COLLABORATIVE TREATMENT OF ERECTILE DYSFUNCTION: THOUGHTS FROM THE MEMBERSHIP OF THE SEXUAL MEDICINE SOCIETY OF NORTH AMERICA

by

DEREK WILLIS HAGEY

B.A., Brigham Young University, 2004
M.S., University of Wisconsin, Stout, 2006

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2012

Abstract

Recent years have seen a rise in the medicalization of treatments for erectile dysfunction (ED). While there has been a divide between the medical and psychological communities, some have called for a more collaborative relationship. Little research has been done on the collaboration between medical professionals and psychotherapists in treating ED. This study seeks to increase current knowledge about medical professionals' referral practices and communication post-referral. An online survey was developed and distributed to the members of the Sexual Medicine Society of North America (SMSNA) (N = 541). Survey questions inquired as to the factors that increased participants' willingness to refer ED patients, the form of communication participants currently/desire to have with psychotherapists and the participants' desired level of communication with psychotherapists to whom they might refer. Less than ten percent of the medical professionals invited to participate in the study completed the survey (n=50). Those who did complete the survey were primarily male, specialized in urology and practiced in the U.S. Almost half the respondents were employed in an academic setting while just over half of respondents worked in hospital-based, group, or solo practices. Just over half of the survey participants practiced in urban areas. Although the number of medical professionals who completed the survey was small, findings indicated that those who completed a sexual medicine fellowship and who had a larger percentage of their patient population being seen for ED were more likely to refer patients to psychotherapists. Participants who have referred ED patients to psychotherapists reported little-to-no communication between them and the psychotherapists to whom they refer. The study participants expressed a desire to refer patients to psychotherapists who are experienced in working with both sexual and couples issues. Questions about the desires and experiences of medical professionals who have not referred to psychotherapists were not able to be answered because of the limited number of these individuals in the data set. Although the number of participants who completed the survey limits the generalizability of the data, this study demonstrates that most medical professionals who responded to the survey are willing to refer ED patients to psychotherapists.

COLLABORATIVELY TREATING ERECTILE DYSFUNCTION: THOUGHTS FROM THE MEMBERSHIP OF THE SEXUAL MEDICINE SOCIETY OF NORTH AMERICA

by

DEREK WILLIS HAGEY

B.A., Brigham Young University, 2004
M.S., University of Wisconsin, Stout, 2006

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2012

Approved by:

Major Professor
Sandra Stith, Ph.D.

Copyright

Abstract

Recent years have seen a rise in the medicalization of treatments for erectile dysfunction (ED). While there has been a divide between the medical and psychological communities, some have called for a more collaborative relationship. Little research has been done on the collaboration between medical professionals and psychotherapists in treating ED. This study seeks to increase current knowledge about medical professionals' referral practices and communication post-referral. An online survey was developed and distributed to the members of the Sexual Medicine Society of North America (SMSNA) (N = 541). Survey questions inquired as to the factors that increased participants' willingness to refer ED patients, the form of communication participants currently/desire to have with psychotherapists and the participants' desired level of communication with psychotherapists to whom they might refer. Less than ten percent of the medical professionals invited to participate in the study completed the survey (n=50). Those who did complete the survey were primarily male, specialized in urology and practiced in the U.S. Almost half the respondents were employed in an academic setting while just over half of respondents worked in hospital-based, group, and solo practices. Just over half of the survey participants practiced in urban areas. Although the number of medical professionals who completed the survey was small, findings indicated that those who completed a sexual medicine fellowship and who had a larger percentage of their patient population being seen for ED were more likely to refer patients to psychotherapists. Participants who have referred ED patients to psychotherapists reported little-to-no communication between them and the psychotherapists to whom they refer. The study participants expressed a desire to refer patients to psychotherapists who are experienced in working with both sexual and couples issues. Questions about the desires and experiences of medical professionals who have not referred to psychotherapists were not able to be answered because of the limited number of these individuals in the data set. Although the number of participants who completed the survey limits the generalizability of the data, this study demonstrates that most medical professionals who responded to the survey are willing to refer ED patients to psychotherapists.

Table of Contents

List of Figures

List of Tables

Acknowledgements

I want to acknowledge the contributions of many people who have provided me with guidance and support during my journey through my doctoral education. I have been blessed with the company of mentors and friends and I offer my sincere thanks and deepest gratitude.

First I want to say thank you to Tony Jurich. Tony, you were there for me throughout my coursework and mentored me at the beginning of this project. The completion of which you were not able to physically be a part of but I know that my research and my professional practice as a marriage and family therapist were shaped in large part by your guidance and I often hear your voice guiding me in my work. It is an honor to be able to say I am a student of Tony Jurich.

During my work on this research I was honored to have two major professors, Tony Jurich and Sandi Stith. Sandi, to have you step in, pick me up and guide me to the end of this journey, I will forever be grateful. You will always be my mentor and my friend.

To my committee members: Jared Anderson, Jacques Gibbons, Rick Scheidt, and Mary Cain. Thank you for your encouragement, support, and critiques. I am grateful to have such brilliant people there to strengthen this project.

To my colleague and friend Katherine Hertlein you are an amazing listener and thinker. I will always be grateful for the support you have provided me as I have worked on my dissertation.

To David Wood who was there for me to bounce statistical ideas off of and for providing statistical guidance when I needed it.

To William Brant, your guidance in collaborating with urologists through our own collaborative relationship has been indispensable.

To Jeremy Boyle and Adriatik Likcani thank you for having sympathetic ears and for the support you both gave in this process and in my life.

To my parents, thank you for your support and unconditional love.

To my wife Morgan, you have always been my rock, my greatest support. My completion of this project was only possible due to your unwavering support and love. Thank you for always being there.

Chapter 1 - Introduction

The definition of manhood has always been tied to virility (Rosen, 1996). Television and film demonstrate this through the use of men who look young and sexually capable as love interests, while men who play "side characters" are often relegated as having little power and seen as asexual buffoons. Examples of this dichotomy are easily seen in Disney's animated films; Gaston vs. Lefou and Robin Hood vs. Little John. This dichotomy can also be seen in movies such as the 1986 comedy "Ferris Bueller's Day Off." The lead character, Ferris Bueller is a handsome and intelligent high school student who seems to have everything work out for him throughout the whole film, including having a beautiful girlfriend, while his best friend Cameron Frye not only has no love interest but is painted as a buffoon that follows others to the point that he even allows his father's prize possession, a Ferrari, to get demolished in the film. Prior to film and television's portrayal of men, literature discussed powerful men as having sexual prowess. Even in biblical times, sexual abilities had to be intact for one to be seen as powerful. This need for sexual virility and power is demonstrated as King David is thought to no longer be able to reign as king after he is not able to be sexually active:

> 1 Now King David was old and stricken in years; and they covered him with clothes, but he gat no heat.
>
> 2 Wherefore his servants said unto him, let there be sought for my lord the king a young virgin and let her stand before the king, and let her wait upon him, and let her cherish him, and let her lie in thy bosom, that my lord the king may get heat.
>
> 3 So they sought for a fair damsel throughout all the coasts of Israel, and found Abishag a Shunammite, and brought her to the king.
>
> 4 And the damsel was very fair, and cherished the king, and ministered to him but the king knew her not.
>
> 5 Then Adonijah the son of Haggith exalted himself, saying, I will be king and he prepared him chariots and horsement, and fifty men to run before him (Kings 1:1-5, King James Version).

It is necessary to confront this expectation of men. Erectile dysfunction (ED) is a direct threat toward a man's view of his own manhood. Key elements of treating ED include a man's

expectations surrounding his sexuality and how the dysfunction affects him personally and his partner within their relationship (Rosen, 1996). Zilbergeld (1992) stated:

> The man with an erection problem is a man in serious trouble… His trouble stems not primarily from a penis that is not working up to expectation, but rather from the heavy symbolic baggage that he, and all of us, attach to the male organ (p. 28).

Within recent history ED was primarily treated as a psychological disorder, requiring treatment from a psychotherapist. Behavioral therapy was often the mode of treatment, taking into consideration how the change of sexual behaviors through specified techniques enable a man to feel sensation more readily. Over the many years of ED treatment by behaviorists and psychologists, there have been four notable treatments including: 1) sensate focus, 2) systematic desensitization, 3) masturbation exercises, and 4) cognitive-behavioral therapy. "Sensate focus" was developed over thirty years ago and continues to be espoused as an effective treatment for ED (Heiman & LoPiccolo, 1983; Masters & Johnson, 1970). "Systematic desensitization" has also shown evidence of its effectiveness in treating ED (Heiman & Meston, 1997). The third method of treating ED that has been utilized in empirical studies and has shown some positive results is "masturbation exercises" (Heiman & Meston, 1997). Recent behavioral trends in ED include movement toward a cognitive-behavioral model. Studies utilizing cognitive-behavioral therapy have not elaborated on the specific cognitive treatments used in therapy but do include the use of either sensate focus or systematic desensitization. Behavioral therapy, including cognitive-behavioral therapy, has mainly focused on lowering performance anxiety and increasing sexual trust.

However, over the last couple of decades much of the new research on alleviating ED has focused on medical treatments that are considered more cost effective and efficacious than behavioral treatment (Rosen, 1996). Tiefer (1994) noted, "No one in our field can have failed to notice that a medical juggernaut is sweeping over the definition, diagnosis, and treatment of men's erection problems" (p. 371). Even within the medical treatments there is a broad range of invasiveness. The original medical treatment for ED and one that is utilized as a last resort today is the insertion of a pump or a semi-rigid prosthesis into the penis (Goldstein, 2004; Padma-Nathan, 2000). The prosthesis surgeries are the most invasive method of treating ED but have been shown to be effective in improving a man's ability to obtain an erection (Goldstein, 2004; Padma-Nathan, 2000). The next medical intervention utilized for the treatment of ED was

intercorporal injection of vasoactive drugs (Goldstein, 2004; Padma-Nathan, 2000). The injection method showed greatest effectiveness with the use of the medication prostaglandin E-1 (Goldstein, 2004; Waldhauser & Schramek, 1988). Although less invasive than the prosthesis, it was not shown to be highly effective with only about 60% of patients obtaining satisfactory erections. The recent development of oral medication to treat ED has been seen by the medical community as an important breakthrough (Goldstein, Lue, Padma-Nathan, Rosen, Steers, & Wicker, 1998). The new oral medications are less invasive, safer, and have shown consistent effective results in aiding patients in obtaining satisfactory erections. Although many psychotherapists claim the medical community only treats ED superficially, the medical community rightly claims that medical assessment is necessary, because ED can be a symptom of greater and possibly life ending medical conditions such as diabetes, heart disease, and neurological disorders (Barsky, Friedman, & Rosen, 2006).

The recent contention, from both the psychological and sex therapy communities, is that there is a need for a combined treatment between the medical community and psychotherapy (Aubin, Heiman, Berger, Murallo, & Yung-Wen, 2009). The idea of a combined treatment grows out of the concern that the treatment given by the medical community is too superficial in only serving the mechanical needs of intercourse and largely neglecting the deeper emotional, psychological and relational issues. There have been many attempts to combine the medical and psychological treatments, mostly with separate treatments by each community. Most theoretical assumptions behind the combined treatments have overlooked the possibility of a true combined treatment, with open communication between the physician and the therapist. In order to rectify this issue, the paradigm chosen must lend itself to communicating with the medical community. To date the most responsive paradigm bridging the medical community and the psychotherapy community in a manner that takes into consideration the biopsychosocial model with a consideration of the couple relationship is Medical Family Therapy (MedFT) (Linville, Hertlein, & Lyness, 2007). Although Medical Family Therapy is the most responsive to the needs of couples experiencing ED there is little knowledge about the type of collaboration that physicians desire. The purpose of this research is to better understand the possible collaborative relationship that MedFTs who want to specialize in treating medical issues can have with urologists in treating ED.

Definitions

In order to understand the purpose and development of this dissertation it is necessary to understand some of the underlying concepts at play in the definition of the problem and the creation of the survey questions asked of participating physicians. The terms most important in this dissertation include Erectile Dysfunction (ED), Sexual Medicine Society of North America (SMSNA), Collaborative Care, Medical Family Therapy (MedFT), and Sex Therapy.

Erectile Dysfunction

Erectile Dysfunction (ED) is not a new concept. ED has previously been lumped together with other erectile disorders, including low sexual desire under the umbrella term "impotence" (NIH, 1992). The National Institutes of Health Consensus Panel for Impotence (1992) described impotence as a confusing term, replacing it with the term ED. Although there has been a change from the less confusing term impotence to a more unified term of ED, formal definitions of ED still leave a lot of interpretation up to the clinician. Formal definitions are not specific enough to have consistency throughout all professional treatment.

The National Institutes of Health Consensus Panel for Impotence (1992) defined ED as the "inability to attain and/or maintain penile erection sufficient for satisfactory sexual performance" (p. 30). This definition is imprecise as many clinicians may define ED differently with regard to what is considered "satisfactory sexual performance". The clinician consequently, often leaves the definition of "satisfactory sexual performance" to the patient. Under this definition, a patient may define "unsatisfactory sexual performance" as a single episode of not attaining an erection. This lack of agreed upon definition for ED is highly problematic from a research perspective.

The definition generally accepted by mental health professionals comes from the American Psychiatric Association's text, the "Diagnostic and Statistical Manual of Mental Disorders" (American Psychiatric Association [*DSM-IV-TR*], 2000). The DSM-IV-TR (2000) defines ED as meeting three criteria:

A. Persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate erection.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The erectile dysfunction is not better accounted for by another Axis I disorder (other than Sexual Dysfunction) and is not due exclusively to the direct physiological effects of a substance or a general medical condition (547).

Although the definition of ED from the DSM-IV-TR includes words such as persistent, recurrent, adequate, marked distress, and interpersonal difficulty, there is no further guidance as to what each of these words mean and how a clinician should interpret them. Since the definition is left to the clinician, there is still little consistency in defining ED by clinicians and researchers alike.

Sexual Medicine Society of North America

The Sexual Medicine Society of North America (SMSNA) is a society of physicians from different specializations that are interested in furthering sexual medicine research and treatment. Although most of the members of SMSNA are urologists there are a number of other specializations represented including family and general physicians, nurse practitioners, physician's assistants, gynecologists and psychotherapists.

Collaborative Care

The causes of ED can be either organic or psychogenic. Because ED can be caused by organic or psychogenic factors there has been a call for the collaborative care of those suffering from ED. Collaborative care consists of the concurrent treatment of disease by both a medical professional and a psychotherapist (Linville, Hertlein, & Lyness, 2007). True collaboration involves not only the parallel treatment of an individual, couple, or family but contact between the medical professional and the psychotherapist (Seaburn, Lorenz, Gunn, Gawinski, & Mauksch, 1996). Although the definition of collaboration demands contact between the two professionals, many researchers have used the term "collaboration" to mean a wide variety of relationships between a medical practitioner and a psychotherapist, including joint assessment, parallel treatments, and unified treatment from one medical practitioner who also treated the psychological issues (Black, 2005; Segraves, 2004; Steggall, Gann, & Chinegwundoh, 2004). Research conducted on collaborative care demonstrated the psychotherapeutic side of the collaborative care as being wholly focused on the individual or couple and not taking into account the biological factors and treatment. This framework does not lend itself easily to

collaborative work with medical professionals but, rather, attends to issues of ED parallel to the medical professional. Treating a person parallel to the medical professional overlooks a needed collaboration source, the medical provider. McDaniel, Hepworth, and Doherty (1992) put it best, "Treatment without communication is like two blindfolded drivers on a racetrack; not colliding is a matter of luck. Communication is the foundation of successful collaboration" (p.57). To bridge the distance between the medical professional and the psychotherapist in treating issues of medical concern and to increase the ability to understand the communication process necessary, McDaniel, Hepworth, and Doherty (1992) developed an overarching theory they termed "Medical Family Therapy" (MedFT).

Medical Family Therapy

MedFT is a specific form of collaboration between the medical community and psychotherapists. McDaniel, Hepworth, and Doherty (1992) defined MedFT as "the biopsychosocial treatment of individuals and families dealing with medical problems" (p. 2). The MedFT framework allows for the biological treatment of conditions by the medical professional, while a mental health professional aids in treating the psychological and systemic issues that can become troublesome to patients (McDaniel, Hepworth, & Doherty, 1992). The MedFT practices not from a position of power but rather as a consultant with the couple (McDaniel, Hepworth, & Doherty, 1992). As a consultant, the MedFT empowers the clients to think and speak for themselves as a means of taking charge of their medical and psychosocial treatment, including asking questions of the medical community and the psychotherapist. The MedFT also seeks to enable a greater level of connection in the couple being treated, in order to empower them to support each other more fully during the stress of medical problems (McDaniel, Hepworth, & Doherty, 1992). MedFTs do not practice without understanding their impact on the medical provider and they obtain a release of information to talk to the medical provider (McDaniel, Hepworth, & Doherty, 1992). By having open dialogue with the medical provider, the MedFT is better able to understand the illness and be able to bring his/her concerns into the therapy room. The MedFT is also able to relay any issues noticed through therapy that could be of concern for the medical professional. Physicians, at a minimum, generally expect letters from the psychotherapist, containing information about the "assessment, treatment, and recommendations for the physician" (McDaniel, Hepworth, & Doherty, 1992, p. 58). In an ongoing collaborative

relationship, the psychotherapist can continue to advise the medical professional of concerns shared by the patient(s) and any suggestions of further treatment that may be needed. It is important to note that communication with a medical professional must be tailored to the level the medical professional desires and this relationship dynamic should be elaborated and agreed upon, early in the collaborative relationship (McDaniel, Hepworth, & Doherty, 1992).

Linville, Hertlein, and Lyness (2007) pointed out the lack of a consistent definition of Medical Family Therapy. In their review of collaborative treatment, they stated their definition as being:

> An approach to health care from a biopsychosocial-spiritual perspective, informed by systems theory, spanning across [sic] a variety of clinical settings, where: the patient's interpersonal relationships are believed to play a key role, and the collaborations exists [sic] between the family psychotherapist and other health care practitioners.

This connection between the medical malady and the interpersonal relationship is what sets MedFTs apart from other medical mental health workers, including medical social workers and health psychologists (Linville, Hertlein, & Lyness, 2007). Medical social workers and health psychologists, although integrated in the medical community, do not necessarily base their work in the immediate interpersonal relationships that often play a major role in the individual's ability to maneuver through dealing with a medical issue. Although there is a growing field of MedFTs ready to collaborate with the physicians and other medical personnel, there has been a lack of research on the collaborative atmosphere and willingness of medical professionals to collaborate with psychotherapists (Linville, Hertlein, & Lyness, 2007).

Sex Therapy

Sex therapy is a specialization in which licensed psychotherapists' from any of the mental health licenses can become certified. Certification is not a prerequisite to practice sex therapy, however it is strongly recommended as a means of maintaining higher integrity in the practice (Kleinplatz, 2009). The one thing that makes sex therapy unique from general psychotherapy practice is the specialized knowledge in human sexuality that is required to effectively treat sexual issues. Sex therapy began with Sigmund Freud and his theories of psychosexual development and was later further explored with Kinsey's search for normal sexual behavior. Following Kinsey were Masters and Johnson and their exploration and defining of the

sexual response cycle for both men and women. These founders of sex therapy began a field focused on sexual health and dysfunction.

Summary

Erectile Dysfunction is a condition that affects many men and their partners. This chapter has defined the key terms including Erectile Dysfunction (ED), Sexual Medicine Society of North American (SMSNA), Collaborative Care, and Medical Family Therapy (MedFT). The primary treatment of ED in the past was through behavioral therapy. More recently, physicians, and especially urologists, have begun to use various medical approaches to treat this condition However, there is a call for more collaborative work between the urologists treating the medical condition, and psychotherapists, especially MedFTs, treating psycho-social issues surrounding this condition. Currently, there is limited research on physicians' willingness to collaborate and no research that has studied urologists' willingness to collaborate in treating ED. Also, no research to date has asked physicians about specific factors of collaboration and the physician's desired collaborative communication. The purpose of this research is to better understand the possible collaborative relationship that MedFTs who want to specialize in treating sexual issues can have with urologists in treating ED. Specifically a sample of urologists are asked to complete an investigative survey. This survey is designed to gather demographic information, the physicians' current use of collaboration and willingness to collaborate, and urologists' desires in collaboration specific to type, frequency, duration and content of communication with a psychotherapist. The last two questions of the survey focus on the urologists' desire for the psychotherapist to whom they refer ED patients to have sex therapy and couples therapy training. The last two questions are important considerations for MedFTs who want to collaborate with urologists. Urologists may have specific expectations regarding sex therapy and couples therapy training that MedFTs should have to receive referrals and engage in a working relationship.

Chapter 2 - Literature Review

ED is an ailment many men currently experience, have experienced, or will someday experience. It is important to understand ED because it not only affects the man, but it enmeshes his sexual partner in a tangle of issues (Wiley & Bortz, 1996). The couple is often trapped in a pattern of negative anticipation, aversive experience, and withdrawal. When these things happen, sexual experiences can become few and far between.

Many factors have resulted in an increase in ED diagnoses (Carson & Dean, 2007). These factors include both the medical issue of failed biological response and the psychological desire to improve that biological response for the well-being of both the man and his partner. Many men, diagnosed with ED, seek to have a fulfilling sexual relationship. These failed attempts at achieving a full erection and attaining an orgasm in their sexual relationship can cause further relationship difficulties and greater physical, psychological, and emotional trauma. The men, who feel the effects of ED come from all walks of life and often have other physical or psychological issues that have a direct effect on their erectile functioning. There is also a relationship effect on erectile functioning, a negative sexual relationship can result in increased psychological, emotional, and performance anxiety issues.

Prevalence of ED

The prevalence of ED remains in question. There have been many studies designed to assess for its prevalence and there has yet to be any consensus on the size of the population with ED. Prins, Blanker, Bohnen, Thomas, & Bosch (2002), in their meta-analysis, found a wide range of prevalence reported, dependent on population of interest and methods of research collection. For men under 40 years of age the prevalence of ED is very low, with between 2% and 9% having erectile difficulties, while men who are 80 years of age or older the rate is as high as 86%. Researchers have concluded that, as men age, the prevalence of ED does increase (Prins, et al., 2002).

Understanding the positive correlation between aging and ED is more important to the population in the United States at this time, due to the large increase in number of men in the aging population. The baby boomer population is currently entering the retirement age, which means more men than ever are entering their late 60's. The largest increase in prevalence for ED

in men happens around the age of 70 (Prins, et al., 2002). Since men are living longer, their sexual relationships tend to continue to be important into their later lives. Also, the baby boomer generation was born during and after the sexual revolution, making active sexuality a positive attribute. The baby boomer men and women tend to desire greater sexual fulfillment in their later lives than previous generations. Their emotional depth and approach to sexuality play an important and largely underestimated role in the lives of both male and female baby boomers, increasing their desire for continued sexual interaction into later life (Pini, Ferretti, Vergani, & Annoni, 2007).

With the development of medications for ED, these men and their significant others no longer need to accept ED as an unfortunate indirect effect of aging and other physical maladies but as an easily treatable problem. Previous to the creation of oral medications for ED, men would seek out psychosexual therapy or resort to invasive surgeries to enable sexual intercourse, which was very costly (Rosen, 1996). It appears that, before the invention of oral medications, many men decided to not seek help for their condition but accepted their sexual issue as their lot in life, due to the cost and invasiveness of treatment. As such, there is definitely a need for the medications for the treatment of ED. As a result, many more men are able to continue to enjoy their sexual lives into their later years.

Anatomy of an Erection

Simply put, an erection is the act of penile rigidity due to stimulation. However, erections are not that simple. In fact, research is still discovering how erections are attained and maintained. An erection is a physiological response to stimulation that entails anatomical, vascular, neurologic, psychologic, endocrine, and systemic factors (Kandeel & Koussa, 2007). The brain controls erections. Upon receiving a sexual arousal message, the brain sends the message for an erection through the central nervous system (Kandeel & Koussa, 2007). To achieve an erection, the central nervous system must communicate through the autonomic nervous system to send blood to the penis. The parasympathetic subsystem of the autonomic nervous system actually controls blood flow to the penis. The blood flows into the corpora cavernosa, two tubular structures that run the length of the penis. When the corpora cavernosa fill with blood, they actually pinch the veins in the penis not allowing the penis to drain the blood flow, thus maintaining the erection (Kandell & Koussa, 2007). Nitric oxide is believed to act as

the mediator of an erection, acting as neurotransmitters communicating the need for blood flow to the penis. Nitric oxide also aids in the ability of the penis to maintain an erection. Nitric oxide in the blood vessel walls maintains an erection through the creation of the enzyme called endothelial nitric oxide synthase (Kandell & Koussa, 2007). Endothelial nitric oxide synthase is created through the pressure placed on the blood vessel walls, caused by the heavy flow of blood into the penis (Kandell & Koussa, 2007).

An issue in the erectile function can take place at any point in the sexual arousal and maintenance process. This can range from issues with tactile stimulation and object of arousal to issues with the brain and central nervous system. Diagnosis of the underlying cause of erectile dysfunction can be a difficult process that takes medical knowledge and possibly requires a battery of tests in order to identify if there is a physiological cause of the erectile difficulty (Carson & Dean, 2007).

Causes of ED

Although it is difficult to delineate the exact cause of ED, there is a higher frequency of ED among people who experience co-morbid issues. The three categories of co-morbid factors that are often considered causal influences include psychological difficulties, physical illness and disabilities, and drug and alcohol use, including the use of some prescription medications (Schumacher & Lloyd, 1981).

Physical causes of ED

Physical issues are the most obvious reason that men seek treatment for ED (Nusbaum, Lenahan, & Sadovsky, 2005). If having sexual intercourse simply doesn't work, due to health problems, it is an outward sign that intervention is needed. However, when physical issues develop, there is concern over the man's ability to perform sexual acts safely, while his blood pressure and heart rate increase rapidly (Garrison, 1989). Keeping a man safe, while trying to allow him a healthy and fulfilling sexual relationship, is a valid concern for care providers, as well as the people dealing with ED. This concern will, no doubt, create some performance anxiety for the man and any demonstration of concern from the significant other may be interpreted as an unwillingness to have a sexual relationship, creating greater feelings of being unattractive and effectively increasing performance anxiety in the man. It has been shown that

ED has a negative effect on not only the man's self-efficacy but that of his female partner (Cameron and Tomlin, 2007).

Many of the physical factors are identified by medical diagnoses that deal with the heart, arteries, and blood pressure. Physical issues that lead to erectile difficulties really center on the heart and blood flow through the body. An increased likelihood of ED is positively correlated with diabetes, hypertension, heart disease, neurological disease, and penile disorders (Laumann, et al., 2006; Cappelleri, Bell, Althof, Siegel, & Stecher, 2006; Cameron, Rosen, & Swindle, 2005; Feldman, et al., 1994). It is hypothesized that exercise is a buffer to the positively correlated physical issues and will decrease men's likelihood of developing ED (Laumann, et al., 2006).

Diabetes is a disease that deals with the glucose level in the blood stream with either too much or too little sugar being released into the blood stream and is positively correlated with ED (Laumann, et al., 2006). Diabetes may lower the sensitivity of physical sensations, including sensitivity in the penis (Rowland, Greenleaf, Mas, Myers, & Davidson, 1989). This lowered sensitivity accounts for the high correlation between diabetes and ED. Some studies have defined ED as a "symptom of diabetes" (Baldo & Eardley, 2005).

Hypertension has a positive correlation with ED (Laumann, et al., 2006; Cameron, Rosen, & Swindle, 2005; Feldman, et al., 1994). Cappelleri et al. (2006) found 48% of the subjects diagnosed with ED were also diagnosed with hypertension. Most interestingly, recent research has shown that the chronic cases of hypertension are more likely to develop ED and the newly hypertensive patients are not likely to develop erectile difficulties until their later years (Heruti, et al., 2007). It is hypothesized that chronic hypertension weakens the arteries' ability to dilate properly for erection to occur (Kloner, 2007). Due to this connection, it would behoove patients with chronic hypertension to treat it early and manage their blood pressure in order to retain their sexual function later in life.

Traeen and Olsen (2007) utilized a large sample of Norwegian men and found that 73% of those diagnosed with heart disease had the comorbidity of ED. Heart disease affects the blood flow through the body and, with decreased ability to have blood flowing through the body, it can be hypothesized that the blood will flow to the parts of the body that are most integral to basic survival functioning. The reproductive system is not included in the body's basic survival functioning, creating ED due to lessened blood flow to that part of the body.

Drug and Alcohol as Causes of ED

Research shows that the use of tobacco, drinking alcohol, and the use of some medications will at least exacerbate the symptoms of ED. The processes by which these medications interfere with the penis's function are not well understood. However, it is assumed that these substances and medications interfere with the man's ability to achieve and maintain an erection through some form of blockage to sexually stimulating sensors in the brain or through affecting the ability for blood flow to increase penis rigidity to create an erection sufficient for sexual intercourse (Goldstein, 2004). The medications most commonly associated with ED include, "antihypertensives, anti-arrhythmic, and antidepressant agents" (Goldstein, 2004, p. 129). Use of these medications cannot just be arbitrarily stopped. Circumstances often necessitate continued use in order for the patient to be healthy in some part of his being, either physically or psychologically. This creates a double-edged sword for many men diagnosed with heart conditions or depression. The man must choose between his treatment for these conditions or his ability to have a sexual relationship. The sexual relationship a man has enjoyed, previous to the new diagnosis and treatment, may cease to exist. Fortunately, it is believed that the ED medications do not have a negative relationship with the other medications and, therefore, can be taken at the same time. The other side of the issue is that patients must be willing to speak with their care providers about the erectile and sexual side effects of their medications.

Psychological Causes of ED

The psychological factors that have been shown to be related to ED include depression, anxiety, phobias and, life stress (Araujo, Durante, Feldman, Goldstein, & McKinlay, 1998; Feldman, Goldstein, Hatzichristou, Krane, & McKinlay, 1994). It has been demonstrated that each of these psychological factors are positively correlated with ED and accepted as precursors to the development of ED (Araujo, Durante, Feldman, Goldstein, & McKinlay, 1998). In addition, performance anxiety is a psychological issue that is often related to repeated inability to attain or maintain an erection, due to other psychological and/or physical complaints and worries (McCabe, 2005).

There have been quite a few studies that have found a link between depression and an increased prevalence of ED (Araujo, Durante, Feldman, Goldstein, & McKinley, 1998; Goldstein, 2004; Laumann, Paik, & Rosen, 1999; Seidman & Roose, 2000; Shabsigh, Klein,

Seidman, Kaplan, Lehrhoff, & Ritter, 1998). The reason for the correlation between ED and depression is unknown, but Araujo, et al. (1998) hypothesized two possible reasons. First, depressed men may be overly critical of themselves creating performance anxiety that leads to lessened erectile functioning. The second hypothesis given by Araujo, et al. (1998), was the concept of inhibited libido, due to lowered mood that restricted men's desire to have sexual intercourse. To further illustrate these two hypotheses, it is important to understand the definition of depression. The Diagnostic and Statistical Manual of Mental Disorders fourth edition, text revision (DSM-IV; American Psychiatric Association [APA], 2000) defines Major Depression as having symptoms that include a loss of interest or pleasure in activities that once brought the person enjoyment, hopelessness, discouragement, fatigue or having a loss of energy, feeling worthless, and as having an inability to think or concentrate. In the first hypothesis, the key piece of depression is the feelings of hopelessness and discouragement (Araujo, et al., 1998). These feelings cause men to think overly critically of themselves and their ability to perform sexually. The unhealthy focus on performance then weakens their ability to focus on pleasure during sexual intercourse, creating a weakened performance in sexual intercourse. The second hypothesis, inhibited libido, is due to depression's effect of lowering the man's ability to find enjoyment and pleasure in many activities. This inability to find pleasure then creates an inability for the man to have a desire for sexual intercourse.

Anxiety has long been a conception of being a possible predictor of ED (Barlow, 1986). The DSM-IV-TR (2000) describes anxiety as characterized by excessive worry. It is believed that anxiety affects the man's ability to focus on sexual activity due to other areas of foci, such as, work and other relational issues, including the worry of his inability to please his partner sexually (Corona, et al., 2008). This focus on other issues inhibits the man's ability to feel intimate during sexual encounters, and rendering him unable to enjoy sexual intercourse and reach orgasm.

Another related psychological condition that affects a man's ability to perform sexually and reach orgasm is phobia (Corona, et al., 2008). Phobias are excessive worries about an event, object, or person and can be either specific or general in nature (DSM-IV-TR, 2000). Phobias inhibit a man's ability to explore and feel sexual excitement. Although men with phobias do exhibit sexual issues including ED, these men tend to have stable long-term relationships and have a higher frequency of intercourse and their partners state a higher frequency of orgasm,

when compared to other men diagnosed with ED. Corona and associates suggested the stable relationship, higher frequency of intercourse, and partner's orgasms were due to the man's phobias' being related to his fear of abandonment and a desire to please his spouse.

Sbrocco, Weisberg, Barlow, & Carter (1997) found the diagnosis of panic disorder to be a strong predictor of ED in men. Panic disorder is the "experience of intense rushes of anxiety or fear consisting of at least four physiological or cognitive symptoms" as well as worry about the possibility of future attacks (Sbrocco, Weisberg, Barlow, & Carter, 1997, p. 213). These researchers asserted that panic attacks are a vulnerability to physiological sensations. Sexual activity is an event that elicits physical sensations, including raised heart rate, sweating, and shortness of breath. In a man who has a panic disorder, his body becomes conditioned to the physical symptoms of a panic attack and may interpret these sensations as panic cues, creating a panic attack. The panic attack then incapacitates a man's sexual ability and will not just inhibit orgasm in the man but could render him incapable of participating in sexual intercourse altogether.

It has been hypothesized that life stress also adds to the likelihood of ED (Moor, Strauss, Herman, & Donatucci, 2003). Life stressors can be any number of issues that create stress in one's life and are not a diagnosable condition, which makes life stress hard to define or quantify. When a man has a life stressor, such as financial, work, extended family, and other social and personal relationship issues, he becomes overly focused on the specific issue and is incapable of feeling the physical sensations that arouse and maintain an erection, without aid in releasing the life stressor he is feeling. Because he is not able to attain and maintain an erection, the man is diagnosed as having erectile dysfunction. An example of life stressors impeding the ability to maintain an erection was described by Zamboni & Crawford (2007). They found men in the minority population demonstrated an increased feeling of being subjugated and judged. The feeling of being subjugated and judged translated across their whole life experience, including in their sexual encounters. According to this research, there was a direct relationship between men's feelings of being subjugated and judged and the instance of erectile dysfunction. Those who had a greater feeling of being subjugated and judged were more likely to experience erectile difficulties.

Most men have had some infrequent or inconsequential erectile difficulties (Morse & Morse, 1982). Men who internalize the anxiety and embarrassment of instances or series of

erectile difficulties may experience the condition "performance anxiety." It is usually after several episodes of erectile difficulties that a man begins to question his ability to perform sexually. This questioning leads the man to psychologically hinder his ability to attain and maintain an erection. A man, who develops performance anxiety, can perpetuate occasional erectile difficulties into the diagnosable condition of ED. Morse and Morse (1982) cautioned that physicians have been at least implicit in creating cases of performance anxiety by not educating patients on the possible reduced ability to perform sexually, as part of the condition or treatment of medical illnesses. In fact, in cases of ED, due to the secondary effect of performance anxiety, the ED will often persist even when the original medical condition has been treated Morse and Morse (1982) stated that the "ignorance of [the organic cause of the ED] greatly increases the fear of failure" (p. 599).

While it is accepted that all these psychological factors may be precursors to ED, it is the belief of some researchers that some patients may have minimal symptoms of depression, anxiety, phobias, and life stress prior to the development of ED, and these feelings and issues may be heightened by the development of ED (Ackerman & Carey, 1995; Giraldi & Kristensen, 2007; McCabe, 2005; Popovic, 2007; Seidman, 2002; Weeks & Gambescia, 2000). Having erectile issues then exacerbates the psychological problem, such that requires a higher level of treatment, such as increasing psychological medication. It is also hypothesized that these factors can be an effect of ED in otherwise psychologically healthy men, much like the development and maintenance of erectile dysfunction due to performance anxiety. Some men, who have not had any psychological complaints and deny any previous issues of a psychological nature, may develop depression, anxiety, phobia, or life stress after having issues in erectile function.

Some physicians are highly trained in the medical issues surrounding ED but they are probably not equipped with the tools needed to help break the psychological cycles that are believed to be created by the ED for the patient and his partner. With the lack of training and tools to break the psychological cycles physicians would do well to have a strong collaborative relationship with a MedFT or an appropriately prepared mental health professional. They can work with the patient and his partner to aid in overcoming the psychological and relational barriers and then, in turn, help the patient to surmount the aggravated symptoms of depression, anxiety, life stress and, performance anxiety that can come with the diagnosis of erectile dysfunction.

Two Opposing Treatment Modalities: Medical vs Psychological

Men do not always understand the causes or fully comprehend the repercussions of ED in their lives. There appear to be two opposing "camps" of belief regarding the treatment of ED. The first is that medical treatment is all that is needed for ED to be fully resolved. The second is that ED would be better treated by a family therapist, psychologist, or behavioral therapist who has specialized training in the treatment of sexual dysfunctions.

Medical

For the past couple decades the treatment of ED has been performed primarily by physicians. Many treatments for ED, developed thirty or forty years ago, are still being implemented infrequently today. By far, the medical community utilizes oral medications as their treatment of choice for ED. The medication treatment has been extensively researched and is cited as the primary treatment for ED (Carson & Dean, 2007). Methods used to treat ED are often classified based on invasiveness of the intervention with a rating of first through fourth-line interventions, from least invasive to most invasive (Carson & Dean, 2007).

First-line Interventions

The first-line intervention techniques include medications and vacuum devices (Carson & Dean, 2007). There are currently three PDE-5 inhibitors approved by the Food and Drug Administration for the treatment of erectile dysfunction. The first medication approved was sildenafil which goes by the brand name of Viagra. Shortly after Pfizer unveiled Viagra, the Ely Lilly Company and GlaxoSmith Kline came out with their own oral medications, Cialis and Levitra respectively. PDE-5 inhibitors seem to work in similar manners. The object of a PDE-5 inhibitor is to inhibit the phosphodiesterase type-5 enzyme, which is the enzyme found predominantly in the vascular smooth muscle in the penis. The PDE-5 enzyme relaxes the smooth muscle in the penis and, by controlling the enzyme, it decreases this relaxing enzyme in the penis and increases the ability to achieve an erection.

The vacuum device was developed in the 1960s and is seen as less invasive because it does not require putting anything into the man's body but relies on bringing blood flow to the penis through a vacuum device being placed on the penis. Once the penis is erect a constriction ring is slid off of the penile cylinder and onto the erect penis to aid in the retention of the erection. There are two negative side-effects to the use of the vacuum device and constriction

ring. The first is the potential for bruising by either overpumping with the vacuum or overconstricting with the ring (Schuetz-Mueller, Tiefer, & Melman, 1995). The second issue is the interruption in the sexual process that such a device requires. Men and their partners find that pumping and utilizing a constricting device causes them to not remain "in the moment" sexually, but forces them to take a break from sexual touching to use the vacuum device and ring (Schuetz-Mueller, Tiefer, & Melman, 1995). One suggestion this researcher has made to decrease this interruption is to use the pump and constricting ring as a part of the lovemaking process. The combined process involves the partner by having her do the pumping, while the man focuses on exciting his partner through manual stimulation.

Effectiveness of oral treatment

There have been numerous studies focused on the effectiveness of oral medication on the treatment of ED (Becker, et al., 1998; Goldstein, et al., 1998; Porst, et al., 2003; van Ahlen, et al., 2005). Many of the effectiveness studies have been funded and performed by the drug companies that produce the medications or consultants hired by these companies. These studies demonstrate improvement for most of the participants with few side-effects. Studies have shown effectiveness of each medication individually. Vardenafil (Levitra) was demonstrated to be effective for men irrespective of their severity of erectile difficulties (Donatucci, et al., 2004). Sildenafil (Viagra) has been used to overcome ED for many reasons, including to overcome serotonin reuptake inhibitors caused dysfunction (Nurnberg, Hensley, & Lauriello, 2000). The drug companies desire to demonstrate their medications' effectiveness across many causes of ED because there is no one psychosocial answer to the "cure" for ED.

There are also a large pool of studies focused on ED medications' effects on psychosocial functioning of the individual and the couple. Psychosocial improvements include: self-esteem, depression, confidence, relationships, and the partner's sexual functioning (Althof, et al., 2006; Goldstein, et al., 2005; Martin-Morales, Meijide, Garcia, Artes, & Munoz, 2007; Muller, Ruof, Graf-Morgenstern, Porst, Benkert, 2001; Rosen, et al., 2006; Swindle, Cameron, Lockhart & Rosen, 2004). It is easily understood that the lowered self-esteem can at least be somewhat recouped through regaining the erectile function in the penis (Althof, et al., 2006; Cappelleri, et al., 2007). When a man has lowered self-esteem due to his inability to perform sexually, he is going to regain self-esteem when his ability to perform sexually returns. However, research on the regaining of self-esteem compared two groups of men, those with ED who receive the

treatment and men with ED who receive a placebo (Althof, et al., 2006). While this article demonstrates that men treated with medication do demonstrate an increase in self-esteem and a raised self-esteem compared to men who receive a placebo, this study does not compare the self-esteem level of those treated with mental health treatment or a combined medication and mental health treatment. This comparison would demonstrate either the medication's ability to increase self-esteem to the same level of the normal population or that the increased self-esteem is not sufficient and would warrant some further treatment to improve self-esteem in men being treated with oral medications.

It is interesting to note there were studies that showed an improvement in the female sexual partners' functioning, as a result of their partners' receiving ED treatment (Cameron & Tomlin, 2007; Cayan, Bozlu, Canpolat, & Akbay, 2004; Fisher, Rosen, Eardley, Sand, & Goldstein, 2005). It is hypothesized that the female sexual partners' functioning improved as a result of the process of two cycles. The first cycle is the emotional distance that a man creates as a result of not being able to have an erection. This distance has a negative impact on the female partner's perception of her sexual functioning and on the relationship as a whole (Askew & Davey, 2004). The second cycle is the rebound in relationship and the partner's perception of sexual functioning due to the man's improved emotional proximity, self-esteem and the zest he brings into the bedroom, as a result of his returned sexual ability. However, in an exploratory study, Askew and Davey (2004) found that the women they interviewed had the opposite reaction, the foreplay and alternative sexual interactions were preferable to penetration sex. The women interviewed discussed the need to be a part of the medical process and the decision making about when the medication would be used in their relationship (Askew & Davey, 2004). When the women were not allowed to be a part of the process, there was a sense of disempowerment and anger, because the man and his physician controlled her sexual life. Some of the women interviewed had their own sexual ability diminish over the years and were not interested in the regained sexual ability of their husband because they could not enjoy intercourse (Askew & Davey, 2004). This research points to the variability with which the spouses of men who have ED may adjust to the ED and the different sexual relationship. There is a need for the wives of these men to be incorporated into the process of treatment. Their sexual concerns, as well as those of the patients, must be addressed.

While much of the research on the medications for ED have shown only positive results, understanding the nuances of these findings as demonstrated above is extremely important. There are downsides and side-effects to the medications, however, little research has been done assessing this data.

Effectiveness of vacuum and constriction devices

Vacuum devices have become a safe alternative to other ED treatments. However, in one study of the efficacy of vacuum therapy, out of 110 participants there was a rejection rate of almost 51% (Derouet, Caspari, Rohde, Rommel, & Ziegler, 1999). Two of the authors' hypotheses regarding the high rejection rate were the patients not liking the idea of the vacuum method and lack of acceptance by the patients' partners (Derouet, Caspari, Rohde, Rommel, & Ziegler, 1999). Of the men who accepted and used the vacuum device method (42% of the original 110 participants), 98% were satisfied with the device and their erections, while only 85% of their partners were satisfied with the vacuum device therapy. The rate of orgasm for the long-term adopters of the vacuum device was 74%, demonstrating that the vacuum device was effective at improving a man's ability to attain an erection and maintain it long enough for orgasm. In a smaller study, Schuetz-Mueller, Tiefer, and Melman (1995) found that, of ten men who were prescribed a vacuum device, only four actually followed through with purchasing the device. Two out of the four men stated that the use of a vacuum device was a tedious and disruptive process.

Second-line Interventions

The second-line interventions are intracavernosal injection therapy and transurethral therapy (Carson & Dean, 2007). Currently, the only approved injection agent for intracavernosal injection therapy in the U.S. is prostaglandin, sold under the brand name of Alprostadil. In intracavernosal injection therapy, Alprostadil is injected directly into the corpora cavernosa and then the body distributes it from the corpora cavernosa to the rest of the penile tissues. Once injected into the penis, the Alprostadil relaxes the vessels feeding blood into the penis, allowing it to fill with blood and become erect. After injection of the prostaglandin, it takes between 5 and 20 minutes for an erection to develop. Men who have used this method of treating ED have complained of penile pain at the injection site and, after injection, issues with priapism (i.e., painful erections of extended duration without sexual stimulation) Priapism is an effect of too

high of a dose of the medication. Carson and Dean also stated that men should be warned of a greater risk of developing Peyronie's disease when this treatment is used. Peyronie's disease involves damage to the penis that can cause difficult and painful intercourse, as well as an unnatural curvature to the penis. It is believed that if men do not take due caution when injecting the penis with the medication damage is done to the penis causing it to develop Peyronie's disease. There are fewer reports of Peyronie's disease and priapism with the transurethral method of alprostadil delivery. Transurethral therapy is the use of the same medication Alprostadil but, instead of an injection delivery, the drug is delivered using a small plunger syringe into the penis through the urethra which then absorbs into the penile tissues and eventually reaches the corpora cavernosa. Patients who use the transurethral therapy treatment sometimes complain of penile pain during and/or after administration and urethral bleeding.

Effectiveness of intracavernosal injection therapy

Intracavernosal injection treatment is the predecessor to the current oral medications that are the current treatment of choice for physicians. The injection treatment has been shown to be over 75% effective in improving the mechanical ability of the man to attain an erection for sexual intercourse (Carson & Dean, 2007). The problem for this form of treatment is less in the effectiveness of the medication and more in the patient's possible error in injection that can cause serious injury to the penis as described above.

Effectiveness of transurethral therapy

Transurethral therapy is less effective than the injection treatment option. Only about 45% of patients reported an improved erection as a result of transurethral therapy (Carson & Dean, 2007). Although effectiveness might be improved through the combined use of transurethral therapy and a constriction ring (Carson & Dean, 2007), no effectiveness studies to date have investigated this combination treatment.

Third-line Interventions

The third-line intervention is the use of a combination of multiple drugs to treat the erectile difficulties when the first and second-line of treatments fail (Carson & Dean, 2007). Physicians may choose to combine multiple medications for intracavernosal injection therapy, including combining Alprostadil with papverine (Bimix) or a combination of Alprostadil with

two other medications, papverine and phentolamine (Trimix). The combining of medications often creates greater risks than when only one medication is used, creating a greater need for the patient to understand the potential risks and side effects to treatment. The major concern in combining medications is the possibility of negative side-effects. Medications go through extensive studies prior to being approved for use. However, when physicians combine medications, there are strong possibilities of side-effects since clinical trials have not been done to find possible harm as a result of combining the medications. The combination of medications for the treatment of ED is no different. There have not been any clinical trials which have focused on side-effects of combining medications to treat ED. There have been a handful of small sample studies examining the possible usefulness of combining medications in treating ED with no major side-effects reported (Nehra, 2007). The few side-effects reported include, urethral burning, throbbing of the penis, headache, nausea, increased glans sensation, dizziness, upset stomach, and blurred vision (Nehra, 2007).

Effectiveness of a combination drugs treatment

As this form of therapy uses medications in combinations, there is little research on its effectiveness. In a recent study, Nehra, Blute, Barrett, and Moreland (2002) found that, of the 28 patients in the study who had failed to find improvement through single medication therapy all 28 stated an improved erectile function as a result of the combined use of sildenfil citrate (Viagra) and transurethral medication therapy. Also, in this study, no patients described having issues with priapism as a result of the combined treatments (Nehra, Blute, Barrett, & Moreland, 2002). Other similar studies have been conducted with very promising results and few side-effects (Nehra, 2007).

Fourth-line Interventions

As a last resort there are the fourth-line interventions, which include surgical implants and vascular reconstructive surgery (Carson & Dean, 2007). There are two forms of surgical implants that have been implemented in the treatment of ED: inflatable and semi-rigid. The inflatable implant involves the placement of tubes in the corpora and a pump in the scrotum. When an erection is desired the man just needs to use the scrotal pump to inflate the tubes in the penis, creating an erection. The semi-rigid implants are placed in the corpora. When a semi-rigid implant is placed in the penis the penis is never fully flaccid but retains a semi-erect state,

causing some issues for men that are used to wearing tighter clothing. The implant placed in the penis is actually two malleable rods that can be bent upward when an erection is desired. By bending the rods upward, it allows an erection to occur more easily. Vascular reconstructive surgery is still undergoing investigations. These surgeries attempt to improve the ability to have an erection by increasing the arterial inflow to the penis and restricting or reducing the outflow from the penis. In most cases, the vascular reconstructive surgeries are too invasive to warrant their use, while a less invasive method of improving erections is more appropriate.

Effectiveness of surgical implants

Studies have demonstrated a high success rate in men who have a penile implant, with over 85% of men rating their ability to attain an erection as satisfactory (Carson & Dean, 2007). The greatest detractions from the use of implants are the invasiveness of surgery, the mechanical needs of the treatment device, and the possibility of device malfunction. Because of these issues, most men and their physicians do not opt for this treatment, except as a last resort, even with the high success rate

Effectiveness of vascular reconstructive surgery

Current research on vascular reconstructive surgery has demonstrated very disappointing results, with most men reporting only temporary gains (Carson & Dean, 2007). Due to the invasive nature of these surgeries and their lack of long-term effectiveness, these treatments are of a last resort and have been all but abandoned as treatments for ED (Carson & Dean, 2007).

Current Research

Recent research supports that the PDE-5 inhibitor medications developed to treat ED are effective in relieving the physical complaint. However, research has sought to go further than just demonstrate the alleviation of the physical complaint and have been designed to demonstrate the medications' effectiveness in increasing men's psychological functioning and relationship satisfaction. It seems that the medications have been touted as so multifaceted in their improvements that physicians rarely refer patients to a mental health professional to aid in the needed and desired relational and psychosexual progress. Often the issue of ED is so complex that it creates greater difficulties for couples than the physical inability to have sexual intercourse (Rosen, 1996). A couple is often confronted with the anxiety and sadness of lost abilities and

spontaneity in their sexual relationship even after the medication is prescribed. The issues of couple anxiety, sadness, and loss of spontaneity in the sexual relationship even after successful medical treatment are discussed later in this paper.

Psychological Treatment

Sex therapists believe that psychological treatments for those suffering from ED are necessary for "effective and enduring treatment" (Fagan, 2007, 427). It has been found that major contributors to sexual dysfunctions generally, and especially ED, are performance anxiety and couple issues (McCabe, 2005). The knowledge that at least two major contributors to ED are psychosocial, fuels the sex therapists argument for psychological treatment. The sex therapy belief is that ED is too complex to be reduced to a pill (Fagan, 2007). Unlike the medical community, the sex therapy community has a much less precise intervention progression and, instead, relies on the therapist to attempt his or her own set of interventions. In the world of sex therapy there are many interventions utilized, but there are two common foundations to the multitude of practices: Masters and Johnson's work and Cognitive Behavioral Sex Therapy.

Masters and Johnson

The work of Masters and Johnson changed the way therapists viewed erectile dysfunction. Their work focused on the issue as a learned behavior, as opposed to a deep psychological issue that requires the lengthy process of psychoanalysis (Atwood, Klucinec, and Neaver, 2006). Through this new lens, Masters and Johnson saw the "problem" as a couple issue and not as an intrapsychic issue found in the individual. Their pioneering efforts took sex therapy into its current state. The most significant intervention that was developed by Masters and Johnson was sensate focus.

Sensate focus emphasizes the gradual process of gaining intimacy and reducing anxiety and self-monitoring, through preplanned steps that limit the progression toward full sexual contact (Wiederman, 1998). Through the lessened anxiety and self-monitoring that sensate focus affords, the client couple is encouraged to rediscover their bodies and focus on the sensual touch and not sexual touch only. The genitals are not touched, as once the genitals become involved, the individuals in the act often begin to focus on the idea of orgasm and full copulation. There are general guidelines to the steps within sensate focus but each therapist who utilizes the technique will tailor it to the client couple he or she is seeing. Four general steps in sensate focus

are: 1) caress each others' body avoiding the breasts and genitals (just exploring the other's body), 2) the caress is the same, however the receiver takes an active role and states the touch they want, 3) the caress involves the genitals and breasts but not exclusively and the receiver continues to take an active role in stating their desires for touch, and 4) the couple is given permission to enjoy mutual touching and stimulation to the point of orgasm, and the couple can proceed to sexual intercourse as long as both are desirous for intercourse. Using these four steps, couples are able to discover new sensations in the body and develop new ways of feeling physical sensations, often leading to better more physically sensitive sexual sensations involving the whole body and not just the genitals.

Cognitive Behavioral Sex Therapy

Cognitive behavioral therapy focuses on relieving complaints through a focus on cognitive restructuring since the theory espouses that the cognitions are creating and maintaining the maladaptive behaviors, thoughts, or emotions (McCabe, 2001). Cognitive behavioral therapy for sexual difficulties focuses on aiding the client in gaining some insight into their distorted sexual beliefs and practice new methods of interacting and being sexual. The PLISSIT model is the overarching cognitive-behavioral model for sex therapy (McCabe, 2001). PLISSIT is an acronym for the four levels of cognitive-behavioral treatment: 1) Permission, 2) Limited Information, 3) Specific Suggestions, and 4) Intensive Therapy (Taylor & Davis, 2007). In the permission level of treatment, the therapist will give the couple "permission" to explore new ways of interacting sexually and pleasuring each other and themselves. The therapist disseminates some psychosexual information during the "limited information" level, usually focused on the issues that the client-couple present. In giving information, it is important to limit the information to that which the client-couple are capable of understanding and prepared to receive (Taylor & Davis, 2007). If the therapist were to present too much information during the limited information stage, the client-couple may feel overwhelmed and/or not prepared for the openness of sexual conversation. In this situation, the client-couple may feel embarrassed and may not return for future sessions. The therapist becomes more involved and invasive during the "specific suggestions" level, usually gaining a history of the presenting sexual problem and then giving the client couple interventions to improve sexual functioning, that could include activities like sensate focus. In the most invasive level of treatment the therapist gains a detailed couple and sexual history, leading to on-going therapy with the client couple to include weekly sessions

with more direct interventions and assignments to improve the couple and sexual relationship. Some notable techniques utilized by cognitive-behavioral therapists are: enhancing the couple's communication pattern, developing new sexual techniques and skills, and lowering sexual and performance anxieties through relaxation techniques (McCabe, 2001).

Since many couples suffering from issues surrounding ED have developed other negative interactions, it may become pertinent for the focus of treatment to be on the couple relationship generally and the couple's ability to communicate about their sexual needs more specifically (Ackerman & Carey, 1995; Weeks & Gambescia, 2000). Many couples do not even communicate about their feelings, surrounding the ED issues, but rather begin to ignore the issue and become relationally stunted, when the prospect of having to deal with ED presents itself. Research shows that the wives and partners of the men with ED often do not know what to say or fear causing the man to feel worse through communication. Couple's communication for sexual issues generally begins with a focus on improving the couple relationship through learning to communicate needs and issues more effectively. This usually begins with the more general couple relationship and, once understood and practiced in less intense situations, can be brought into the sexual relationship.

Part of the PLISSIT model is giving permission for the couple to experiment within their sexual life, which may be enough to change their sexual dysfunctions including ED (Trepper, Treyger, Yalowitz, & Ford, 2009). A change in the sexual expression can give the client couple enough excitement to create a positive change and increase the likelihood of complete copulation. Another part of the permission giving is for the couple to experiment with new positions and experiences that may be more enjoyable. When a person's sensitivity to touch changes, it takes more and often new forms of touch to create the same effect on the penis.

When ED is evident in a man who has unhealthy levels of anxiety about the possibility of a poor sexual performance, a cognitive behavioral therapist incorporates relaxation techniques into the client's treatment (Gambescia, Sendak, & Weeks, 2009). Relaxation techniques focus on lowering inhibitions and worries through any number of methods including: breathing exercises, visual imagery, progressive muscle relaxation, and the use of music for relaxation.

As the causes of ED can be psychogenic and/or relational in origin, as well as be the secondary cause of continued ED, it is important to understand the current treatment possibilities for these psychological and relational issues. The previous options are the foundation of what

most psychotherapists practice and should be considered as an adjunct to any other treatments for ED.

The Need for Medical Treatment/Consultation

The mental health community cannot ignore that many men suffer from ED as a symptom of a medical disorder. As the medical community has sought to uncover the underlying causes of ED they have found many biological foundations for the disorder. Some of the biological bases for the ED diagnosis are treatable and will improve with the treatment of the overarching medical illness (Weeks & Gambescia, 2000). A man who develops ED and has not had a medical checkup in some time should consult a physician, especially if he is showing risk factors for any of the underlying medical disorders that are known to cause ED. If a man has had rather normal erectile function but has recently been having erectile difficulties, it would be important to gain a medical history to make sure that there are no underlying medical conditions. As these medical conditions can be somewhat insidious, therapists will have some difficulty in creating a diagnosis for the man's medical condition and should refer him to a physician for a checkup. Therapists do not gain the anatomy and biology expertise that is necessary to understand the ins and outs of possible causes of ED. Physicians can run tests as necessary to assure that any underlying medical condition is treated in conjunction with the ED. If therapists neglect to have the client gain a medical checkup, there may be dire consequences as some biological causes can be treatable, especially if caught early. For instance, as discussed earlier diabetes is a medical condition shown to be highly correlated with ED and, when diabetes is diagnosed and treated in earlier stages, it is more manageable. However, if a therapist were to treat the client, without any thought for the medical conditions that possibly underlie the ED, there may be greater harm done to the client and his physical health.

The Need for Mental Health Referral

By treating only the physical complaint, the medical community is often neglecting the cause of the physical complaint, since a large proportion of erectile difficulties are psychological in their root (Rowland, 2007). A man who is dealing with performance anxiety may be helped by being prescribed a pill that enables him to have greater sexual performance, but this situation might be merely an example of the placebo effect. The man performs better because he believes the pill will endow him with greater sexual power. The placebo effect creates a dependency on

the pill for the man to be able to perform sexually, as opposed to helping him to decrease the performance anxiety through improving his confidence in himself and his sexual relationship. Another key issue with focusing just on the biological function of the penis is the ignoring of the other parts of the sexual relationship, including being emotionally connected. Potts and associates (2004) published two articles focusing on alternatives to a focus on intercourse. Their research demonstrated that men with ED can lead satisfying sexual lives without the need for penetration (Potts, Grace, Gavey, & Vares, 2004; Potts, Grace, Vares, & Gavey, 2006). Potts and associates (2006) highlighted the opportunity to enjoy sensual touch and physical closeness that is developed as a coping skill in relationships plagued with erectile difficulties, and argue these new found sexual abilities can increase satisfaction in the couple relationship, when the focus of the couple's sexual life is not on penetration, but on being physically and emotionally intimate.

The Shift to Holistic Thinking in ED Treatment

In recent years the focus of ED has shifted to a biopsychosocial model. This shift in focus increases the need for the medical community to look beyond the medical side of ED and begin treating it with a more holistic view (Atwood, Klucinec, & Neaver, 2006; McCabe, 2005; McCabe & Matic, 2008; Moor, Strauss, Herman, & Donalucci, 2003; Rowland, 2007; Wagner & Kaplan, 1993). Banner and Anderson (2007) called for a combined sildenafil medication and cognitive-behavioral sex therapy treatment model. In their study, the combined treatment demonstrated an increase in sexual functioning and adjustment to a revitalized sexual life. Atwood, Klucinec, and Neaver (2006) argued for a combined treatment focusing on the couple's ability to create meaning to their new sexual lives, as it is different than it was prior to developing ED, even after treatment. Practitioners have stated that a combined approach to treating ED, men and their partners can find greater sexual and relationship satisfaction than through medicine or psychotherapy alone.

Review of Current Collaborative Treatment of ED

Collaborative treatment is the process of multiple professionals' treating the same person for an issue of concern. The medical community is not the only profession guilty of "treatment reductionism." Sex therapists have held, and many continue to hold, constricted views of treating ED through psychotherapy alone (Fagan, 2007). The sex therapy and medical communities must think outside their comfort zones and begin to work collaboratively. Very few researchers have

studied the collaborative treatment of ED. This researcher was only able to find six articles or book chapters that discuss a combined medical and psychological treatment for ED. Four of the articles and book chapters were completely theoretical citing some anecdotal experiences and only two were research studies. Of the four articles and book chapters that discuss the theoretical treatment of ED through a combined approach, only one focused on the relationship between the therapist and the medical provider, while the other three focused on the patient and partner being treated in both venues separately (Atwood, Klucinec, & Neaver, 2006; Rosen, 2007; Steggall, Gann, & Chinegwundoh, 2004; Weeks & Gambescia, 2000). The only theoretical paper that discussed a joint treatment with collaboration between the medical social worker and a urology specialist nurse incorporated both professionals in the same office (Steggall, Gann, & Chinegwundoh, 2004). Within the combined office, the medical social worker and urology specialist nurse participated in a joint assessment, which, according to the authors, resulted in the patients being more willing to participate in therapy. Although this article described joint treatment, it did not discuss the communication process between the two professionals. The two research articles utilized quantitative methods and compared a treatment group (combined medication and psychological treatment) with a control group (medication only). One article incorporated a single 60-90 minute psychoeducation workshop with oral medicinal treatment (Phelps, Jain, & Monga, 2004). The other study focused on combining oral medication with a cognitive behavioral sex therapy treatment protocol in a joint clinic for psychogenic ED (Banner & Anderson, 2007). In this treatment approach the treatment incorporated improvement of the relationship as well as erectile function and satisfaction of the patient. This study demonstrated a greater improvement in the first four weeks of treatment for the combined approach, although the difference between the two groups' improvement was not statistically significant. In every article and book chapter the relationship factors between the medical professional and the therapist are not discussed. As the relationship factors are not highlighted or even discussed in the current collaborative treatment of ED literature this dissertation will focus on the communication factors and their importance to urologists, including their willingness to collaborate with and desired communication with a psychotherapist. The collaborative relationship factors of focus will be discussed later in this chapter.

Medical Family Therapy

For a physician or medical professional, the implications of the medical model is quite simple, use each intervention from least invasive to most invasive until one works. Because of the amazing advances that technology has made in treating the physical causes and symptoms of ED, treating patients is now easier and more generalizable than ever before. The physician will prescribe a pill and the problem is usually solved, that is unless something more invasive is needed. The general public and those dealing with ED seem to accept these conditions. ED can usually be treated with a pill. End of story.

However, that leaves MedFTs with a new challenge collaborating on treating ED with physicians. As sex therapists have fought for ground in treating sexual issues they have often fought against the medical interventions that have been developed. MedFTs can accept the medical interventions for their benefit and aid in overcoming possible complications and shortcomings of a treatment approach that only addresses the medical issues. MedFT does not attempt to create exclusivity in the treatment of issues, but collaborate with medical professionals and aid in the psychosocial and relational adjustments that must be made in issues being treated by a medical professional (McDaniel, Hepworth, & Doherty, 1992).

This researcher could not find any efficacy studies that directly evaluated MedFT, and only two efficacy studies that investigated the effect of family therapy on medical treatments (Law & Crane, 2000; Law, Crane, & Berge, 2003). In these two studies, the researchers investigated the reduction in healthcare usage as a result of the patient attending family therapy. Law and Crane (2000) conducted a review of 292 patient charts in a randomly selected population of HMO cases. In their review, Law and Crane (2000) found a 21.5% reduction in healthcare usage as a result of incorporating marriage and family therapy. Although there is a reduction in healthcare usage, these studies did not look at specific interventions or diseases but, rather, at a randomly selected population of HMO cases that went to the physician and family therapy (Law & Crane, 2000). Law, Crane, and Berge (2003) focused their research on a comparison of individual vs. family therapy with the highest utilizers of medical services (n=75). In this study, Law, Crane, and Berge (2003) found that both groups decreased their use of medical services with the difference not being statistically significant (family therapy by 53% and individual therapy by 48%). These two studies illustrated therapy including family therapy, can be beneficial for patients, their families, and aid in reducing the need for physicians' visits.

Research into the effectiveness of interventions involving the family and medical illness are sparse (Linville, Hertlein, & Lyness, 2007). Research in family interventions' effect on medical treatment has shown improvement in a wide variety of medical conditions. Improved outcomes have been studied in situations involving, cancer care (Anderson, 2009), cardiovascular disorders (Ewart, Taylor, Kraemer, & Agras, 1984), neurological disorders (Evans, Matlock, Bishop, Stranahan, & Pederson, 1988), obesity (Epstein, Wing, Koeske, & Valoski, 1987), diabetes (Robinson, Barnacle, Pretorius, & Paulman, 2004), asthma, anorexia (Campbell & Patterson, 1995) and the general practice population (Graham, Senior, Lazarus, Mayer, & Asen, 1992). These positive outcomes demonstrate the potential that a combined treatment can bring to patients of many different medical diagnoses.

However, there has been a lack of research on the willingness of medical professionals to collaborate with psychotherapists generally and no research focusing exclusively on the treatment of erectile dysfunction through a true collaborative approach. Therefore, it is necessary to bring these concepts together and develop an understanding of the possibility of collaboration and the form of communication that urologists would prefer to give and receive in working with a MedFT. If the medical community and MedFTs were to work together on the issue of ED, it would become much more realistic to create a typical and prescribed course of treatment for ED that enables the assessment and treatment of ED from a holistic perspective, including the advances in the medical and family therapy fields (Banner & Anderson, 2007). The foundation of MedFT is collaboration with medical professionals, this collaboration is based on understanding the role of medical professionals in the treatment process and how this treatment affects patients and their family members. To understand the issues of concern in the communication process between the urologist and the MedFT in treating ED it is necessary to discuss the components of collaboration.

Collaboration

MedFTs are not necessarily constrained to practicing in a hospital setting and many are actually in private practice or academic settings (McDaniel, Hepworth, & Doherty, 1992). Collaboration is at the heart of the MedFT model, without collaboration there is no complete biopsychosocial and relational treatment. Seaburn, Lorenz, Gunn, Gawinski, & Mauksch (1996) developed six ingredients they see as the keys to effective collaboration between medical

professionals and mental health therapists. Three ingredients discussed are important for the purposes of this study: common purpose, paradigm and communication.

Common purpose within the collaborative framework is the uniting of the patient, family, and professionals around the common goal of effectively treating the illness (Seaburn, et al., 1996). Although the professionals collaborating do not need to completely agree on the short term goals within the common goal of effective treatment, the greater the clarity and agreement between all parties involved, the greater ability to bring together the separate short term goals for a more cohesive treatment. In the collaborative treatment of ED with an urologist and a MedFT, the common purpose could be the alleviation of the symptom of ED and the improved well-being of the patient and his partner. Although in treating the issue and the couple the urologist will be mostly concerned with the erectile function, the MedFT will be more focused on the psychosocial and relational issues that precipitated and/or followed the development of the symptom of ED.

The paradigm is how the professional/person views the issue and what leads to change (Seaburn, et al., 1996). The collaborators do not need to have the same paradigm, but they must allow room for the inclusion of the paradigm of others. In the treatment of ED the urologist's paradigm is his focus on the biological part of the patient. The MedFT is more concerned with creating change through a focus on the patient's psychological, emotional and relationship factors that are inhibiting improved well-being and sexual function. The two paradigms are brought together to a patient and partner who have their own paradigm and may believe that the MedFT and/or urologist are responsible for the necessary change. There are at least three separate paradigms in play in the treatment of ED. Making these differences explicit lessens the likelihood of confusion within the interrelated relationships.

In any collaborative relationship, communication is a key element. Communication involves multiple factors including, language, frequency, duration, form, content, and confidentiality (Seaburn, et al., 1996). Language is more than just jargon. Although jargon and professional shorthand are two issues that may come up in a collaborative relationship, language also includes the style of communication. Communication style is the preferred mode of communication by a given population. Seaburn et al. (1996) gave the example of a referral from a primary care physician and a cardiologist. In their example the cardiologist will send a written report summarizing the consultation to the primary care physician. Therapists may be more

likely to just make a phone call as opposed to the more formal summary that may be desired. At this time it is not known what mode of communication urologists would find most acceptable in collaborating with a MedFT. The frequency of communication and how often the collaborators communicate is generally developed on a case-by-case basis depending on the level of need for communication. Although the desired frequency may be case specific there are often professional preferences. At the very least there should be communication between the mental health therapist and the physician at the time of referral and at termination, but with the focus on ED there may be a greater desire from urologists to increase the frequency to discuss the ongoing symptom alleviation or needed adjustments to medication/treatment. Duration is the length of conversations with the collaborative relationship. Mental health therapists often have views very different from medical physicians on duration. Mental health therapists generally see clients for an hour or more for weeks or months, whereas, physicians usually see patients for 15-20 minutes for extended periods of time, possibly for the patient's whole life. This difference is also a part of the communication style of each professional with mental health therapists generally desiring more lengthy dialogue in collaboration while physicians focus on brief and to the point interactions. MedFTs come from the mental health therapy field and may desire a greater amount of time dedicated to collaboration while urologists may want to have quicker communication. Of the two methods neither is right or wrong but with the possibility of a difference it is important to understand the duration of communication desired by the urologists. The form of communication focuses on the method of communication from face-to-face to letters and e-mails. Face-to-face interaction is generally the best form of communication for physicians and therapists because instant feedback and discussion can take place. When face-to-face communication is not possible, telephone calls may be the next best method because of the continued opportunity to exchange ideas and information. Although these two methods are better for a quick exchange of information, e-mails or other electronic communication have gained prominence in the hospitals and medical practices because of the ability to communicate quickly and the respondent can reply at a time that is more convenient than when a phone call is made. The form of communication desired by urologists is an important consideration for MedFTs desiring collaboration because urologists may be more open to one form of collaboration than another. Content of communication is the information exchanged. In collaboration, most communication is goal-oriented and specific to the issue at hand. In the collaborative relationship between a

MedFT and an urologist in treating ED the content of communication may be focused on the alleviation of the symptom of ED or any mitigating factors. At this point it is not clear what content urologists would like to receive from a MedFT in collaborative treatment of ED. Content that may be of interest includes: the MedFT's assessment of attributing factors to the ED, the patient's satisfaction with erections, the patient's partner's satisfaction with erections, the patient's frequency of sexual intercourse and, any relational issues between the patient and his partner. Confidentiality is a part of all health care treatment. Both physicians and mental health therapists must keep a patient's information confidential, but the norms of confidentiality within each of the professions may be very different. Physicians tend to be more free in sharing information about a patient with other healthcare personnel while mental health therapists safeguard information and share fewer details with others including physicians. This difference in understanding confidentiality can create a difficult relationship. Seaburn, et al. (1996) suggest mental health therapists and physicians must discuss confidentiality not only with each other but with patients and their families to make sure that all are able to understand what information will be shared and what information may not be disclosed. It is important to note that this shared understanding of confidentiality creates the ground rules for communication. Once understood, the rules make the collaborative process more easily negotiated. It may be best to give an example of how confidentiality can disturb the collaborative process for a MedFT and urologists in treating ED. Patients seeing a MedFT may request that the couple's issues discussed in therapy not be shared with the urologist. When the urologist and MedFT discuss the case the MedFT's withholding the couple's issues from the urologist may be seen as an unwillingness of the MedFT to discuss such issues with the urologist causing frustration on the part of the urologist. The couple has a right to ask certain information to be kept confidential and if this is their desire at the outset, the therapist should address with the clients the need to at least make their request clear to the urologist to lessen the frustration that is possible when the therapist withholds this information from the urologist.

Conclusion

This chapter has provided a review of the literature regarding the current treatment options for ED within the medical and psychotherapy fields as well as the usefulness of the MedFT approach. Some psychotherapy researchers have sought to better understand the benefits

of a combined psychotherapy and medical treatment for ED but, at this time, it is unclear if urologists are willing to collaborate in treating ED and what degree of collaboration they would consider. The major questions being investigated in this study are, 1) What factors influence medical professionals to be more willing to collaborate with a MedFT? 2) What form of collaboration do medical professionals desire in referring patients to a MedFT? 3) What current interaction are medical professionals having with psychotherapists to whom they refer?

Chapter 3 - Methods

The purpose of this dissertation is to better understand the current state of medical professionals' referral practices to psychotherapists as it pertains to ED and medical professionals' desired communication with psychotherapists. As a population, the members of the Sexual Medicine Society of North America specialize in the treating sexual issues. As mentioned earlier, there has yet to be a study that focuses on medical professionals' referral patterns to psychotherapists and desire for collaboration in regard to ED. This chapter describes the methods used to examine the research questions and better understand the medical professionals' willingness to collaborate, the factors that are important to medical professionals in the collaborative relationship, the medical professionals' desire for specific collaborative sex therapy, and the desired level of couples therapy training received by psychotherapists to whom the medical professionals are more willing to refer. This chapter begins with outlining the research questions. Then the data collection methods will be described. Finally, the methods of analyzing the data collected will be discussed.

Research Questions

As this is an exploratory study there are research questions of interest. These questions were guided by the current literature review and an interest in understanding medical professionals' desired collaborative relationship in treating ED. In order to understand the factors that lead to a higher likelihood of collaboration and the medical professionals' desired communication in collaborating with psychotherapists, the following research questions have been identified:

1. What demographic factors increase the likelihood that a medical professional is open to collaboration with psychotherapists in treating ED?
2. Why do some medical professionals not refer ED patients to psychotherapists?
3. What type of communication would medical professionals who have not referred patients to a psychotherapist prefer in collaboratively treating ED?
4. What type of communication do medical professionals have with psychotherapists to whom they refer ED patients?

5. What frequency of interaction would medical professionals who have not referred patients to a psychotherapist prefer in collaboratively treating ED?
6. What is the frequency of interaction that medical professionals have with psychotherapists to whom they refer ED patients?
7. What duration of real-time communication would medical professionals who have not referred patients to a psychotherapist prefer in collaboratively treating ED?
8. What is the duration of real-time communication that medical professionals have with psychotherapists to whom they refer ED patients?
9. What information would be of importance to medical professionals in collaborative relationships with psychotherapists in treating ED?
10. What level of sex therapy training do medical professionals desire psychotherapists to have in order to engage in a collaborative relationship in treating ED?
11. What level of couples/relational therapy training do medical professionals desire psychotherapists to have in order to engage in a collaborative relationship in treating ED?
12. What advice would medical professionals give to psychotherapists who want to collaboratively treat ED?

Data Collection and Sample Selection

Procedure

This research utilized the internet as the mode of survey administration. There are several advantages and disadvantages to the use of the internet in administering a survey. Advantages to the use of the internet include: cost-effectiveness, lessened time to gather data, greater participant autonomy, lessened survey administrator bias and greater ability to create complete confidentiality/anonymity in survey responses (Dillman, 2000; Kaplowitz, Hadlock, & Levine, 2004). The greatest disadvantage associated with internet survey administration is the low response rates. Two issues that have been described as potential inhibitors to response are concern over internet security and a lack of recognizing the survey as scholarly research because many internet "spam" emails will often elicit responses to some form of survey (Sills & Song, 2002).

The factors that affected the decision to utilize the internet as the mode of survey dissemination and collection are the cost effectiveness and many clinics and hospitals have gone paperless, making electronic contacts not only normal but preferred. Although there is some disagreement about whether or not response rates are equitable between the mail and internet methods of data collection, the internet was chosen with the belief that medical professionals will fall into the category of the population that is more likely to be comfortable communicating through the internet (Couper, Traugott, & Lamias, 2001; Sills & Song, 2002). The largest barrier to a higher response rate was believed to be the propensity for those who use the internet to delete the introductory e-mail, as a result of having experiences with "spam" email surveys. To counteract this issue, the introductory and a reminder email were sent from the Sexual Medicine Society of North America, as opposed to being sent from the researcher. It was hoped that sending out this introductory email through the society would increase the likelihood that medical professionals would complete the survey.

Prior to being sent out to the Sexual Medicine Society of North America membership, the survey was reviewed by an urologist who gave feedback that was incorporated into the survey and the survey was pilot tested with urology faculty members at university medical centers. Through this process, the survey was evaluated for content as well as format. The pilot test group members were sent a copy of the internet survey to fill out anonymously, and were asked to take notes while going through the survey of any questions that were confusing, unnecessary or issues with question formatting. The data collected from the piloting process were not incorporated into the final study findings. After the pilot test process was complete, minor changes were made to formatting and question response wording. Prior to sending the final survey to SMSNA membership, the study was reviewed and consent was granted from the Institutional Review Board (IRB), and the SMSNA executive board and research committee.

Sample

The sample for this research consisted of urologists, physician's assistants, advanced practice nurses and nurse practitioners who are currently practicing and are members of the Sexual Medicine Society of North America (SMSNA). Two previous surveys conducted in the urologist population focused on urologists' practice patterns in treating premature ejaculation and Peyronie's Disease and yielded 28% and 21% response rates respectively (Shindel, Bullock

& Brandes, 2008; Shindel, Nelson & Brandes, 2008). Every member of SMSNA was invited to be a part of the research sample and received an email from SMSNA inviting them to take part in the survey, with a description of the study, the survey website as well as the contact information for the researcher in case of questions or concerns. SMSNA members were also sent one email midway through the survey response collection cycle reminding them of the opportunity to participate in the study. The limit of one reminder email was set by SMSNA policy. It was believed that the original invitation and reminder email would be sufficient to provide opportunity for SMSNA members who were willing to accept the invitation to complete the survey. The total number of potential respondents after removing those members who were not qualified to complete the survey was 541. The rate of response when compared to the two studies cited above was much lower with only 9.24% (50 respondents) of those invited to take the survey completing it.

Measurements

Four demographic variables were selected for inclusion in this study, biological sex, specialization type, practice type, and percentage of patients being seen for ED. Biological sex included two choices female and male. Specialization type included multiple categories including physician's assistant, nurse practitioner, sexual medicine physician, urologist, family physician, internal medicine and psychiatrist. Due to the low response rate and the much higher population of urologists, the participants were placed in one of two categories, urologist or other medical professional. Practice Type included four categories, solo, group, hospital and academic. Due to the low response rate and the much higher population of academic professionals, the participants were placed in one of two categories, academic or other type of practice. The fourth demographic variable was percentage patients being seen for ED which allowed the participant to enter an estimated percent. These four demographic variables were chosen through a search of recent studies that included similar criteria.

This study included primarily multiple choice questions with two open-ended questions. The first open-ended question asked of SMSNA members was only asked of those who stated they have not referred patients to a psychotherapist, "Under what circumstance might you refer a patient to a psychotherapist?" The second open-ended question was at the conclusion of the survey and asked, "What further advice would you give to psychotherapists who want to work

with urologists in treating individuals/couples dealing with erectile dysfunction?" These responses were qualitatively analyzed to find patterns of responses among the population of SMSNA members and are detailed in the Results section. See Appendix A for the complete survey.

Methods of Analysis

Data from this exploratory study were analyzed primarily through a variety of descriptive statistical methods. Demographic data were used to describe the sample (i.e., means, frequencies and distributions of each of the demographic variables). In addition, means, frequencies and distributions of each of the responses were presented to provide an overview of the medical professionals' thoughts and beliefs about collaboration in general, looking at what qualities medical professionals want in a potential psychotherapy collaborator. The data were used to create two chi-squares (Practice Type and Sexual Medicine Fellowship) and one logistical regression (percentage of patients being seen for ED) using the rate of referral as the dependent variable. The open-ended questions were analyzed qualitatively.

The use of chi-square statistic ($\chi 2$) was chosen as an analysis for two different variables because as a non-parametric analysis it is more robust and not as sensitive to unevenly distributed data or small sample sizes. The chi-square analysis is used to test the relationship between two variables. The $\chi 2$ statistic reports the expected frequencies if the two variables are not related with accompanying p-values. The chi-square analysis requires a minimum cell count in the 2 x 2 table to be 5 (Delucchi, 1983). Using chi-square enables researchers to compare the expected frequencies to the actual frequencies enabling an understanding of the significance of the relationship between the two variables.

Logistic regression is a method of analyzing one or more continuous variables in relation to a dichotomous outcome variable (Field, 2005). The resulting logistic model allows one to assess whether the continuous predictor variables are related to the dichotomous outcome variable. If the logistic model is significantly related to the outcome variable, then the model becomes a practical method to determine the likelihood of one of the two outcomes given a particular value on the continuous variable(s). In this study the continuous variable was the medical professionals' percentage of patients diagnosed with ED and the rate of referral was dichotomized into low and higher referral rates and used as the outcome variable.

Participants were asked for the advice they would give psychotherapists who want to work with medical professionals in treating ED. Due to the open nature of this question thematic analysis was chosen as the method of analyzing the data. The purpose of thematic analysis is to search for themes across qualitative data (Braun & Clarke, 2006). The benefit of thematic analysis in this study as opposed to other potential qualitative analyses is the freedom from being bound by specific theory or searching for specific types of data. Within thematic analysis a theme "captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82).

Chapter 4 - Results

This chapter contains the results of a survey of the Sexual Medicine Society of North America membership. To obtain these data, a secure online survey was sent to all members of SMSNA with 541 potential respondents who are qualified to respond to the questions in the survey. For members of SMSNA to be considered as potential respondents, they had to meet three criteria: (a) an active member of SMSNA; (b) a medical professional that can diagnose and treat erectile dysfunction; and (c) actively seeing patients diagnosed with erectile dysfunction. Of the 541 potential respondents, 50 (9.2%) completed the survey.

Demographics

On average the medical professionals who completed the survey had been in practice for 17.5 years with a range from 1-38 years of practice. Of the 50 respondents 42 (82.4%) were male, 7 (15.7%) were female and 1 person did not record a response to the question about biological sex. On average, respondents reported that 35% of their practice was made up of patients being seen for ED, with a range from .05% to 90%. As was expected and is consistent with the SMSNA membership, the largest specialization for survey participants was urology (82%, n=41). Other specializations included nurse practitioners (n=3) physician's assistants (n=3), family physicians (n=2) and sexual medicine specialist (n=1). Those who completed the survey were mostly in an academic setting (46%, n=23), followed by group practice (26%, n=13), hospital practice (14%, n=7), and solo practice (14%, n=7). Those who completed the survey were primarily in an urban practice setting (52%, n= 26), followed by participants in a suburban setting (42%, n=21) and only a few participants in a rural setting (6%, n=3). Most respondents stated having a practice in the United States (92%, n=46) with other respondents from Canada (n=2), Brazil (n=1) and France (n=1). Less than half the respondents completed a postdoctoral fellowship or training in sexual medicine (40%, n=20) with one participant that did not respond to the question.

When comparing the SMSNA general membership with participants in this study there is a slight difference in the gender breakdown with only 9.6% of the potential respondents being female (n=68) while this study's female respondents made up 14% of the total responses (n=7). The SMSNA general membership is 90.4% male (n=489) while this study's male respondents

made up only 84% (n=42) of the total responses with 1 person not responding to the gender question. The country of origin was also slightly different with the SMSNA potential respondents being primarily from the U.S. (87.4%, n=473), while this study received a higher percentage of responses from the U.S. (92%, n=46). The second largest population for potential respondents reside in Canada (6.8%, n=37) while only 2 medical practitioners from Canada completed this survey. The rest of the potential respondents from the SMSNA membership (n=31) is made up of medical practitioners from countries including: Brazil, Colombia, France, Italy, Philippines, South Korea, Spain, Turkey, U.K., Argentina, Australia, Belgium, China, Germany, Iran, Mexico, Puerto Rico, Serbia, Switzerland, Syrian Arab Republic, and Thailand. See Table 4.1 for a comparison of the study sample with the potential respondents from SMSNA general membership.

Table 4.1

Demographic Information

Variable		# of respondents N=50	# of SMSNA Membership N=541
Gender	Female	7	52+
	Male	42	489+
	No Response	1	--
Specialization	Family Physician	2	--
	Nurse Practitioner	3	--
	Physician's Assistant	3	--
	Urologist	41	--
	Other	1	--
Practice Type	Academic	23	--
	Group	13	--
	Hospital	7	--
	Solo	7	--
Practice Location	Rural	3	--
	Suburban	21	--
	Urban	26	--
Country of Practice	United States	46	473
	Other	4	68

Notes. + approximation based on first and middle name as well as known respondents.

Description of the Sample

The sample that responded to this survey have been practicing in the medical field an average of almost 18 years with a range of 1 year to 38 years. This range demonstrates a wide difference in time of training and practice in the medical field. The experience of these medical professionals in treating ED is also demonstrated in the average percentage of over 42% of their patients being seen for ED with the range of 3% to 90%. This again demonstrates a variety of experiences for the medical professionals who completed this survey.

The diverse experience for the medical professionals in this study is also represented in the range of responses to their thoughts on the primacy of either biological or psychological causes of ED. Medical professionals who completed this survey stated the belief that ED is primarily caused by biological issues with the average response being that ED is caused by biological issues over 80% of the time. Participants believed that ED was primarily biological from 3% to 90% of the time. The same medical professionals' average response was that ED is primarily caused by psychological issues less than 16% of the time with a range of 2% to 100% of the time. The ranges and averages of survey responses are detailed in Table 4.2

Table 4.2

Description of the Sample

	Minimum	Maximum	Average
Years in Practice	1	38	17.84
Percentage of Patients Being Seen for ED	3%	90%	42.26%
Percentage of the Time that Biological Issues are the Cause of ED	3%	98%	80.24%
Percentage of the Time that Psychological Issues are the Cause of ED	2%	100%	15.90%

Notes. N=50

Medical Professionals' Referrals to Psychotherapists

Research Question 1:

What demographic factors increase the likelihood that a medical professional is open to collaboration with psychotherapists in treating ED?

Due to the low response rate, the answers from this study are limited. To analyze the data, descriptive statistics are reported, two chi-square analyses were run and one logistic regression was conducted. As there was a large disparity in numbers of those who do and do not refer to therapists, it was decided to focus on the differences between physicians who refer, but only refer 6% or less of their ED patients, versus those who refer greater than 6% of ED patients, using the median response as the separation point. This allowed for 22 respondents who refer 6% or less of their patients and 22 respondents who refer greater than 6% of their patients. The following analyses were run using the 44 respondents that refer as the population.

Female vs. Male Demographic Variable

Of the 22 respondents who reported referring 6% or less of their patients with ED to a therapist, 20 were male and 2 were female. Of the 22 respondents who reported referring greater than 6% of their patients with ED to a therapist, 18 were male and 3 were female with 1 no response to the gender question. Due to the low response rate from female medical professionals, it is not possible to complete a statistical analysis to compare men's versus women's referral patterns, but the distribution of males and females between low and higher referrers are similar.

Medical Professional Specialization

Because over half of the respondents were urologists (n=37) the other specialization groups were combined into one group (n=7). Of the 22 respondents who reported referring 6% or less of their patients with ED to a therapist, 21 were urologists and 1 described his/her specialization as a "physician's assistant". Of the 22 respondents who reported referring greater than 6% of their patients with ED to a therapist, 16 were urologists and 6 were from other specializations including, family physicians, physician's assistants, nurse practitioners and a "sexual medicine physician". There were too few respondents outside of the urology specialization to compare the two groups, but there appears to be a slight difference in the two populations with a greater number of urologists being in the low referral category and a greater number of the other specializations in the higher referral category.

Practice Type

Due to the much larger population of academic medical professionals who responded compared to any other specific practice type, the other practice types were combined into one group. The academic population was compared to the non-academic population of respondents using a chi-square analysis. Out of the 44 respondents, 23 were from academic institutions while 21 were employed in either "Group", "Solo", or "Hospital" practices. There was no statistically significant difference based on type of practice with a p-value of 0.09. Of the 23 participants from academic institutions 11 refer 6% or less of their ED patients to a therapist and 12 refer greater than 6% of their ED patients to a therapist. Of the 21 participants from non-academic institutions, 11 refer 6% or less of their ED patients to a therapist and 10 refer greater than 6% of their ED patients to a therapist. Results are reported in Table 4.3.

Table 4.3

Practice Type Chi-Square Analysis

Rate of Referral	Academic	Other	Total
Low	11 (11.5)[a]	11 (10.5)[a]	22
High	12 (11.5)[a]	10 (10.5)[a]	22
Total	23	21	44

Note. a = expected frequency

Sexual Medicine Fellowship

Of the 44 respondents included in this analysis, only 43 completed the question regarding completion of a sexual medicine fellowship. Of the 43 respondents, 17 responded that they did complete a sexual medicine fellowship, while 26 responded that they did not complete a sexual medicine fellowship. Of the 17 who completed a sexual medicine fellowship, 13 reported referring greater than 6% of their ED patients to a therapist while only 9 of the 26 respondents who did not complete a sexual medicine fellowship reported referring greater than 6% of their ED patients to psychotherapists. There was a significant association between the history of completing a sexual medicine fellowship and rate of referral ($\chi 2$ (1) = 7.2, $p<.05$). Those medical professionals who have completed a sexual medicine fellowship are more likely to refer greater than 6% of their ED patients to a therapist than those who do not complete a sexual medicine fellowship. Results are reported in Table 4.4.

Table 4.4

Sexual Medicine Fellowship Chi-Square Analysis

Rate of Referral	Fellowship	No Fellowship	Total
Low	4 (8.3)[a]	17 (12.7)[a]	21
Higher	13 (8.7)[a]	9 (13.3)[a]	22
Total	17	26	43

Note. a = expected frequency

Percentage of Patients Being Seen for ED

A logistic regression was conducted to predict the rate of referral to therapists (low referrer 6% or less, higher referrer greater than 6%) using the medical professionals reported percentage of practice devoted to ED patients as the predictor variable. A test of the full model

against a constant only model was statistically significant, indicating that the predictor reliably distinguished between low and higher referrers (chi square = 9.41, $p < .05$ with df = 1).

Nagelkerke's R2 of .257 indicated a weak relationship between prediction and grouping. Prediction success overall was over 60% (68.2% for low referrers, 63.6% for higher referrers). The Wald criterion demonstrated that the percentage of patients diagnosed with ED made a significant contribution to prediction ($p < .05$). EXP(B) value indicates that when the percentage of patients the therapist treats diagnosed with ED increases by one unit (one percentage) the likelihood that the therapist would refer patients to a psychotherapist increases 1.046. The results of the logistic regression are reported in Table 4.5.

Table 4.5

Percentage of Patient with ED Logistic Regression Analysis

	B	SE B	Wald	df	Sig.	e^B
Percentage of Patients with ED	.045*	.016	7.477	1	.006	1.046
Constant	-2.013	.800	6.323	1	.012	.134

Note. *p<.05

Research Question 2:

Why do medical professionals not refer patients to psychotherapists?

Because only six medical professionals reported never referring to psychotherapists, it was not possible to answer this question statistically. However, four of the six respondents who had not referred a patient to a psychotherapist responded to this question. One reason given by two participants was that it is not necessary for their practice. It is possible that these medical professionals do not refer patients to a therapist due to the focus of their treatment. For instance, the treatment may focus on surgery and correcting physical issues, and these medical professionals may only see referral as important if the cause of ED is psychological in nature. Another reason for not referring given by two participants was there are no psychotherapists in their area to whom they can refer. The third reason given by one participant was the lack of knowledge on how to find a psychotherapist to refer patients. The fourth reason cited for not referring patients to a psychotherapist given by one participant is that he/she is also a psychologist and can treat both the physical and the psychological issues.

Communication in Collaborative Treatment

Research Question 3:

What type of communication do medical professionals prefer in collaborative relationships with psychotherapists in treating ED?

Because of the limited response, it was not possible to answer this question with any level of certainty. Participants were asked to select all appropriate responses to this question. Among the six respondents who have never referred a patient to a psychotherapist only one reported a desire to give and receive a copy of the release of information document. Two reported that they would want a copy of the patient's history and chart, one reported that emails between the psychotherapist and the medical professional would be desired and one stated that phone calls would be desired. All of the medical professionals who have not referred ED patients to a psychotherapist reported that they would want a written summary of treatment from the psychotherapist. The one medical professional who reported a desire for the release of information document also wanted a written summary of treatment, the patient's history and chart, and the use of email for communication.

Research Question 4:

What type of communication do medical professionals have with psychotherapists to whom they refer ED patients?

There were 44 respondents who reported having referred a patient to a psychotherapist. Of the 44 medical professionals who have referred patients, nine reported that they exchanged a copy of the release document. Almost half of the respondents reported exchanging a written summary of treatment (n=20). Only one quarter reported exchanging copies of the patient's chart and history (n=11). Just over a quarter of the respondents reported exchanging emails (n=13). Almost half of the respondents reported exchanging phone calls (n=21) with most of those who exchanged emails also exchanging phone calls (n=12). Only a small number of respondents reported having in-person contact with the psychotherapist(s) to whom they refer (n=6). Only one medical professional who responded to this question stated having joint assessment and sessions with a psychotherapist. Interesting, over a sixth of the respondents reported having no communication with the psychotherapist with whom they refer (n=7).

Research Question 5:

What frequency of interaction would medical professionals who have not referred patients to a psychotherapist prefer in collaboratively treating ED?

Because only six respondents who have not referred a patient to a therapist responded to this survey, it was not possible to statistically analyze this data. However, while there is no ability to quantify these responses, there may be some value to the limited responses for future research. Frequency of interaction is an important part of collaboration. It is interesting to note that the medical professionals do not always desire a collaborative relationship but some would rather refer out the client and then not really communicate. Of the six medical professionals who have not referred patients to therapists one stated no desire for communication with the therapists if they were to refer patients. One respondent reported only wanting to interact once per year, while two stated they would want to interact every six months with the therapist. The final two respondents stated either, once every two-to-three months or once every month. None of the medical professionals surveyed stated a desire for interaction more frequently than once a month.

Research Question 6:

What is the frequency of interaction for medical professionals who have referred ED patients to psychotherapists?

The medical professionals who have referred patients to therapists were asked about their current level of interaction with therapists (n=44). Almost a quarter of the respondents stated they have no contact with the therapists to whom they refer (n=9). The largest number of respondents stated they interact with the therapist only at the time of referral (32%, n=14), which is to be expected from a referral relationship but interaction only at the time of referral cannot generally be described as collaborative. There were two respondents that reported only interacting with the therapist one time per year, while seven reported interacting every six months. Three of the possible responses had two respondents each, “interacting every two-to-three months”, “interacting once per month”, and “interacting on a weekly basis”. Interestingly, six respondents filled in the “Other” category with a response denoting that they would tailor the interactions with therapists according to the patients’ needs rather than have a predetermined expectation of interaction interval.

Research Question 7:

What duration of real-time communication do medical professionals prefer in collaborative relationships with psychotherapists in treating ED?

There were insufficient data to answer this question with any level of certainty. While there is no ability to quantify these responses, there may be some value to the limited responses for collaboration and future research. Only six participants responded to this question. Of those surveyed who have not referred patients to a psychotherapist, three would prefer no real-time interaction but contact by email or other written formats, two stated a desire to keep real-time interactions below five minutes while only one stated a desire to have a five-to-ten minute conversation.

Research Question 8:

What is the duration of real-time communication that medical professionals have with psychotherapists to whom they refer ED patients?

The two most frequent responses regarding duration of real-time interaction that medical professionals who have referred ED patients to psychotherapists (n=44) were, "no real-time communication" (37.8%, n=17) and "five to ten minutes of real-time communication" (42.2%, n=19). Six respondents reported having less than five minutes of real-time interaction, one reported greater than 10 minutes of interaction, and one respondent stated seeing the psychotherapist(s) at work and communicating as needed.

Research Question 9:

What information would be of importance to medical professionals in collaborative relationships with psychotherapists in treating ED?

Between 60 and 70 percent of the 50 respondents reported that the information that would be important to have received from the psychotherapist included, "the psychotherapist's assessment of the ED causal factors" (n=34), "the relational issues between the patient and his partner" (n=33) and "affirmation of the ED diagnosis as organic/psychogenic" (n=31). About half of the respondents reported that knowing about "the patients' and their partners' satisfaction with the sexual functioning" would be important to them, and ten of the respondents reported that the patients' "frequency of sexual intercourse" would be an important piece of information for them. Generally the proportions of respondents who have and have not referred were similar

in their responses with one exception. Only one of the medical professionals who have not referred a patient to a psychotherapist stated a desire to know of the patients and their partners' relational issues while 32 of those who have referred patients to psychotherapists stated that knowing this information would be important to them. There was one respondent who did not agree with any of the possible choices stating an interest in information from the psychotherapist "only how it relates to successful therapy". Another medical professional used the "Other" category to add his/her thoughts about the idea of distinguishing issues as either biological or psychological stating "I really disagree with the biological/psychological distinction - they are always mixed, just the proportions differ - rare that I see ED at my tertiary level of practice purely on psych factors but that may be more of a reflection of my medical/ trauma based practice". The last comment is most interesting as it follows the more collaborative view of treating erectile dysfunction even though this respondent's treatment tends to be surgical in nature. See Table 4.6 for detailed comparison of preferences for medical professionals who have never referred ED patients to a psychotherapist compared to those who have referred ED patients to a psychotherapist.

Table 4.6

Information of Importance to Medical Professionals

Type of Information	Never Referred	Have Referred	Total
Psychotherapist's assessment of the ED causal factors	3	31	34
The relational issues between the patient and his partner	1	32	33
Affirmation of the ED diagnosis as organic/psychogenic	4	27	31
The partner's level of satisfaction with the patient's sexual function	2	22	24
The patient's satisfaction with sexual function	2	21	23
The frequency of sexual intercourse for the patient	0	10	10

Desired Psychotherapist Qualifications

Research Question 10:

What level of sex therapy training do medical professionals desire psychotherapists to have in order to engage in a collaborative relationship in treating ED?

Of the 50 respondents, most (n=30) stated their preference that psychotherapists have extended training in treating sexual issues. While nine stated a desire that the psychotherapist be a Certified Sex Therapist, and seven stated a desire for the psychotherapist to have some post-graduate training in sex therapy. Of the remaining five respondents, one stated his/her desire for the psychotherapist to have taken at least one graduate class in sex therapy, one respondent stated his/her belief that the psychotherapist needed no special training in sex therapy and three respondents chose the "Other" category. The three responses in the "Other" category included two stating that a full course in graduate school is not necessary. One stating it is only important that the psychotherapist have an "interest" in seeing patients with sexual issues and the second stated his/her desire for the psychotherapist to have some "material on sex therapy included in a graduate level course". The third respondent that selected the "Other" category stated that it is important for the psychotherapist to be comfortable with "relationship issues but not have to do sex therapy" adding she believes "that sex therapists who also do couples therapy/clinical psychology are the best resource".

Research Question 11:

What level of couples/relational therapy training do medical professionals desire psychotherapists to have in order to engage in a collaborative relationship in treating ED?

Out of the 50 respondents most (n=31) stated their preference that psychotherapists have extended training in treating couple/relational issues. Only four stated a desire that the psychotherapist be a Licensed Marriage and Family Therapist, while just eleven stated a desire for the psychotherapist to have some post-graduate training in treating couples' issues but not need to specialize in treating couples. Of the remaining five respondents, three stated their desire for the psychotherapist to have taken at least one graduate class in couples' therapy or couples' issues, two respondents stated their belief that the psychotherapist needed no special training in couples' issues.

Advice from Participants

Research Question 12:

What advice would medical professionals give to psychotherapists who want to collaboratively treat ED?

All survey participants were asked, "What further advice would you give to psychotherapists who want to work with urologists in treating individuals/couples dealing with erectile dysfunction?" As this question was not required, not all respondents completed the question. Out of the possible 50 respondents, 31 chose to leave a statement. Of the 31 respondents to this question, 30 gave some advice. One of the medical professionals stated that a person must be a MD to treat erectile dysfunction in his country because only MDs will be reimbursed by Social Security. Also, most respondents to this question left one sentence responses.

Analysis Strategy

The responses to this question were analyzed through the use of thematic analysis. The primary researcher read over the comments made by participants several times prior to developing the initial coding. The initial codes were specific to the type of suggestion made by the respondents. Over the course of the initial coding, seven initial codes were found and can be described as: 1) advertise to medical professionals, 2) describe ability to treat ED to medical professionals, 3) explain plan for treatment, 4) communicate more, 5) give medical professionals screening questions for psychogenic ED, 6) psychotherapy is an important part of treating ED and 7) psychotherapists must be aware of the biological part of ED.

Due to the specific nature of the initial codes, some only contained one suggestion. However, single comment codes are prohibited from being a theme since thematic analysis requires a pattern of responses to become a theme. After the initial codes were outlined, the categories were collapsed to develop less specific and more patterned response themes. From the seven initial codes came three revised themes: 1) Biopsychosocial Focus, 2) Communicate and 3) Collaborate. These themes are outlined below using specific comments from respondents that were used in defining each theme. After the primary researcher developed the themes, the primary researcher's major professor checked the themes through comparing the comments made by respondents and fitting them into one of the three themes defined by the primary researcher. When the major professor and the primary researcher's initial categorizing of respondents' advice were in disagreement they discussed the differences and came to a consensus on the final themes and categorizing of respondents' advice. Examples of quotes that led to the final themes are outlined in Table 4.7.

Table 4.7

Example of Quotes within Final Themes

Biopsychosocial Focus	Communicate	Collaborate
"I feel that most of the time there is psychogenic facet to ED and that psychotherapy is very important aspect of that multimodality."	"Communicate better"	"Psychotherapists with an interest and expertise in the area should reach out to those of us who are specialized in sexual medicine and remind the providers about the importance of collaborative work."
"Identify Urologists in your community who are interested in engaging their patients sexual function and really want to help improve their function and sexual life as a whole."	"Make sure that you make your presence known in the GU and ED community."	"Contact the urologist that specialize in sexual health issues in your area and develop a working relationship."
"In the best of worlds all ED couples should be seen by a sex therapist as well as the urologist."	"Contact my group and attempt to arrange a presentation to us."	"My suggestion is for the psychotherapist to regularly update how the patient and or couple are doing (email, letter, phone call)."

Biopsychosocial Focus

Within the "Biopsychosocial Focus" theme, the medical professionals reported knowing that ED is both biological and psychological and affirmed the importance of psychotherapy as a treatment avenue. One participant stated, "I feel that most of time there is [a] psychogenic facet to ED". This statement agrees with current psychotherapeutic research that ED affects a man's psychological state (Gambescia, Sendak, & Weeks, 2009). It is important to note, however, that medical professionals may not always consider the psychological aspects of ED. For example, one participant said,

> Make sure that you make your presence known in the GU and ED community. Many urologists/PA's don't have a good sense of who to send their patients to, So the patients may suffer as a result. I would also suggest educational activities for

urologists and PA's (and PCP's) who treat ED, as I believe that many practitioner's ED treatment regime consists of trials of all 3 PDE5-I's and then nothing after that.

In addition to participants reporting that medical professionals need to be more aware of the psychosocial component they also emphasized that psychotherapists need to be more aware of the organic component of ED. For example, one participant stated that psychotherapists must keep in mind the biological side of ED treatment, "Just because no medical case has been identified or imaged doesn't mean something organic is not going on". Participants seemed to believe that psychotherapists should consider the biological part of the sex therapy treatment process even when no medical diagnosis has been found. One participant really summed up this theme when he/she commented, "In the best of worlds all ED couples should be seen by a sex therapist as well as the urologist". It is refreshing to read comments where medical professionals give psychotherapy equal stance in the treatment of ED, but along with the statement lies the statement of "in the best of worlds"

Communicate

The second theme that emerged through the analysis was "Communicate". Multiple participants stated that psychotherapists need to communicate more when they receive a referral from a physician. Within the "Communicate" theme were three specific parts of communication necessary in relation to receiving referrals. The first part of communication is simply for psychotherapists who are interested in collaboration to advertise their services to medical professionals, especially the medical professionals who specialize in treating sexual issues. Some respondents seemed to indicate that they would be willing to collaborate but they do not always know where to look for collaboration. In advertising services to the medical professionals they also suggested that psychotherapists focus on demonstrating how referring to and collaborating with psychotherapists can make a difference in the treatment of ED. It is important to not just be psychotherapists that ask for referrals, but to make a difference in the lives of those clients who are referred to us by medical professionals and aid in the process of improvement. Participants also emphasized the importance that therapy not hinder the medical professionals' work. One participant cautioned to "not interfere with organic treatment, i.e. don't tell the physician what meds to use or tests to order". This respondent seemed to suggest that he perceived that there were psychotherapists that are (whether in reality or perceived) attempting to be a part of the

medical treatment through telling the medical professional how to do their job. The third part to the "Communication" theme was to communicate more with medical professionals from whom we receive referrals. One medical professional related his/her thoughts as, "Can you imagine [a] patient coming in for the second visit and [I] need to ask him; 'What did the psychotherapist tell you?', 'What did the psychotherapist suggest for you?'" In order to continue to receive referrals from medical professionals it appears necessary to relate more of the content of treatment prior to the medical professional's second meeting with the patient. Another participant suggested, "Please send a follow-up note to the urologist about planned therapy." The use of a follow-up note might be extremely helpful for the medical professional as they not only hear from the psychotherapist but also have a letter to reference prior to and during the patient's next appointment.

Collaborate

The third theme "Collaborate" is related to "Communicate" but focuses more on developing a collaborative relationship. One participant stated it is important to, "remind the [medical] providers about the importance of collaborative work". While this participant did not elaborate on what he/she means by collaborative work, it may be necessary for psychotherapists to discuss the positive outcomes of collaborative work for the patient and for the medical professional. Another thought offered by one participant that really adds to the idea of collaborating with medical professionals is to develop and distribute to medical professionals, "appropriate screening questions and indications for referral". The screening tool for medical professionals would help the medical professional know the important considerations in checking for issues that require psychotherapeutic intervention. A screening device not only would make referrals easier for the medical professional but can also be seen by their patients as a form for diagnosing psychological ED and increase patients' willingness to seek out psychotherapy. An additional part of developing collaborative relationships mentioned by one participant is to consider referring sex therapy patients to sexual medicine specialists. This participant said, "There seems to be a culture of non-referral in the other way, i.e., in all my years of referring patients to various psychotherapists, I can barely remember any instances where the therapists have referred patients to me". Obviously, developing collaborative relationships with medical professionals should be two-way with psychotherapists referring to

medical professionals when appropriate and medical professionals referring to psychotherapists when appropriate.

Through the thematic analytic method three themes were developed that medical professionals see as important for therapists who want to collaborate to with them to consider: “Biopsychosocial Focus”, “Communicate”, and “Collaborate”. It appears to be important for psychotherapists to consider these themes in developing positive and effective collaborative relationships with medical professionals.

Chapter 5 - Discussion

In this chapter, a thorough discussion is presented regarding the findings and implications of findings regarding the referral practices of medical professionals in treating ED, as presented in the previous chapter. First, an overview of the study is included to explain the background, purpose, and summary of findings. Following the study overview, the implications of the findings of this study are discussed and the research implications are presented. Then the limitations of the findings from this study are addressed and thoughts for future research are offered at the conclusion of this chapter.

Overview of the Study

At the current time no literature has addressed medical professionals' desires for communication when referring patients experiencing erectile dysfunction (ED) for psychotherapy. In fact, the current field of research literature on medical professionals' referral patterns for psychotherapy in general is limited. One study found that family physicians refer 12% of their patients for psychotherapy (Clark, 2009).

All members of the Sexual Medicine Society of North America (SMSNA) received an invitation to complete this survey via email from SMSNA. After the initial invitation and one reminder were sent from SMSNA, 50 (9.4%) responses were collected that met criteria for inclusion in this study. Data were analyzed using both quantitative and qualitative methods. For the quantitative data, descriptive, chi-square, and logistic regression analyses were used. Qualitative information was analyzed using a thematic analytic method.

Summary of Findings

Primary Themes

Five major themes emerge from this study. 1) Most survey participants are willing to refer patients to psychotherapists; 2) Medical professionals who complete a Sexual Medicine Fellowship are likely to refer at a higher rate than those who do not; 3) Communication with medical professionals tends to be brief; 4) The information medical professionals would most like from a psychotherapist includes affirmation of the ED diagnosis, the ED causal factors, the patient and their partner's satisfaction in the sexual relationship, and the relational issues

between the patient and their partner; 5) Most medical professionals prefer to refer ED patients to psychotherapists who have extensive experience and training in both sexual and couples issues.

Willingness to Refer

Most of the medical professionals surveyed currently do refer patients with ED issues for psychotherapy regardless of the medical professionals' gender, specialization and place of employment. Of the 50 medical professionals who completed the survey 44 stated referring patients to psychotherapists. One of the six survey participants who stated not referring patients to a psychotherapist responded that they would refer the patient to a psychotherapist if the primary cause of the ED was psychological. Two of the medical professionals would refer the patient if he complains of relationship issues outside of the ED complaint, while one reported only referring if the patient specifically asked for a referral. The remaining two medical professionals who have never referred an ED patient to a psychotherapist reported that they would refer the patient to a psychotherapist only after the patient failed medical treatment, one stated after failure of a first-line intervention, such as the oral medications, while the other stated after failure of both a first-line and second-line intervention.

While 44 medical professionals reported referring patients to psychotherapists, the average rate of referral for these medical professionals is only 12.63%. This percentage is quite low considering 56.8% of the same group of medical professionals' reported that the ED complaint is either frequently or almost always related to or exacerbated by psychological and/or relational issues. Of the non-referral group of medical professionals, three reported that the ED complaint is either frequently or almost always related to or exacerbated by psychological and/or relational issues and three stated the ED complaint is "sometimes" related to or exacerbated by psychological and/or relational issues. It is interesting to note that none of the medical professionals in either the referral or non-referral groups reported that it is "hardly ever" or "never" related to psychological and/or relational issues. It seems clear that there is considerable opportunity for trained medical family therapists or other psychotherapists who work with couples and sexual issues to collaborate with sexual medical professionals.

Another key component to medical professionals' willingness to refer patients to psychotherapists is the timing of referral. The most frequent time of referral from medical

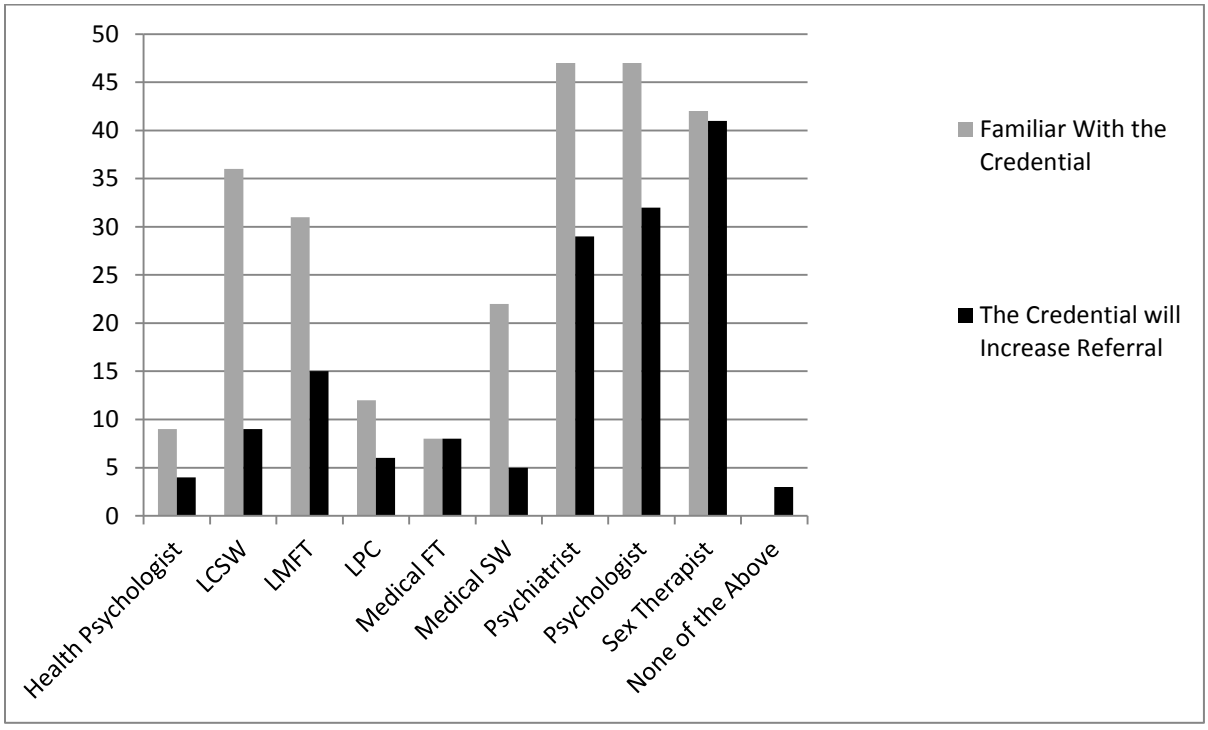
professionals to psychotherapists is at the beginning of treatment for psychological treatment instead of medical treatment if they deem the cause of ED to be psychological in nature (n=18). The second most frequent response from physicians was that referral would happen if the patient complained of relationship issues outside of the primary ED complaint (n=13). Of particular interest is the low number of medical professionals (n=8) who responded in the form of the most collaborative referral processes, "refer patients at the beginning of treatment in conjunction with medical treatment". Only four of the medical professionals reported referral to a psychotherapist after a first-line treatment, including the medications, proved to be ineffective. Only two reported that they would refer after both first and second-line treatments proved to be ineffective. Only one reported he/she would refer if the patient is having difficulty following through with medical treatment. Only two reported that they would wait until the patient asked for a psychotherapy referral. None of the medical professionals reported that they think there is no reason to refer patients to a psychotherapist. One medical professional reported that his/her primary patient load is made of surgical referrals but made no statement about his/her preferred timing of referral to a psychotherapist. It appears that most of the medical professionals who responded to this survey are not attuned to collaborating and jointly treating patients. This is a potential area of need, educating medical professionals that are willing to refer. As psychotherapists attempt to collaborate with medical professionals it is necessary to discuss how jointly treating patients' ED complaints can increase the patients' follow-through in taking medications and improve the patients' overall relationships and general wellbeing (McDaniel, Hepworth, & Doherty, 1992).

The five psychotherapeutic credentials the medical professionals who completed this survey are most familiar with (over 50% are familiar with the credential) are "Psychiatrist" (n=47), "Psychologist" (n=47), "Sex Therapist" (n=42), "Licensed Clinical Social Worker" (n=36), and "Licensed Marriage and Family Therapist" (n=31). The credential that is most likely to increase referrals for ED treatment from the medical professionals is "Sex Therapist" (n=41). Other notable credentials for increasing referrals for ED treatment include "Psychologist" (n=32), "Psychiatrist" (n=29). Another interesting finding was while medical professionals are more familiar with "Licensed Clinical Social Workers" than they are with "Licensed Marriage and Family Therapists", fifteen of medical professionals surveyed said the credential of "Licensed Marriage and Family Therapist" would increase the likelihood of referral while only nine stated the "Licensed Clinical Social Worker" credential would increase the likelihood of

referral. Two of the medical professionals stated their opinion that the psychotherapists credentialing matters less than if they are "good with patients" and that the psychotherapists have "interest in the area". While the credential "Licensed Marriage and Family Therapists is recognized by over 50% of the medical professionals who took this survey, it appears that these medical professionals do not recognize the worth of being a marriage and family therapist in treating couples' issues in conjunction with medical treatments for ED. Another key is the value of being a certified sex therapist in the eyes of medical professionals who treat sexual issues. Marriage and family therapists who are interested in collaboratively treating ED would do well to become certified by the American Association of Sexuality Educators, Counselors and Therapists (AASECT) as this certification will increase the medical professionals' recognition of their unique qualifications to treat sexual issues.

Figure 5.1

Psychotherapist Credentials



Sexual Medicine Fellowship

Of the 50 medical professionals who completed this survey, 20 completed a sexual medicine fellowship while 30 did not. The medical professionals who completed a sexual

medicine fellowship are likely to refer patients to a psychotherapist at a higher rate than those who did not complete a sexual medicine fellowship. A sexual medicine fellowship provides more specific and detailed training in taking a sexual history and diagnosing and treating sexual health issues. The extra focus and training in sexual medicine may increase the likelihood of referral since the treatment protocol taught in the fellowship focuses on more than just the medical factors that contribute to ED. One of the survey participants suggested to psychotherapists who want to work with medical professionals in treating ED, "pay attention to who finishes andrology fellowships and moves into your city and target them as they are starting their practice. It is easier to develop relationships with the younger physicians." This suggestion highlights the idea that those who complete an andrology (a medical specialization in the male reproductive system) or other sexual medicine fellowship are more willing to work collaboratively with a psychotherapist in the treatment of sexual issues. Marriage and family therapists who want to collaborate with medical professionals should become aware of those medical professionals who have completed a sexual medicine fellowship as they are more likely to refer at a higher rate than those who did not complete a sexual medicine fellowship. There are many sexual medicine fellowships across the U.S. and no listing site for these programs or their graduates so it is important to get to know the medical professionals in your area and find the ones who have completed a sexual medicine fellowship and target them as referral sources.

Preferred Communication

As Seaburn, et al., (1996) point out, it is imperative that therapists interested in working with medical professionals learn to communicate with medical professionals. Because of the growing need for a collaborative nature of treatment, psychotherapists interested in working with medical professionals should tailor communication in a manner that increases medical professionals' willingness to communicate. This study found that the medical professionals surveyed have less face-to-face contact and much more asynchronous and brief interactions in communication.

It appears one key issue medical professionals have had with psychotherapists is the lack of communication. One survey respondent stated,

"My suggestion is [the psychotherapist] regularly update how the patient and or couple is doing…Can you imagine patient coming in for the second visit and we need to ask him; What did the [psychotherapist] tell you? What did the [psychotherapist] suggest for you?" So, even more important than the type of interaction is a need for psychotherapists to actually communicate with medical professionals. Regarding the type of communication the medical professionals want when collaborating with psychotherapists in treating ED it is important for communication to be brief, below 10 minutes and written communication is also preferred. As suggested by one of the medical professionals, psychotherapists should, "Be patient with physicians, who tend to be busy and overworked." Medical professionals do not have a lot of time for extraneous communication, so the psychotherapist must be aware of their desire to keep conversations brief and to the point. Some patients might have ongoing and frequent interactions with a psychotherapist but limited frequency with medical professionals. Often patients will be referred to a psychotherapist and be given a prescription for one of the PDE5 inhibitors and then not see the medical professional again for six months to check in on the medication effectiveness. In these cases it is probably wise to communicate with the medical professional at the time of the referral and then again just before the six month check in. In other cases where the medical issue is far more intensive than just a prescription for a PDE5 inhibitor, it may be necessary for a psychotherapist to communicate with the medical professional on a more frequent basis. These two examples merely highlight the variable nature of treatment and the need to tailor consultations with the medical professional to the patient's needs. It is important to develop ongoing relationships with individual medical professionals. To increase the likelihood of being a helpful referral source for medical professionals, psychotherapists need to provide brief and helpful feedback to the medical professional on a regular basis.

Important Information

To keep communication brief and to the point, psychotherapists must know what information is important to the medical professionals. In regard to communication surrounding ED the medical professionals stated their desire to understand the psychotherapists' diagnostic analysis of the ED and its causal factors and the patient's relationship factors that are of import to the treatment process. As one survey respondent stated, "urologists do not have the training (or much interest usually) in going into the other details since they do not know what to do with

it, nor should they be expected to." Medical professionals are not generally trained in treating the relational and psychogenic causes and aggravators of the ED diagnosis. Instead, the medical professional is willing to have the patient see a specialist in the area to work with the patient and his partner. Of particular interest to the medical professionals is the patient and his partner's satisfaction in the sexual relationship. Issues such as partial erection or weakened orgasm may demonstrate other issues with either organic or psychogenic causes that are not being treated effectively. There is also the possibility that the patient may not be able to increase the hardness of the erection or the strength of the orgasm, but through psychotherapy both the patient and his partner can gain an appreciation of other elements of the sexual relationship.

Training and Experience Desired

The medical professionals who completed this survey stated their desire for the psychotherapists to be specialized in both sexual and couple issues. Medical professionals who specialize in treating sexual issues tend to look for psychotherapists who also specialize. One survey participant stated, "Andrologists want to work with equally specialized psychotherapists." It is important that psychotherapists who want to work with medical professionals in treating ED explain to the medical professional their training and expertise in treating both couple and sexual issues as the medical professionals have taken extra time to become trained in treating sexual issues from a biological standpoint are looking to see the psychotherapists to also put in the extra time and effort. It is common for medical professionals to specialize in specific areas and become experts and it is far less common for psychotherapists to specialize.

Limitations

This study has highlighted a number of important concepts in the collaborative relationship between medical professionals and psychotherapists in treating ED. While these concepts are important, the findings of this study must be cautiously considered. There are limitations to the findings of this study due to the use of the survey method, sample selection and the low response rate.

While the use of a survey is judged to be an effective method of conducting an exploratory study, there are several limitations due to the use of a survey. The medical professionals were surveyed at one point in time. The participants were asked to recall and estimate information. Their memory may not be exact. It is also unknown how honest the

participants were about their own experiences. In addition, survey participants tend to attempt to answer questions in a socially desirable manner and may have been swayed to respond in a manner that they believed the researcher wanted. Another limitation due to the use of a survey in collecting data is the lack of allowance for participants to share their thoughts. The participants' responses are mostly restrained to a select few responses, although there were two opportunities for survey participants to share more open-ended responses that added depth to the findings of this survey. It would have been interesting to have an opportunity to add more qualitative features to the study. However, adding more short answer questions may have added to participant burden and reduced the response rate even further. Another limitation with this survey is possibility of flaws in the design of the survey. Even though the survey was reviewed by experienced urologists during the piloting process, the instrument's validity and reliability is not known, rather there are likely potential flaws in the instrument's design.

The generalizability of the findings of this study suffers due to lack of random sampling. The sample was comprised of members of the Sexual Medicine Society of North America who voluntarily completed the survey. Since the survey was sent to every member of the society, members who completed the survey may have had a greater interest in collaboration while those who did not complete the survey may not have been interested.

The largest cause for caution in interpreting the results of this study is the small sample and low response rate. The small sample size of 50 participants is not large enough to generalize the findings of this study to a larger population. The response rate of 9.24% is quite low and also restricts the results from being generalized to the larger Sexual Medicine Society of North America population. While the largest group of participants completing the survey were urologists, the survey also cannot adequately be generalized to the urology population. There are two main potential reasons the response rate was much lower than previous studies using urologists as the target population. The first potential reason for the low response rate is the use of SMSNA to collect respondents. No published studies have used SMSNA members as the study participants and through my interactions with SMSNA executive members it was evident that they do not handle a lot of requests for membership participation in studies. The lack of previous solicitation to members for participation in studies may have hindered participation since members of SMSNA are not accustomed to receiving requests from the organization but may have been more likely to participate had the request to participate come through an

organization that routinely requests participation in studies. Also, SMSNA is a secondary organization for most medical professionals and had the request come from the organization the members view as their primary identity, such as the American Urological Association for urologists, there may have been more willingness to participate. The second potential reason for a lower response rate is the population's possible lack of interest in collaborative relationships. It is possible that those who did not respond were not interested in the focus of the study. If the SMSNA membership is generally not interested in developing collaborative relationships, they then have less investment in participating in a study that focuses on collaboration between medical professionals and psychotherapists.

Future efforts to collect data from this or a similar population may attempt to gain stronger support and visibility within the targeted population. Methods to improve response rates might include: having the organizations the medical professionals' see as their primary identity send out the survey (i.e. American Urological Association, etc.), conducting the survey through the combined efforts of the researcher and the organization at a Sexual Medicine Society of North American society meeting and having greater advertising efforts within the Sexual Medicine Society of North America. Another possible aid would come from a more targeted audience through a simple random sample. Using a simple random sample may increase the likelihood of those selected to actually complete the survey.

Implications for Marriage and Family Therapists

This study is very practical for marriage and family therapists. Those marriage and family therapists interested in working with medical professionals to collaboratively treat ED should consider three main things: 1) gaining training and experience in sexual issues; 2) marketing themselves as an expert to specialized medical professionals; and 3) keeping communication brief and tailored to patients' needs.

Marriage and family therapists interested in working with medical professionals in treating ED should first be sure to gain the training and experience to be able to state expertise in both couple and sexual issues. It is evident from this study that the medical professionals are interested in working with those who are specialized in treating both couples and sexual issues. Marriage and family therapists receive extensive training in treating couples and families but in introductions to medical professionals, marriage and family therapists should highlight their

training and experience with couples. While marriage and family therapists gain extensive training and supervision in working with couples throughout their training program, most do not receive extensive training and supervision in treating sexual issues. To increase the likelihood of receiving referrals and be looked to as an expert it is important to receive extra training and supervision in treating sexual issues. This extra training can happen within a program, after graduation from a program and through certification processes (i.e. "Certified Sex Therapist" through AASECT).

Once experience and training is obtained, it is important to market oneself as a specialist in the field of couple and sexual issues and describe how a marriage and family therapist can be beneficial in the treatment of ED. The medical professionals suggested some good ideas of marketing including: sending out an introductory letter, setting up a presentation to the larger sexual medicine groups/urologists, include screening questions for the medical professionals to aid in identifying indications for referral, and describe for the medical professionals the treatment process from a psychological and relational perspective so they can better explain to their patients the purpose of referring them to a marriage and family therapist. These ideas are just a basis for understanding how to increase the likelihood of referral and since this was an exploratory study there are other potential methods of increasing referrals not discussed in this study.

When referrals come from medical professionals for the treatment of ED it is important to keep communication brief and to the point. Medical professionals are often very busy and do not have time for lengthier conversations. It is helpful to use a bullet point list of specific things either to discuss or questions to ask rather than just have the chart in hand and allow for free conversations. Many medical professionals make use of emails for communication with each other and this is a critical form of interacting as emails allow for the medical professional and the marriage and family therapists to maintain a record of the communication and have a form of text to go back to for reference in treating the patient.

Future Research

Future research is necessary to generalize the findings to a larger population of medical professionals. Through a larger scale study the likelihood of referral from medical professionals can be better understood. The chi-squares that were not significant in this study may be

significant with a larger sample. Developing not only a larger population but a more diverse population should be a focus of future research. A more diverse population will enhance our understanding of the specific populations that are likely to refer as well as increasing the ability to differentiate between the different populations of professionals. While looking at the possibility of future research with a larger population it would be interesting to know which sexual medicine fellowships the medical professionals completed. There is no standard training protocol for sexual medicine fellowships and as such each one chooses the focus of training. Because of the lack of standard protocol some fellowships might increase the likelihood of referral over other fellowships.

Since the professionals that completed this survey suggested the importance of networking with them and advertising to them, it is important to better understand the methods of networking that will increase the medical professionals' probability of referring. The medical professionals who responded with advice to psychotherapists that want to collaborate suggested some methods of networking, such as sending out an introductory letter or setting up a meeting with the urology group. Future research could compare various approaches to marketing to physicians or develop and test a screening device for medical professionals to aid in the referral process. Better understanding how to advertise to medical professionals would enhance the practice of collaboration between psychotherapists and medical professionals.

Another possible future research opportunity lies in using qualitative methods. The use of a survey restricts the opportunity for respondents to share their own thoughts and desires. This study is very limited in the use of open-ended questions and lacks depth of thought from the respondents. The use of phenomenological methods to understand both the medical professionals' and psychotherapists' experiences in collaborative relationships is one potential direction in qualitative research.

Summary

In summary, it seems clear that medical professionals refer patients with ED for psychotherapy and see both the organic and psychological causes of ED. According to the medical professionals surveyed, communication should be brief and done regularly. The medical professionals stated their desire for those to whom they refer to be experienced in both couples counseling and sex therapy. Throughout their training marriage and family therapists receive specialized training in treating couples' issues however, marriage and family therapy programs

tend to provide little sex therapy training. With this in mind, marriage and family therapists would do well to enhance their training through certification in sex therapy. Also, it is important to consider the medical professionals' focus on developing referral networks as opposed to creating collaborative relationships. It is important for marriage and family therapy training programs to include more training in developing and maintaining collaborative relationships with medical professionals and also training in how to market to special populations, such as those who specialize in medically treating sexual issues. More research is necessary to generalize these findings to the greater medical community but this exploratory study is a start in the dialogue surrounding the collaborative treatment of sexual issues.

References

Ackerman, M. D. & Carey, M. P. (1995). Psychology's role in the assessment of erectile dysfunction: Historical precedents, current knowledge, and methods. *Journal of Consulting and Clinical Psychology, 63*, 6, 862-876.

Althof, S. E., O'Leary, M. P., Cappelleri, J. C., Glina, S., King, R., Tseng, L. & Bowler, J. L. (2006). Self-esteem, confidence, and relationships in men treated with sildenafil citrate for erectile dysfunction. *Journal of General Internal Medicine, 21,* 1069-1074.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Text revision-DSM-IV TR). Washington: American Psychiatric Association.

Anderson, R. (2009). Medical family therapy in cancer care. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Accession Order No. AAT 3323269)

Araujo, A. B., Durante, R., Feldman, H. A., Goldstein, I. & McKinlay, J. (1998). The relationship between depressive symptoms and male erectile dysfunction: Cross-sectional results from the Massachusetts Male Aging Study. *Psychosomatic Medicine, 60,* 458-465.

Askew, *J. &* Davey, *M.* (2004). Women living with men who use Viagra: An exploratory study. *Journal of Couple and Relationship Therapy, 3*, 4, 23-42.

Atwood, J. D., Klucinec, E., & Neaver, E. (2006). A combined constructionist therapeutic approach to couples experiencing erectile dysfunction: Part II. *Contemporary Family Therapy: An International Journal, 28*, 4, 403-418.

Aubin, S., Heimen, J. R., Berger, R. E., Murallo, A. V., & Yung-Wen, L. (2009). Comparing sildenafil alone vs. sildenafil plus brief couple sex therapy on erectile dysfunction and couples' sexual and marital quality of life: A pilot study. *Journal of Sex & Marital Therapy, 35*, 122-143.

Banner, L. L. & Anderson, R. U. (2007). Integrated sildenafil and cognitive-behavior sex therapy for psychogenic erectile dysfunction: A pilot study. *Journal of Sex Medicine, 4*, 1117-1125.

Barlow, D. H. (1986). Causes of sexual dysfunction: The role of anxiety and cognitive interference. *Journal of Consulting and Clinical Psychology, 54*, 2, 140-148.

Barsky, J. L., Friedman, M. A. & Rosen, R. C. (2006). Sexual dysfunction and chronic

illness: The role of flexibility in coping. *Journal of Sex & Marital Therapy, 32*, 235-253.

Becker, A. J., Stief, C. G., Machtens, S., Schultheiss, D., Hartmann, U., Truss, M. C., & Jonas, U. (1998). Oral phentolamine as treatment for erectile dysfunction. *The Journal of Urology, 159*, 4, 1214-1216.

Black, J. (2005). Integrating medical and psychological treatment for sexual problems: The psyche and the soma. *Sexual and Relationship Therapy, 20*, 1, 105-113.

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

Cameron, A., Rosen, R. C., & Swindle, R. W. (2005). Sexual and relationship characteristics among an internet-based sample of U.S. men with and without erectile dysfunction. *Journal of Sex & Marital Therapy, 31*, 229-242.

Cameron, A. & Tomlin, M. (2007). The effect of male erectile dysfunction on the psychosocial, relationship, and sexual characteristics of heterosexual women in the United States. *Journal of Sex & Marital Therapy, 33*, 135-149.

Campbell, T., & Patterson, J. (1995). The effectiveness of family interventions in the treatment of physical illness. *Journal of Marital and Family Therapy, 21,* 545–583.

Cappelleri, J., Bell, S., Althof, S., Siegel, R. & Stecher, V. (2006). Comparison between sildenafil-treated subjects with erectile dysfunction and control subjects on the self-esteem and relationship questionnaire. *Journal of Sexual Medicine, 3*, 274-282.

Cappelleri, J. C., Althof, S. E., O'Leary, M. P., Glina, S., King, R., Stecher, V. J., Carlsson, M., & Siegel, R. L. (2007). Clinically meaningful improvement on the self-esteem and relationship questionnaire in men with erectile dysfunction. Quality of Life Research, 16, 1203-1210.

Carson C. C., & Dean, J. D. (2007). *Management of Erectile Dysfunction in Clinical Practice*, London: Springer.

Cayan, S., Bozlu, M., Canpolat, B. & Akbay, E., (2004). The assessment of sexual functions in women with male partners complaining of erectile dysfunction: Does treatment of male sexual dysfunction improve female partner's sexual functions? *Journal of Sex & Marital Therapy, 30*, 333-341.

Corona, G., Ricca, V., Bandini, E., Mannucci, E., Petrone, L., Fisher, A. D., ... Maggi, M.

(2008). Association between psychiatric symptoms and erectile dysfunction. *Journal of Sexual Medicine, 5*, 2, 458-468.

Couper, M. P., Traugott, M. W., & Lamias, M. J. (2001). Web survey design and administration. *Public Opinion Quarterly, 65*, 230-253.

Delucchi, K. L. (1983). The use and misuse of chi-square: Lewis and Burke revisited. *Psychological Bulletin, 94(*1), 166-176.

Derouet, H., Caspari, D., Rohde, V., Rommel, G., & Ziegler, M. (1999). Treatment of erectile dysfunction with external vacuum devices. *Andrologia, 31*, 1, 89-94.

Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: Wiley

Donatucci, C., Eardley, I., Buvat, J., Gittelman, M., Kell, P., Segerson, T.,…Montorsi, F. (2004). Vardenafil improves erectile function in men with erectile dysfunction irrespective of disease severity and disease classification. *The Journal of Sexual Medicine, 1*(3), 301-309.

Epstein, L. H., Wing, R. R., Koeske, R., & Valoski, A. (1987). Long-term effects of family-based treatment of childhood obesity. *Journal of Consulting and Clinical Psychology, 55,* 91–95.

Evans, R., Matlock, A., Bishop, D., Stranahan, S., & Pederson, C. (1988). Family intervention after a stroke: Does counseling or education help? *Stroke, 19*, 1243–1249.

Ewart, C. K., Taylor, C. B., Kraemer, H. C., & Agras, W. S. (1984). Reducing blood pressure reactivity during interpersonal conflict: Effects of marital communication training. *Behavior Therapy, 15*, 473–484.

Fagan, P. (2007). Sex therapy and research: A view from health services research. *Journal of Sex & Marital Therapy, 33*, 427-432.

Feldman, H. A., Goldstein, I., Hatzichristou, D. G., Krane, R. J., & McKinlay, J. B. (1994). Impotence and its medical and psychosocial correlates: Results of the Massachusetts Male Aging Study. *Journal of Urology, 151*, 54-61.

Field, A. (2005). *Discovering statistics using SPSS*. Thousand Oaks, CA: Sage Publications.

Fisher, W., Rosen, R., Eardley, I., Sand, M., & Goldstein, I. (2005). Sexual experience of

female partners of men with erectile dysfunction: The Female Experience of Men's Attitudes to Life Events and Sexuality (FEMALES) study. *Journal of Sexual Medicine, 2,* 675-684.

Gambescia, N., Sendak, S. K., & Weeks, G. R. (2009). The treatment of erectile dysfunction. In K. M. Hertlein, G. R. Weeks, & N. Gambescia (Eds.) *Systemic Sex Therapy* (pp. 107-131). New York: Routledge.

Garrison, J. (1989). Sexual dysfunction in the elderly: Causes and effects. *Journal of Psychotherapy & the Family, 5,* 1-2, 149-162.

Giraldi, A. & Kristensen, E. (2007). Medical solutions have improved the treatment of sexological problems and created more demand for sexological care. *Journal of Sex & Marital Therapy, 33,* 5, 433-437.

Goldstein, I. (2004). Diagnosis of erectile dysfunction. *Sexuality & Disability, 22,* 2, 121-130.

Goldstein, I., Fisher, W. A., Sand, M., Rosen, R. C., Mollen, M., Brock, G., Karlin, G., Pommerville, P., Bangerter, K., Bandel, T. J., & Derogatis, L. R. (2005). Women's sexual function improves when partners are administered Vardenafil for erectile dysfunction: A prospective, randomized, double-blind, placebo-controlled trial. *Journal of Sexual Medicine, 2,* 819-832.

Goldstein, I., Lue, T. F., Padma-Nathan, H., Rosen, R. C., Steers, W. D. & Wicker, P. A. (1998). Oral sildenafil in the treatment of erectile dysfunction: Sildenafil study group. *New England Journal of Medicine, 338,* 1397-1404.

Graham, H., Senior, R., Lazarus, M., Mayer, R., & Asen, K. (1992). Family therapy in general practice: Views of referrers and clients. *British Journal of General Practice, 42,* 25–28.

Heiman, J., & LoPiccolo, J. (1983). Clinical outcome of sex therapy: Effects of daily vs. weekly treatment. *Archives of General Psychiatry,* 40, 443 449.

Heiman, J. R. & Meston, M. (1997). Empirically validated treatment for sexual dysfunction. *Annual Review of Sexuality,* 8, 148-194.

Heruti, R. J., Sharabi, Y., Arbel, Y., Shochat, T., Swarzon, M., Brenner, G., & Justo, D. (2007). The prevalence of erectile dysfunction among hypertensive and prehypertensive men aged 25-40 years. *Journal of Sexual Medicine, 4,* 3, 596-601.

Kandeel, F. R., & Koussa, V. (2007). Disorders of the male sexual response cycle. In Kandeel, F. R. (Ed) *Male Sexual Dysfunction: Pathophysiology and Treatment*, (pp. 111-130). New York: Informa Healthcare.

Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly, 68*, 1, 94-101.

Kloner, R. (2007). Erectile dysfunction and hypertension. *International Journal of Impotence Research, 19*, 3, 296-302.

Laumann, E. O., Paik, A. & Rosen, R. C. (1999). Sexual dysfunction in the United States: Prevalence and predictors. *Journal of American Medical Association, 281*, 537-544.

Laumann, E. O., Paik, A., Glasser, D. B., Kang, J., Wang, T., Levinson, B.,…Gingell, C. (2006). A cross-national study of subjective sexual well-being among older women and men: Findings from the global study of sexual attitudes and behaviors. *Archives of Sexual Behaviors, 35*, 2, 145-161.

Law, D., & Crane, R. (2000). The influence of marital and family therapy on healthcare utilization in a health-maintenance organization. *Journal of Marital and Family Therapy, 26*, 281–291.

Law, D., Crane, R., & Berge, J. (2003). The influence of individual, marital, and family therapy on high utilizers of health care. *Journal of Marital and Family Therapy, 29*, 353–363.

Linville, D., Hertlien, K. M., & Lyness, A. M. (2007). Medical family therapy: Reflecting on the necessity of collaborative healthcare research. *Families, Systems, & Health, 25*, 1, 85-97.

Martin-Morales, A., Meijide, F., Garcia, N., Artes, M. & Munoz, A. (2007). Efficacy of vardenafil and influence on self-esteem and self-confidence in patients with severe erectile dysfunction. *Journal of Sexual Medicine, 4*, 440-447.

McCabe, M. P. (2001). Evaluation of a cognitive behavior therapy program for people with sexual dysfunction. *Journal of Sex & Marital Therapy, 27*, 3, 259-271.

McCabe, M. P. (2005). The role of performance anxiety in the development and maintenance of sexual dysfunction in men and women. *International Journal of Stress Management, 12*, 379-388.

McCabe, M. P. & Matic, H. (2008). Erectile dysfunction and relationships: Views of men

with erectile dysfunction and their partners. *Sexual and Relationship Therapy, 23*, 1, 51-60.

McDaniel, S., Hepworth, J., & Doherty, W. J. (1992). *Medical family therapy: A biopsychosocial approach to families with health problems*. New York: Basic Books.

Moore, T. M., Strauss, J. L., Herman, S. & Donatucci, C. F. (2003). Erectile dysfunction in early, middle, and late adulthood: Symptom patterns and psychosocial correlates. *Journal of Sex & Marital Therapy, 29*, 381-399.

Morse, W. I., & Morse, J. M. (1982). Erectile impotence precipitated by organic factors and perpetuated by performance anxiety. *Canadian Medical Association Journal, 127*, 1, 599-601.

Muller, M. J., Ruof, J., Graf-Morgenstern, M., Porst, H. & Benkert, O. (2001). Quality of partnership in patients with erectile dysfunction after sildenafil treatment. *Pharmacopsychiatry, 34*, 91-95.

NIH Consensus Panel on Impotence. (1992). Impotence. *Journal of the American Medical Association, 270*, 83-90.

Nehra, A. (2007). Oral and non-oral combination therapy for erectile dysfunction. *Reviews in Urology, 9*, 3, 99-105.

Nehra, A., Blute, M. L., Barrett, D. M., & Moreland, R. B. (2002). Rationale for combination therapy of intraurethral prostaglandin E1 and sildenafil in the salvage of erectile dysfunction patients desiring noninvasive therapy. *International Journal of Impotence Research, 14*, 1, 38-42.

Nurnberg, H. G., Hensley, P. L., & Lauriello, J. (2000). Sildenafil in the treatment of sexual dysfunction induced by selective serotonin reuptake inhibitors: An overview. *CNS Drugs, 13*, 5, 321-355.

Nusbaum, M. R. H., Lenahan, P., & Sadovsky, R. (2005). Sexual health in aging men and women: Addressing the physiologic and psychological sexual changes that occur with age. *Geriatrics, 60*, 9, 18-23.

Padma-Nathan, H. (2000). Current paradigms in treating erectile dysfunction. *Postgraduate Medicine, 107*, 6, 14-18.

Phelps, J. S., Jain, A. & Monga, M. (2004). The PsychoedPlusMed approach to erectile

dysfunction treatment: The impact of combining a psychoeducational intervention with sildenafil. Journal of Sex & Marital Therapy, 30, 305-314.

Pini, U., Ferretti, M., Vergani, C., & Annoni, G. (2007). Affectivity and sexuality in the elderly: Often neglected aspects. *Archives of Gerontology and Geriatrics, 44*, 413-417.

Popovic, M. (2007). Psychosexual treatment of erectile dysfunction in a man who had reluctance to couple therapy: A case report. *Sexual and Relationship Therapy, 22*, 3, 363-377.

Porst, H., Padma-Nathan, H., Guiliano, F., Anglin, G., Varanese, L. & Rosen, R. C. (2003). Efficacy of tadalafil for the treatment of erectile dysfunction at 24 and 36 hours after dosing: A randomized controlled trial, *Urology, 62*, 121-125.

Potts, A., Grace, V. M., Gavey, N. & Vares, T. (2004). 'Viagra stories': Challenging 'erectile dysfunction'. *Social Science and Medicine, 59*, 489-499.

Potts, A., Grace, V. M., Vares, T. & Gavey, N. (2006). 'Sex for life'? Men's counter-stories on 'erectile dysfunction', male sexuality and ageing. *Sociology of Health & Illness, 28*, 3, 306-329.

Prins, J., Blanker, M. H., Bohnen, A. M., Thomas, S. & Bosch, J. L. (2002). Prevalence of erectile dysfunction: A systematic review of population-based studies. *International Journal of Impotence Research, 14*, 422-432.

Robinson, W. D., Barnacle, R. E. S., Pretorius, R. & Paulman, A. (2004). An interdisciplinary student-run diabetes clinic: Reflections on the collaborative training process. Families, Systems, & Health, 22, 4, 490-496.

Rosen, R. C. (1996). Erectile dysfunction: The medicalization of male sexuality. *Clinical Psychology Review*, *16*, 6, 497-519.

Rosen, R. C. (2007). Erectile dysfunction: Integration of medical and psychological approaches. In: S. R. Leiblum (Ed.) *Principles and Practice of Sex Therapy* (4th ed., pp. 277-312). New York: Guilford Press.

Rosen, R. C., Janssen, E., Wiegel, M., Bancroft, J., Althof, S., Wincze, J., Segraves, R. T. & Barlow, D. (2006). Psychological and interpersonal correlates in men with erectile dysfunction and their partners: A pilot study of treatment outcome with sildenafil. *Journal of Sex & Marital Therapy*, *32*, 215-234.

Rowland, D. L. (2007). Will medical solutions to sexual problems make sexological care

and science obsolete? *Journal of Sex & Marital Therapy, 33*, 5, 385-397.

Rowland, D. L., Greenleaf, W., Mas, M., Myers, L., & Davidson, J. M. (1989). Penile and finger sensory thresholds in young, aging, and diabetic males. *Archives of Sexual Behavior, 18*, 1, 1-12.

Sbrocco, T., Weisberg, R. B., Barlow, D. H., & Carter, M. M. (1997). The conceptual relationship between panic disorder and male erectile dysfunction. *Journal of Sex & Marital Therapy, 23*, 3, 212-220.

Schumacher, S. & Lloyd, C. W. (1981). Physiological and psychological factors in impotence. *The Journal of Sex Research, 17*, 40-53.

Schuetz-Mueller, D., Tiefer, L., & Melman, A. (1995). Follow-up of vacuum and nonvacuum constriction devices as treatments for erectile dysfunction. *Journal of Sex & Marital Therapy, 21*, 4, 229-238.

Seaburn, D. B., Lorenz, A. D., Gunn, W. B., Gawinski, B. A., & Mauksch, L. B. (1996). *Models of Collaboration: A Guide for Mental Health Professionals Working with Health Care Practitioners.* New York: Basic Books.

Segraves, R. (2004). Treatment of erectile dysfunction: A psychiatric perspective. *Primary Psychiatry, 11*, 12, 35-45.

Seidman, S. (2002). Exploring the relationship between depression and erectile dysfunction in aging men. *The Journal of Clinical Psychiatry, 63*, 5, 5-12.

Seidman, S. N. & Roose, S. P. (2000). The relationship between depression and erectile dysfunction. *Current Psychiatry Reports, 2*, 201-205.

Shabsigh, R., Klein, L. T., Seidman, S., Kaplan, S. A., Lehrhoff, B. J., & Ritter, J. S. (1998). Increased incidence of depressive symptoms in men with erectile dysfunction. *Urology, 52*, 848-852.

Shindel, A., Bullock, T. L., & Brandes, S. (2008). Urologist practice patterns in the management of Peyronie's Disease: A nationwide study. *The Journal of Sexual Medicine, 5*, 4, 954-964.

Shindel, A., Nelson, C., & Brandes, S. (2008). Urologist practice patterns in the management of premature ejaculation: A nationwide study. *The Journal of Sexual Medicine, 5*, 1, 199-205.

Sills, S. J. & Song, C. (2002). Innovations in survey research: An application of web-

based surveys. *Social Science Computer Review, 20*, 1, 22-30.

Steggall, M. J., Gann, S. Y., & Chinegwundoh, F. I. (2004). Sexual dysfunction screening: The advantages of a culturally sensitive joint assessment clinic. *Sexual and Relationship Therapy, 19*, 2, 179-189.

Swindle, R. W., Cameron, A. E., Lockhart, D. C. & Rosen, R. C. (2004). The psychological and interpersonal relationship scales: Assessing psychological and relationship outcomes associated with erectile dysfunction and its treatment. *Archives of Sexual Behavior, 33*, 1, 19-30.

Taylor, B. & Davis, S. (2007). The extended PLISSIT model for addressing the sexual wellbeing of individuals with an acquired disability or chronic illness. *Sexual Disability, 25*, 135-139.

Tiefer, L. (1994). The medicalization of impotence: Normalizing phallocentrism. *Gender & Society, 8*, 3, 363-377.

Traeen, B. & Olsen S. (2007). Sexual dysfunction and sexual well-being in people with heart disease. *Sexual and Relationship Therapy, 22*, 2, 193-208.

Trepper, T.S., Treyger, S., Yalowitz, J., & Ford, J.F. (2009). Solution-focused brief therapy for the treatment of sexual disorders. In K. M. Hertlein, G. R. Weeks, & N. Gambescia (Eds.). *Systemic Sex Therapy*, New York: Routledge.

van Ahlen, H., Wahle, K., Kupper, W., Yassin, A., Reblin, T., Neureither, M. (2005). Safety and efficacy of Vardenafil, a selective phosphodiesterase 5 inhibitor, in patients with erectile dysfunction and arterial hypertension treated with multiple antihypertensives. *Journal of Sexual Medicine, 2*, 856-864.

Wagner, G. & Kaplan, H. S. (1993). *The New Injection Treatment for Impotence: Medical and Psychological Aspects.* Philadelphia: Brunner/Mazel.

Waldhauser, M. & Schramek, P. (1988). Efficiency and side effects of prostaglandin E1 in the treatment of erectile dysfunction. *Journal of Urology, 140*, 3, 525-527.

Weeks, G. R. & Gambescia, N. (2000). *Erectile Dysfunction: Integrating Couple Therapy, Sex Therapy and Medical Treatment*. New York: W. W. Norton.

Wiederman, M. W. (1998). The state of theory in sex therapy. *The Journal of Sex Research, 35*, 1, 88-99.

Wiley, D. & Bortz, W. (1996). Sexuality and aging – Usual and successful. *The Journals*

of Gerontology, 51, 142-146.

Zamboni, B. D. & Crawford, I. (2007). Minority stress and sexual problems among African-American gay and bisexual men. *Archives of Sexual Behavior, 36*, 4, 569-578.

Zilbergeld, B. (1992). *The New Male Sexuality*. New York: Bantam Books.

Appendix A – Introductory Email

Dear Member of SMSNA:

The purpose of this letter is to elicit your response to my doctoral dissertation study questionnaire. I am a member of SMSNA and a doctoral candidate in the Marriage and Family Therapy program at Kansas State University, and my dissertation is under the direction of Sandra Stith, PhD.

My dissertation is a simple, SMSNA Committee and Kansas State University IRB approved questionnaire that focuses on the possible collaborative process that can be had between a medical professional and a psychotherapist. The questionnaire is 24 questions long and includes questions about general demographic information, your experience and willingness to refer patients to a psychotherapist and your desired communication level with the psychotherapist once a referral has been made. It is believed the questionnaire will only take about 5 minutes (as per pilot survey data) to complete and the results will be anonymous and cannot be traced back to the respondent's name and identifying information.

While there are no direct benefits to participants, there are some potential indirect benefits. The Sexual Medicine Society is comprised of a diverse group of practitioners dedicated to sexual medicine, including MDs from various disciplines, a range of psychotherapists, etc. As far as I have found, no formal study to date has examined the relationship between various disciplines or documented the preferred communication that medical professionals would like to have with psychotherapists while collaboratively treating an illness of any type. This information can be disseminated, through association conferences and publications, to psychotherapists and improve their ability to communicate more effectively with physicians and other medical professionals. Also, psychotherapists will have a greater understanding of physicians' desired collaborative partners as the questionnaire asks specifically about credentials that are important in collaboratively treating erectile dysfunction. Another added potential benefit is the plan to propose these findings for presentation at a Sexual Medicine Society of North America Meeting. In presenting the study's findings at a Society Meeting those who participated and the

membership at large can gain from the responses in understanding their own desires for collaboration with psychotherapists. This should allow for better access and collaboration between the Society's members.

I thank you for your time and I know that this study is just one piece in improving the collaborative relationships of physicians and therapists. If you have any questions prior to completing the study please feel free to contact me by phone or email as listed below.

Sincerely,

Derek Willis Hagey, MS, LMFT
Doctoral Candidate
Kansas State University MFT Program
dwhagey@ksu.edu
801-882-1237

Appendix B – Questionnaire

AXIO SURVEY

Sexual Medicine Society of North America Survey on

Collaborative Treatment of Erectile Dysfunction

Survey Description
This survey has 24 total questions. These 24 questions can be broken into 2 categories. Category 1: 8 questions concern participant demographics; Category 2: 17 questions concern thoughts, beliefs, and experiences in referring erectile dysfunction patients to a psychotherapist. Most questions are multiple choice with a few short answer questions. The estimated time for completion based on pilot group surveying is 5 minutes. If you should have any problems or questions please feel free to contact Derek Hagey, doctoral candidate by either phone (801) 882-1237 or email dwhagey@ksu.edu. If you believe you have a need that requires contact with the university's institutional review board you may contact: Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

Opening Instructions
Participation in this research is strictly voluntary. Questions that you consider uncomfortable may be skipped and you may end your participation in this survey at any time. The following survey contains both multiple choice and short answer questions. For the multiple choice questions please select the response(s) that are most in line with your thoughts and beliefs. The purpose of this study is to better understand the collaborative elements that are important to medical professionals in treating erectile dysfunction. The responses from this study may be used in publications and presentations including potential for presentation at a Sexual Medicine Society of North America society meeting. There are no known risks or direct benefits from your participation in this research although by increasing therapists' understanding of medical professionals' preferences and desires, psychotherapists will be better equipped to collaborate and become a meaningful participant in the treatment process for patients with erectile dysfunction and their significant others. As a participant in this study your responses set the standard for practice in collaborating with psychotherapists in treating erectile dysfunction. Your participation is anonymous and specific participants cannot be identified as the online system does not allow access to individual surveys. By clicking on the 'Next' button you are stating your willingness to voluntarily participate in this survey and that your responses can be collected and used for purposes of the researcher's dissertation, published in journals, and presented at conferences. If you should change your mind at any time you may feel free to end your participation by closing your browser window without penalty.

Page 1

Question 1

Sex:

- ○ Female
- ○ Male

Question 2

What is your specialization?

- Family Physician
- Internal Medicine
- Nurse Practitioner
- Physician's Assistant
- Psychiatry
- Urology
- Other:

Question 3

How would you describe your practice?

- Academic Practice
- Group Practice
- Hospital (employed) Practice
- Solo Practice
- Other:

Question 4

What is your location of practice?

- Rural
- Suburban
- Urban

Question 5

In what country is your practice located?

- United States of America
- Other:

Question 6

How many years have you been practicing medicine (i.e. post-residency)?

Characters Remaining: 5

Question 7

Did you do a fellowship or postdoctoral training in sexual medicine or a related field?

- Yes
- No

Question 8

Approximately what percentage of your patients are being seen for ED? (If you do not see ED patients please mark "0").

Characters Remaining: 6

Page 2

Question 9

According to your experience, approximately what percentage of the time is the primary cause of ED Biological?

Characters Remaining: 6

Question 10

According to your experience, approximately what percentage of the time is the primary cause of ED Psychological?

Characters Remaining: 6

Question 11

How often do you think a patient's ED complaint could be related to or exacerbated by couple/relational stress and issues?

- Almost all the time
- Frequently
- Sometimes
- Hardly Ever
- Never

Question 12

Thinking about the ED cases you have worked with, at what point in a patient's treatment would you be most likely to consider a referral to a psychotherapist?

- At the beginning of treatment, in conjunction with medical treatment.

- At the beginning of treatment, in place of medical treatment if the patient demonstrates what I believe to be psychosocial causes of ED.
- After oral medication or another first-line treatment is shown to be ineffective for the patient's ED.
- After first-line and second-line treatments are shown to be ineffective.
- If the patient is having difficulty with following through with treatment as prescribed
- If the patient complains of relationship issues outside of the ED complaint.
- If the patient asks about a referral for psychotherapy.
- I do not think a referral to a psychotherapist is necessary in treating ED.
- Other:

Question 13 ***** required *****

Have you ever referred ED patients to a psychotherapist? (i.e. marriage and family therapist, professional counselor, psychiatrist, psychologist or social worker)?

- Yes
- No

Question 14

Which of the following credentials/titles are you familiar with?

- [ ] Health Psychologist
- [ ] Licensed Clinical Social Worker
- [ ] Licensed Marriage and Family Therapist
- [ ] Licensed Professional Counselor
- [ ] Medical Family Therapist
- [ ] Medical Social Worker
- [ ] Psychiatrist
- [ ] Psychologist
- [ ] Sex Therapist
- [ ] None of the Above

Question 15

Which of the following credentials would increase your likelihood of referral?

- [ ] Health Psychologist
- [ ] Licensed Clinical Social Worker
- [ ] Licensed Marriage and Family Therapist
- [ ] Licensed Professional Counselor

- [ ] Medical Family Therapist
- [ ] Medical Social Worker
- [ ] Psychiatrist
- [ ] Psychologist
- [ ] Sex Therapist
- [ ] None of the Above
- [ ] Other:

Question 16

In referring a patient diagnosed with ED to a psychotherapist, how important is it that the psychotherapist has had training in sex therapy? Please select the one response that most closely aligns with your thoughts on the subject of psychotherapist training needed to receive referrals from you.

"I believe therapists who are going to work with patients diagnosed with erectile dysfunction should…

- ( ) be certified by a sex therapy association
- ( ) have extended training in treating sexual issues
- ( ) receive some post-graduate education but do not need to specialize in sexual issues
- ( ) take at least one graduate level psychotherapy course in sex therapy and/or sexual issues
- ( ) not need training specifically in sexual issues
- ( ) Other:

Question 17

In referring a patient diagnosed with ED to a psychotherapist how important is it that the psychotherapist has had training in couples/relational therapy? Please select the one response that most closely aligns with your thoughts on the subject of psychotherapist training in couples/relational therapy needed to receive referrals from you.

"I believe therapists who are going to work with patients diagnosed with erectile dysfunction should…

- ( ) be a licensed marriage and family therapist
- ( ) have extended training in treating couples' issues
- ( ) receive some post-graduate education but do not need to specialize in couples' issues
- ( ) take at least one graduate level psychotherapy course in couples' therapy and/or couples' issues
- ( ) not need training specifically in couples' issues
- ( ) Other:

Page 3

Fill out this page only if you answered:

- ***No*** on question ***13. Have you ever referred ED patien...*** on ***page 2*** .

Question 18

What is the main reason you have not referred a patient to a psychotherapist?

- ○ Not necessary for my practice.
- ○ The thought has never crossed my mind.
- ○ I do not see any purpose/value in referring to a psychotherapist.
- ○ I would refer to a psychotherapist, but there are none in my area.
- ○ I do not know how to locate a psychotherapist in my area.
- ○ Other:

Question 19

Under what circumstance might you refer a patient to a psychotherapist?

Characters Remaining: 200

Question 20

If you were to refer a patient to a psychotherapist, what type of communication would you expect to give and receive in the referral process? (Select all that apply)

- ☐ A copy of the release document
- ☐ Written summary
- ☐ Patient's chart and history
- ☐ E-mails
- ☐ Phone calls
- ☐ In-person dialogue (face-to-face meetings with the psychotherapist)
- ☐ Joint assessment with the psychotherapist and the patient
- ☐ Joint meetings with the psychotherapist and the patient
- ☐ None
- ☐ Other:

Question 21

If you were to refer a patient to a psychotherapist, what amount of interaction would you want to have with the psychotherapist regarding the patient?

- None
- 1 time at referral
- Once every year
- Once every 6 months
- Once every 2-3 months
- Monthly
- Semi-weekly
- Weekly
- Other:

Question 22

If you were to refer a patient to a psychotherapist, what duration of real-time (face-to-face or phone call) interaction would you want to have with the psychotherapist during regular interaction?

- 0 minutes, I prefer to communicate by email, letter or other written formats.
- less than 5 minutes
- 5-10 minutes
- 10 minutes or greater
- Other:

Question 23 ***** required *****

If you were to refer a patient to a psychotherapist what information would be of importance to you that the psychotherapist can provide (select all that apply)?

- [ ] Affirmation from the psychotherapist that the ED diagnosis is organic/psychogenic.
- [ ] The psychotherapist's assessment of ED causal factors.
- [ ] The patient's level of satisfaction with his sexual function.
- [ ] The partner's level of satisfaction with the patient's sexual function.
- [ ] The frequency of sexual intercourse for the patient.
- [ ] The relational issues between the patient and his partner.

Page 4

Fill out this page only if you answered:

- ***Yes*** on question ***13. Have you ever referred ED patien...*** on ***page 2*** .

Question 24

Please estimate the percentage of your patients diagnosed with ED whom you refer for psychotherapy?

Characters Remaining: 6

Question 25

How do you decide where to refer your patients diagnosed with ED?

- My practice site employs psychotherapists, and we refer to them.
- My practice keeps an approved referral list of psychotherapists.
- I have developed relationships with a few psychotherapists to whom I refer patients.
- I refer my patients to psychotherapy and provide a list of places nearby my office, but do not have relationships with these providers.
- I refer my patients to psychotherapy but do not give them specific direction as to whom to see.
- Other:

Question 26

What type of interaction do you have with psychotherapists to whom your patients go? (check all that apply)

- Only the release
- Written summary
- Patient's chart and history
- E-mail
- Phone call
- In person dialogue (face-to-face meetings with the psychotherapist)
- Joint assessment with the psychotherapist and the patient
- Joint meetings with the psychotherapist and the patient
- None
- Other:

Question 27

Thinking about your general interaction with psychotherapists to whom your patients go: What amount of interaction do you have with the psychotherapists regarding one case?

- None
- 1 time at referral
- Once every year
- Once every 6 months

- Once every 2-3 months
- Monthly
- Semi-weekly
- Weekly
- Other:

Question 28

In referring a patient to a psychotherapist, what duration of real-time (face-to-face or phone call) interaction would you want to have with the psychotherapist during regular interaction?

- 0 minutes, I prefer to communicate by email, letter or other written formats
- less than 5 minutes
- 5-10 minutes
- greater than 10 minutes
- Other:

Question 29

In referring a patient to a psychotherapist, what information would be of importance to you that the psychotherapist can provide (select all that apply)?

- Affirmation from the psychotherapist that the ED diagnosis is organic/psychogenic
- The psychotherapist's assessment of ED causal factors
- The patient's level of satisfaction with his sexual function
- The partner's level of satisfaction with the patient's sexual function
- The frequency of sexual intercourse for the patient
- The relational issues between the patient and his partner
- Other:

Page 5

Fill out this page only if you answered:

- ***The psychotherapist'...*** OR ***Affirmation from the...*** OR ***The partner's level ...*** OR ***The patient's level ...***OR ***The relational issue...*** OR ***The frequency of sex...*** on question ***23. If you were to refer a patient t...***on ***page 3*** .

Question 30

What further advice would you give to psychotherapists who want to work with urologists in treating individuals/couples dealing with erectile dysfunction?

Characters Remaining: 1000

Closing Message

Thank you for your participation and insights. If you have any questions or would like to know more about the results of this survey please feel free to contact: Derek Hagey, (801) 882-1237 or dwhagey@ksu.edu. If you believe you have a need that requires contact with the university's institutional review board you may contact: Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224. Thank you again for your participation. You may now close your browser window to exit the survey.

- End of Survey -