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# Medication Therapy Management: The Perspective of the Case Manager

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Medication Therapy Management: The Perspective of the Case Manager

Submitted by Amanda L. Kubista  
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MSW Clinical Research Paper

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present their findings. This project is neither a Master's thesis nor a dissertation.

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### **Abstract**

What is the case manager's perspective on medication therapy management? The study consisted of 3 focus groups consisting of mental health case managers who work with clients in the community within the St. Paul and Minneapolis, Minnesota. This study analyzed how case managers engage with their client; more specifically, the perceived importance of engagement and effectiveness of client engagement was explored. This research also examined what barriers case managers face in engaging with their clients and how these barriers affect a client to be medication compliant. Finally, this research attempted to obtain data on the case manager's attitude of the importance of medication as a form of treatment for clients. This study used a qualitative approach to interviewing case managers in agencies chosen from a convenience sample. Narrative information from interviews was transcribed and subjected to a content analysis to inductively explore themes from the sample.

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## Introduction

Mental illness is a reality in many people's lives. Approximately 25% of the global population is affected by mental illness at some point in their life (Centers for Disease Control, 2011; Fernandez, Evans, Griffiths, & Mostacchi, 2006). Mental illness affects many areas of one's function in very debilitating ways. There are various ways to treat mental illness, one popular form of treatment for mental illness, is through the use of psychotropic medications (Bentley & Walsh, 2006). This paper will focus on medications as a means to treat mental illness. The use of psychotropic medications has grown exponentially since the introduction for the first antidepressant in the 1950's (Bentley & Walsh). When used properly, psychotropic medications can have many benefits, including increasing the odds of a person suffering from mental illness to stay independent and live in the community, have relief from very debilitating symptoms, increased life satisfaction, and the ability to lead a meaningful hopeful life (Bentley & Walsh, 2006; Fernandez et al., 2005; Finnell & Osborn, 2006). However, adherence to medications is a major barrier to many people suffering from mental illness (Fernandez, Evans, Griffiths, & Mostacchi, 2006).

Mental health case managers play a major role in the treatment of clients who suffer from mental illness (Ziguras & Stuart, 2000; Kelly & Stephens, 1999; Hangan, 2006; Rapp & Goscha, 2004; Burns & Perkins, 2007). In Ziguras and Stuart's (2000), "Meta-Analysis of the Effectiveness of Mental Health Case Management Over the Past 20 Years," it was found that clients who are receiving case management services are more likely to spend more days in the hospital than those who are receiving usual care in the community. This same study also found that the overall cost to treat a person suffering from mental health services is reduced when a person is receiving case management services. A case study conducted by Kelly and Stephens

(1999), discussed the successes clients had in reducing hospital visits, obtaining housing, becoming more adherent to medications and decreased suicidal ideation with the introduction of mental health case management services. Clients who receive case management services are also more likely to lead independent lives in the community and were able to incorporate meaningful activities in their life (Kelly & Stephens, 1999; Hagan, 2006; Rapp & Goscha, 2004; Burns & Perkins, 2007).

## **Background**

The nation's first mental institution was founded by Benjamin Franklin, it was known as the Pennsylvania Hospital located in Philadelphia. In Williamsburg, Virginia the first state mental hospital was founded in 1773, and it is still in operation today. By 1880 there were 128 institutions in 15 states (Bentley & Walsh, 2006).

Throughout the 19<sup>th</sup> century, the population in the United States grew dramatically, thus an expanding population in mental health wards. Prior to the population increase, treatment in these institutions were aimed at rehabilitation and stabilization of emotions and thoughts and for the patient to eventually integrate back into the community. Due to increased populations, the ability to intervene in this way was eventually limited to just population control. In the later part of the 19<sup>th</sup> century, psychotropic medications were introduced, but were used primarily as a way to control aggressive behavior and as a form of treatment for rehabilitation (Bentley & Walsh, 2006).

Bromides, a medication used for sedation, were introduced to the market in the latter part of the 19<sup>th</sup> century. Bromides were known as the most popular form of medications used to treat mental illness throughout the 20<sup>th</sup> century, despite having significant and dangerous side effect of respiratory paralysis (Bentley & Walsh, 2006).

Psychiatry and treatment for those suffering from mental illness made very little progress until the introduction of antipsychotic medication during the first half of the 20<sup>th</sup> century (Bentley & Walsh, 2006). Popular treatments that were used during this time included the use of sedative medications, rest, baths, and hydrotherapy. Other form of treatment that was developed during this time was electric shock therapy (ETC) and lobotomies. By the 1950's, the use of ETC and lobotomies were no longer seen as a popular form of treatment and were seen as cruel (Bentley & Walsh, 2006; Osborn, 2009). During this time, the only form of treatment for mental illness was in state mental hospitals. Overcrowding, high costs with low funding were forcing the United States to call on a reformation in how mental health was treated. There were not enough doctors or nurses to treat patients with patient to doctor ratios at 1:500 and patient to nurse ratios at 1:1,000 or more. People suffering from mental illness were basically warehoused in asylums to keep them away from the public. The states legislatures began to realize that something more needed to be done to revise treatment for people suffering from mental illness, and in 1945 a movement to shift mental health care to community based programming took place. Outpatient services were implemented to treat mental illness, and hospital care was limited to those with chronic, severe symptoms. The introduction of psychotropic medications and rehabilitative therapies provided the mental health workers and the public hope that people suffering from mental illness can get better and be discharged from hospitals back into the community (Osborn, 2009).

It is argued that deinstitutionalization was a failure because people were discharged from hospitals with insufficient resources, lack of housing, and structured support needs to remain safe and stable while being in the community (Burns & Perkins, 2000; Osborn, 2009).

Deinstitutionalization has provided social work the opportunity to address the needs of the

mental health population in the community rather than a hospital setting (Floersch, 2002). The case managers were a response to a need after deinstitutionalization (Burns & Perkins, 2000). Case manager has long been associated with the social worker (Floersch, 2002). Since the establishment of community based services, the role of the case manager has evolved to keep up with budgetary demands, public demands, and client demands (Kondrat & Early, 2010; Holloway, McLean & Robertson, 1991).

This study will discuss the role of the case manager, treatment of mental illness through the use of psychotropic medications, adherence to medication therapy, collaboration with providers in the clients life, and how the case manager plays a role in this form of treatment. This study attempted to obtain data from case managers who work with client's suffering from mental illness and what their perceived role is in medication therapy management.

### **Literature Review**

Social workers face a number of roles when working with clients who are within the mental health population (Bentley & Walsh, 2006). Historically, social workers were seen as a service that supports the doctor, helping with medication compliance according to the doctor's orders and are often referred to as case manager and/or social worker (Bentley & Walsh, 2006; Specht & Courtney, 1994). With a decrease in psychiatrists in the community and available beds in hospitals, social workers are being called on more than ever to help clients make crucial determinations about their treatment, thus calling on social workers to increase their knowledge and competence surrounding medications (Bentley & Walsh, 2006).

### **Definition of Case Manager**

Rapp and Goscha (2004) reviewed several studies conducted on case management. They studied the effectiveness of case management and what was needed to make it more effective.

Rapp & Goscha highlight ten strategies to make case management more effective. First, case managers should be the service delivery person rather than making referrals. The review of the studies showed that clients on an Assertive Community Treatment team (ACT) fared better than client who are referred out into the community based programs. Clients on an ACT team receive a wrap around type service where the case manager, nurse, psychiatrist work together on one team.

ACT is a form of mental health treatment that uses a team approach (Gillis & McQuiston, 2006; Mahoney, 2005). Gillis and McQuiston (2006) discussed that an ACT team is meant to be a form of intensive assertive outreach treatment that focuses on the most symptomatic mentally ill. The team includes a variety of different professionals designed to be a “one-stop-shop” to treatment designed to reduce hospital stays and help the individual remain a part of the community. The team is comprised of a psychiatrist, clinical professional, nurse, vocational specialist, a dual diagnosis specialist and a general case manager. The ACT team focuses heavily on medication adherence with the practice of supervised medication adherence often referred to as eyes-on-meds. A member from the team will bring the medication out the client on a daily basis.

Second, it is important for the case manager to integrate natural supports as much as possible in the treatment of a client. For example, working with landlords, work supervisors, teachers, and neighbors on the behalf of the client is more effective than making referrals into the community (Rapp & Goscha, 2004).

Third, case managers need to meet with client in the community versus the client going to the case manager in an office or clinic. Rapp and Goscha (2004) argue that with case management in the community, it increases engagement, reduces drop-outs of community based

services, provides case managers to conduct more accurate assessments, and most clients prefer it.

Fourth, case management services delivered on an individual basis or with a team approach were equally effective. Although there may not be any difference in the outcome of the effectiveness, a team is still important in the treatment of a client. For example, the individual case manager would have a team to back them up on an ACT team; the whole team would see the client (Rapp & Goscha, 2004).

Fifth, case managers are at the center of the clients services. Case managers should not have fragmented responsibility over a client's case. It is the major responsibility of the case manager to help the client make critical decisions regarding a client's care (Rapp & Goscha, 2004).

Sixth, quality supervision is a fundamental part in providing quality case management services. Case managers can be of a generalist background, but the supervision needs to be that of a clinical level. Case managers need access to a variety of professionals who have experience in the field, access to variety of specialists, and quality supervision (Rapp & Goscha, 2004).

Seventh, the case manager's case load should be small and manageable enough to allow for intensive, frequent contact with the client. For example, case load size on ACT teams are small and manageable, where the case manager is expected to occupy many roles while working with the client in the community. With a 10:1 ratio on an ACT team, the case manager is able to take a more recovery intensive approach to working with the client (Rapp & Goscha, 2004).

Eighth, there should be no predetermined end date with case management. Placing time limitations on services could result in re-hospitalizations, compromise stability in the community, often resulting in cyclical use of the system. As clients continue to improve,

reduced frequency of contact and intensiveness of services are introduced to the client (Rapp & Goscha, 2004).

Ninth, case management models include being accessible to the client. Case managers should be accessible to the client twenty four hours a day, seven days a week. Having a team approach allows for the duties to be divided between the team. People suffer from mental illness 24/7 and need access to services. If clients are able to access services through a known trusted person, they are more likely able to access the services they need and to stabilize more rapidly (Rapp & Goscha, 2004).

Tenth, case managers need to acknowledge client's choice. Client autonomy is important in the role of recovery for the client. For example, when clients have choice of where to live or their choice of employment settings, they are more likely to do better (Rapp & Goscha, 2004).

### **Role of Case Manager**

The working models for case management have evolved over time (Kelly & Stephens, 1999). The case manager's role of coordination between providers has been a common theme that has emerged throughout time. Coordination is a primary function of the case manager's role. Kelly & Stephens (1999) define coordination as collaborating with a number of specific individuals to assist with client care.

Other roles of the case manager include collaboration with the other providers within the client's network. The case manager serves as a liaison between relatives to keep the family informed of client's case and to organize family meetings. Case managers also identify goals with clients through an individualized plan; including objectives that will help the client realize their goals. Ongoing revision, monitoring and adjusting the plan as needed to adjust to changes and goals in the client's life is often required (Kelly & Stephens, 1999).

Preservation and specific information of the client's record of care is kept. This includes but is not limited to; communication with other providers, family members, assessments, and crisis plans. Finally, case managers play an important role in stabilizing services and preserve stability during times of transition (Kelly & Stephen, 1999).

Kelly & Stephens (1999) outline three specific examples in where the coordination of care and creative implementation of services helped individuals become stabilized in the community and live as independently as possible. It is highlighted that considerations of client's strengths, safe and affordable housing, and supportive psychotherapy plays a critical role in making progress toward client's goals.

Sometimes case management services are offered in brokerage type style (Holloway, McLean, & Robertson, 1991; Floersch, 2000). A brokerage model of case management is linking individuals to services in the community (Floersch, 2000). Despite the wide range of use in many case management services, studies have shown that this model does not work (Holloway, McLean, & Robertson, 1991; Floersch, 2000; Ziguras & Stuart, 2000; Rapp & Goscha; 2004). This style of case management services actually leads to more hospitalizations, increased use of services in the community, and lack of progress toward meeting established goals (Holloway, McLean, & Robertson, 1991).

Several studies have made that a clinical approach in the delivery of services is far more successful and desirable by the clientele (Holloway, McLean, & Robertson, 1991; Floersch, 2000). The formation of a relationship with the client and the client's ability to form relationships with other forms of support is an important factor in the development of the client's skills and progress toward their goals (Holloway, McLean, & Robertson, 1991).

One model that case managers often work under is the stress-vulnerability model, it is a model that stresses how one is affected by mental illness (Mazure, 1995). This model emphasizes that mental illness is caused by genetics and abnormal brain chemistry, while also having an association with environmental factors. One's ability to manage and deal with stress is associated to the amount of resilience they have in managing their symptoms. Managing symptoms are reliant on protective factors such as coping skills, education, medication, social and natural supports, or socioeconomic status. Bentley and Walsh (2006), argue that helping clients to build in protective factors provides social workers with a niche in the mental health population. Clients and their families also benefit by having better psychosocial functioning, thus providing social workers an opportunity to influence medication management. Providing psychosocial interventions to clients can greatly influence the benefits of taking psychotropic medications (Bentley & Walsh, 2006).

### **Psychiatric Social Work**

Social psychiatry emerged in the in the early 1900's (Bentley & Walsh, 2006; Specht & Courtney, 1994). Adolph Meyer, a renowned psychiatrist of that time thought best practice consisted of a close observation of the patient in his home and social environment. His wife, Mary Brooks Meyer, acted as the social worker for Meyer, going to the homes of patients making sure their homes were suitable and following up on the progress of patients discharged from the hospital (Bentley & Walsh, 2006).

Edith Horton was the first professional social worker to emerge during this time period. Her role was somewhat similar to what a case manager would do today such as being responsible for helping individuals find employment, housing, and community based resources for those

discharged from the hospital (Bentley & Walsh, 2006). In 1913, four functions of a psychiatric social worker were outlined: casework, clinic management, public education, and research.

### **Alliance with Case Manager**

In the psychiatrist and client relationship, the alliance between those two is a critical factor in whether or not the client will take the medication. The client's perceived competence of the prescriber and the prescriber's ability to establish rapport are important factors in client medication adherence (Diamond & Scheifler, 2007).

The working alliance between the case manager and client is often described as one of most important factors in making change for clients (Bordin, 1979; Konrat & Early, 2010; Summers & Early, 2010). Bordin's (1979) theoretical definition consisted of three different thoughts. 1) the goals of the client needs to be agreed upon by the client and the therapist, 2) the tasks of therapy are in agreement, 3) there needs to be a positive bond between the therapist and client (Summers & Barber, 2010; Konrat & Early, 2010).

Summers and Barber argue that of the three components in Bordin's theory, two can be taught. A therapist can be trained to agree upon goals and how to agree upon the tasks, but teaching someone how to form a bond with another is much more challenging. In Konrat & Early's study (2010), it is found that some case managers were able to form bonds with their clients more than others. The study also found that case managers who formed stronger bonds with their clients were more successful in completing tasks and goals.

### **Collaboration with providers**

Diamond and Scheifler (2007) state that mental health treatment is more than just a relationship between the client and the therapist or the client and the doctor; mental health treatment is a relationship between all three members. They also describe the relationship

between all three members as complicated, often left unclear, and not ever identified as an important factor in the treatment of a client. Often roles are blurred and members of the same team can share the same responsibilities. Poor adherence to medications can be attributed to a breakdown in the collaboration between the client and treatment team providers (Pathare & Paton, 1997).

Treatment teams can mean various things in various settings. Diamond and Scheifler (2007) describe the treatment team as the therapist and the prescriber, but can also be known as all of the providers within the client's network of care. More broadly, it can be anyone within the client's supports; formal or informal. Also, more and more the client is being considered a part of the treatment team (Diamond & Scheifler, 2007).

The informal supports in a client's life are thought to be vital, whether they directly or indirectly impact a client's life, they can help to reduce stress, participate in the community, support medication adherence, and provide meaning to their life (Diamond & Scheifler, 2007).

The ability to form an alliance with the client is dependent on the client and the provider (Diamond & Scheifler, 2007; Kihlstrom, 1998; Kondrat & Early, 2010). Client symptoms and whether the client is voluntary or involuntary need to be considered. Challenges in forming a relationship with a client can include paranoid, grandiose, or psychotic symptoms make forming a relationship complex and easier said than done (Diamond & Scheifler, 2007).

Bentley and Walsh (2006) describe effective collaboration within three specific ideas 1) the social worker must partner with the client 2) understand the perspective of rights and roles in the client social worker relationship and 3) integrate services within the community and with medications.

In partnering with a client, the case manager needs to understand and appreciate the strengths and limitations of the client including the client's family. They also need to understand and appreciate the client's values, goals, and perspective. Ultimately, partnering with the client is a nonthreatening relationship with a mutual understanding and open communication (Bentley & Walsh, 2006).

The strengths perspective is a significant strategy that case managers take in the formation of a relationship with a client and also in the collaboration with the client and other providers (Bentley & Walsh, 2007). The strengths model was conceptualized with a framework and idea to improve services for people diagnosed with severe and persistent mental illness. With a strengths perspective, the focus on the symptoms is secondary to a focus on the client's strengths (Taylor, 2007). The client is the expert in his/her problem, they are part of the treatment team and the opinion of the client is taken into consideration. People with mental illness are considered people and are not labels of their diagnosis such as; "bi polar" or "schizophrenic". Finally, clients have a voice in the direction of their treatment (Taylor, 2007, Christensen et al., 2010).

### **Managed Care**

Managed care was created as a means to provide health care as a way to lower the use of excessive services, control health care expenses, and provide positive outcomes in one's health. It was also designed to provide effective, feasible, and quality services in the health care system. The managed care system is designed to work with various insurance companies to provide health care services. The health care insurance companies compete with other insurance companies to provide the most cost effective services for those who are utilizing the health care system. Within the managed care system, specialized Health Maintenance Organizations

(HMOs) are “carved out” to provide specialized care, such as those with mental illness (Kihlstrom, 1998). Almost all recipients, nearly 776,000 of Medical Assistance in the state of Minnesota are on managed behavioral health care programs (Minnesota Department of Human Services, 2011). The medical model largely influences how care is provided to those suffering from mental illness. Through the HMO’s coverage plans, most services in the hospital as well as services provided in the community are based on the medical model. Although the medical model is highly disputed, it is still used today (Beecher, 2009)

### **History of Psychotropic Medications**

Five classes of drugs were being used in the treatment of mental illness and most of these drugs are still used today. The five classes of drugs include antidepressants, mood stabilizers, benzodiazepines, tranquilizers, and psycho stimulants. In the 1950’s, the first antidepressant was introduced (Bentley & Walsh, 2006).

Lithium was the first mood stimulant which was introduced to the United States in 1969; this is effective in treating those who suffer from bipolar disorder. Antidepressants were first introduced as monoamine oxidase inhibitors (MAO); later the tricyclic antidepressant, imipramine, was introduced to the market and was preferred by prescribers because of fewer side effects. Attention deficit disorder has been treated by stimulants since the 1930’s. The first benzodiazepine introduced to the United States market in 1957 was Librium (Bentley & Walsh, 2006).

### **Side-Effects of Medications**

“Side-effects are the physical, psychological, or social effects of a medication that are unintentional and unrelated to its desired therapeutic effect (Bentley & Walsh, 2006. pp. 76)”. Social workers often have firsthand knowledge of how medications can positively affect and

adversely affect clients. People taking psychotropic medication are often faced with complicated medical regimens and this can cause side-effects. Some antipsychotic and antidepressant medications can result in; “dry mouth, blurred vision, constipation, and urinary hesitancy (pp76)”. These symptoms are referred to as anticholinergic effects, affecting the part of the brain that is in charge of the fine motor system (Bentley & Walsh, 2006).

Extrapyramidal symptoms most commonly arise when taking antipsychotic medications (Bentley & Walsh, 2006). There are a variety of side-effects that affect the nervous and muscular systems. Dystonia consists of involuntary, uncoordinated muscle movements due to muscle spasms. Conversely, tardive dyskinesia is an involuntary rhythmic movement. This can be observed in lip smacking or repetitive eye lid movements. Parkinsonian effects parallel the disease and can be observed in a person with a shuffled gait, drooling, and tremors (Bentley & Walsh, 2006; Harris, 1981). Usually these symptoms will resolve themselves. However, this is not until two to three months after the symptoms initiate (Harris, 1981). Akathisia is feeling the urge to be constantly moving or feeling restless (Bentley & Walsh, 2006).

On rare occasions, usually within two weeks of starting the medication, one can develop Neuroleptic Malignant Syndrome. Due to an unsafe level of antipsychotics in the body, one can experience high fever, ridged muscles, and going in and out of consciousness (Bentley & Walsh, 2006).

Other side effects include orthostatic hypotension; this is a sudden drop in a person's blood pressure that happens when a person is lying down or sitting and goes to standing. This can cause dizziness, feeling lightheaded, or weakness. Even though this seems like a minor side effect, one could fall and cause even greater problems (Bentley & Walsh, 2006). Sedation or drowsiness is a common side effect in many psychotropic medications as well.

Particularly in the antidepressant class of medication, sexual dysfunction is common. Sexual dysfunction is a major factor in adherence to medications (Bentley & Walsh, 2006). Another adverse side effect from antidepressants is tachycardia, which is an increased heart rate, which is a significant concern for those suffering from heart conditions (Bentley & Walsh, 2006).

Weight gain is a common side effect of many psychotropic medications, particularly in women (Bentley & Walsh, 2006; Pathare & Paton, 1997). Weight gain can cause significant problems in the health of the client. The client is at greater risk of developing diabetes and heart disease because of the weight gain (Pathare & Paton, 1997).

Many factors affect the client's ability to be medication adherent (Pathare & Paton, 1997). Case managers play a vital role in the life of a client with mental illness (Bentley & Walsh, 2006; Angell, 2006). There are many studies on the effectiveness of case management services (Rapp & Goscha, 2006), but there is a lack of information on the perception of the case manager and what has been effective in their work in the mental health field.

### **Medication Adherence**

Several studies have explained factors that contribute to whether or not people take their medications. Sometimes people feel that the symptoms of the illness are better than the medication, and other times the social stigma to taking medications outweighs the benefit of taking the medication for the patient. Some patients don't feel they need medication (Deegan & Drake, 2006; Branham, 1992; Doyle & Keogh, 2008). Finally, some people do not use medications because they do not feel like they help reduce their symptoms (Deegan & Drake, 2006; Branham, 1992). Others discontinue their medication because they feel better and do not feel they need the medication any longer (Mitchell, 2007). Various beliefs about mental illness

and treatment are a factor in medication adherence, and many feel that medications should not play a role in treating mental illness. Some feel that psychotropic drugs are addictive, thus making them unwilling to take medications (Doyle & Keogh, 2008). If a client experiences a side effect to a medication, like drowsiness, weight gain or sexual dysfunction, these side effects can be a barrier for a patient in taking their medications and the client and may be reluctant to taking the medication (Branham, 1992; Doyle & Keogh, 2008; Kihlstrom, 1981). Poor adherence is a significant problem in the effectiveness of psychotropic medications (Pathare & Paton; 1997).

Non-adherence can lead to a plethora of problems in a client's life including relapse of psychiatric symptoms, loss of housing, employment, family, a decrease in social functioning, or life. Non-adherence can also increase the stress levels of the providers. For example, the case manager is responsible for helping the client to manage many areas in their life including food, shelter, medications, employment, and financial barriers. These barriers only become worse when a client is experiencing psychiatric symptoms (Doyle & Keogh, 2008). Therefore, taking preventative steps in helping a client in medication therapy management is essential to the emotional and health of the client and the case manager.

Deegan and Drake (2006) argue that the compliance model is too basic to be applied to people who battle with mental illness. The process of finding the best medication regimen that treats the illness is far too complicated for the compliance model. Other factors, such as finding purpose in one's life, parenting, or employment also affect mental health symptoms and how one uses medications.

Compliance therapy is another angle in which adherence with medications is tried. Compliance therapy is a combination of cognitive behavioral therapy, motivational interviewing,

and psychoeducation. These interventions are used to promote adherence with medications (Doyle & Keogh, 2008). This involves an open discussion of how and what the barriers are to taking medications, considering the pros and cons to taking medications, and allowing the client to be a part of the decision making of their medications (Angell, 2006; Doyle & Keogh, 2008).

Another part of compliancy therapy is client/family psychoeducation about the limitations and benefits to taking medications (Brown & Bussel, 2011; Pathare & Paton, 1997; Doyle & Keogh, 2008). Education about the medications and the client's illness is a way that providers can assist their client in better adherence with medications. Many clients feel that they do not have sufficient information about their medications, which can lead to an increase in non-adherence. Medication education includes; educating the clients about potential side-effects, what the medication is used for or what symptoms are being treated by using the medication, and how the medication is taken, such as, at what time of the day, with or without food, what the dose is and how many times a day it is taken (Doyle & Keogh, 2008).

The behavioral component is as equally important in compliancy therapy. Cognitive Behavioral Strategies are utilized as a way to help the client remember to take their medications and to facilitate the incorporation of medications in the client daily life. For example, putting a post-it note on the mirror as a reminder, taking medications at meal times, and attaching a medication bottle to a toothbrush with a rubber band are all forms of cognitive behavioral strategies to help the client to become for compliant with their medications (Doyle & Keogh, 2008).

A study by Christensen et al. (2010), found that both the physician's attitude and the patient's attitude towards medications significantly impact the likely hood of medication adherence. Eighteen primary care doctors and 246 patients took part in this study. The doctor's

attitude and the patient's attitude toward the medications were both measured. In this study, when both the doctor and the patient's attitude toward the degree of personal control over medications were highly similar, the health outcomes were significantly better than when the patient had a stronger belief in their personal control over their medications than their doctor (Christensen et al., 2010). Autonomy in the client's choice of taking medications is a significant factor in medication adherence (Mitchell, 2007; Brown & Bussel, 2011; Cowen, 2010; Doyle & Keogh, 2008).

The setting that the client is in plays a significant role in a client's ability to stay adherent to their medications. Clients who are in an inpatient setting tend to be more adherent in taking their medication. In these settings, the client tends to be involuntary in nature. Thus the client often has no choice in taking their medications (Doyle & Keogh, 2008; Longhofer, Floersch & Jenkins, 2003). This can be seen as coercion, and is sometimes seen as a necessary step in treating those with mental illness. The argument is made that once the acute period of psychosis is over and psychiatric symptoms have stabilized, the therapeutic relationships can be formed with providers (Longhofer, Floersch, & Jenkins, 2003; Angell, 2006). Clients have a tendency to maintain longer term medication adherence when a therapeutic relationship is reached with providers, thus allowing the client to give more input and feedback as to how medication therapy is working for them (Longhofer, Floersch, & Jenkins, 2003; Doyle & Keogh, 2008; Angell, 2006)

Adherence to medication provide clients to have a choice in taking medications rather than feeling mandated to take medications (Cowan, 2010). However, it is important not to place blame on the patient when it comes to medication non-adherence (Brown & Bussel, 2011). The NSW Code of Ethics (2008) also states that "Social workers respect and promote the right of

clients to self-determination and assist clients in their efforts to identify and clarify their goals” (online).

Self-medication commonly refers to someone taking illegal drugs or using alcohol to manage psychiatric symptoms, and that the use of illegal drugs and alcohol were greater in cases with untreated mental illness. Another form of self-medication is supplementation of the effects in the medications by using over the counter medications. Self-medication can also be observed in the client’s autonomy of ultimately deciding to take the medication or not (Mitchell, 2007).

### **Medication Therapy Management**

Non-adherence to medications can be a costly impact on society. Non-adherence can result in more than a \$100 billion in emergency room visits, hospital expenses, and admissions to nursing homes a year. Approximately 22% - 44% of emergency room visits are due to non-adherence to medication and are preventable (Branham, 1992).

With the approval of the Medicare Prescription Drug Improvement and Modernization Act (MMA) in 2003, a new prescription drug benefit emerged as part of the Medicare Part D plan. Medicare Part D is a prescription drug benefit to those who qualify for Medicare Benefits. Enrollees’ have the option for medication management therapy. The MMA encourages Part D providers to implement programming that decreases adverse reactions to medications and also improves medication adherence (Pellegrino, Martin, Tiltion, & Touchette, 2009).

In Branham’s study (1992), the length of hospital stays was significantly reduced in patients who were involved in a medication adherence program. This same study also indicates a significant difference in the utilization of the emergency room. Patients involved in the adherence program had less emergency room visits than the group not involved in the program and were more likely to be admitted to nursing homes. The costs associated with hospital

admissions were also much different between the two groups. On average, the cost of a patient in the hospital who was involved in the adherence program was \$566.82 per hospitalization. The average cost of a hospitalization stay for those not involved in the program was \$679.92 per patient (Branham, 1992).

Three goals of medication therapy management are 1) to provide education on medication to improve understandings of the medication, 2) increase adherence to prescribed medications 2) to determine patterns of misuse in prescribed medications and to avoid adverse reactions to multiple medications taken congruently (Pellegrino, Martin, Tiltion, & Touchette, 2009).

The role of the community mental health case manager in medication therapy management can be observed at different levels based on where the client is at in this process. Whether the client is beginning to present with psychiatric symptoms, gaining access to the medication to treat the symptoms, having the means to access the medication such as health care, monitoring the effectiveness of client compliance of the medication, or reporting the effectiveness of medication in a case note or to other providers, the case manager plays a role in this process (Longhofer, Floersch, & Jenkins, 2003). Longhofer, Floersch, & Jenkins (2003) argue that case management needs to move beyond the client/case manager relationship by including family, other members of the community, other providers, and other forms of informal supports.

One limitation that social workers have is a limited knowledge about psychotropic medications (Bentley & Walsh, 2006). Many studies consider what the client's needs are in medication adherence, but not what the case manager's needs are in providing sufficient support to their client to be medication adherent. Bentley & Walsh (2006) argue that case managers need

more education on psychotropic medications. After reviewing the literature, there was limited information on what the case manager's confidence level was in their ability to provide effective interventions in promoting medication adherence.

Collaboration with providers is a large part in what case managers do (Angell; 2006; Bentley & Walsh, 2006) and that effective collaboration between providers is vital in client success with medication adherence (Diamond & Scheifler, 2007). This research will provide an opportunity to explore what barriers case managers face in attempting to collaborate with other providers, what would be helpful in being more effective with collaboration, and finally, what value do case managers place on collaboration with providers.

In case management, the working alliance is a variable that can profoundly impact the success a client has toward their recovery goals (Diamond & Scheifler, 2007). Rapp and Goscha (2006) suggest that the ability to form a bond with a client is something that cannot be taught. That the case manager comes with the innate ability to form relationships with their clients and that case managers that are able to form stronger bonds with their clients are more successful in completing their goals, including symptom management and medication adherence. There is little evidence supporting the perception of the case manager's ability to form a bond and how that has benefited the client.

The push for managed care to have better control over health care costs (Kihlstrom, 1998), and the provision of client outcomes is a driving force in how case management services are delivered (Bentley & Walsh, 2006). It would be interesting to know what case managers feel is effective services and what their limitations and barriers are to providing effective services to clients, as well as how insurance companies impact the delivery of services to clients.

One of the major goals in medication therapy management is medication adherence, the case manager is a key player in this process (Bentley & Walsh; 2006). Collaboration between the client and the providers is important to help clients become more adherent to their medications. Deegan & Drake (2006) suggest that more qualitative research be conducted regarding the barriers in which clients experience in being medication adherent. Since case managers play a vital role in the client's recovery process it would be beneficial to explore their thoughts on the client's barriers to being medication adherent.

Finally, the success of medication therapy management relies on a variety of factors, one being the acceptance of those involved in the process. The clients, providers, and pharmacists need to all agree to be a part of this process. Client participation in medication therapy management progress is low (Pellegrino et al., 2009), and case managers can play an important role on many different levels in this treatment process (Bentley & Walsh; 2006). It would be beneficial to know how the case managers currently operate within this system and what challenges they face to further improve the effectiveness in implementing interventions in medication therapy management.

### **Conceptual Framework**

Several theoretical models will guide this research. The medical model plays a significant role in how people with mental illness are treated (Beecher, 2009). In the treatment of mental illness, the medical model specifically focuses on the symptom management through the use of medications (Casstevens, 2010). *Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2000)*, is an example of how the medical model is used in the mental health field. Reimbursement from insurance companies, Medicaid,

and Medicare for mental health services, including case management often depend on a diagnosis from the DSM (Casstevens, 2010).

According to Mosby's Medical Dictionary of Medicine, Nursing, & Health Professions (online), the definition of a medical model is:

the traditional approach to the diagnosis and treatment of illness as practiced by physicians in the Western world since the time of Koch and Pasteur. The physician focuses on the defect, or dysfunction, within the patient, using a problem-solving approach. The medical history, physical examination, and diagnostic tests provide the basis for the identification and treatment of a specific illness. The medical model is thus focused on the physical and biologic aspects of specific diseases and conditions.

One argument regarding the medical model is that the client is often referred to as their diagnosis. For example, the client becomes "the bi polar" or "the schizophrenic". The client is not realized as part of a community, a family, or as a person (Cesstevens, 2010). Although the medical model is disputed by many in the mental health system (Cesstevens, 2010; Wade & Halligan; 2004), it must be recognized as an influential factor in this study.

The stress-vulnerability model is another theory that shapes the focus of this research. The Encyclopedic Dictionary of Psychology (2011) describes it as, "vulnerability to psychiatric disorder, which is often (but not always) seen to be of biological origin, and stressful events (usually, but not always, psychological in nature) that actually trigger episodes of illness". This model assumes that those who are predisposed to mental illness are more vulnerable to developing mental illness when exposed to a stressful event.

Strengths based case management is ...based on the belief that individuals possess abilities and inner resources that allow them to cope effectively with the challenges of living

(Brun & Rapp, 2001, pg. 279). The assumption here is that everyone has strengths. If the case manager focuses on the client's strengths, the client will be more likely to reach their goals.

The recovery model is based on the philosophy that it "expand(s) the possibilities for clients to recover a sense of themselves as both members of a community and self-governing agents of choice" (Fardella, 2008, pp. 114). The client plays an equal and important role in the treatment process (Fardela, 2008). The recovery model also recognizes that there are internal and external forces that affect the clients choices in their recovery process, and that these forces will enhance or hinder change in a client (Fardela, 2008).

### **Methodology**

This study used a qualitative approach incorporating a focus group method which obtained data for the purposes of understanding the mental health case manger's perception of their role in medication therapy management. How case managers engage with their client, or more specifically the perceived importance of engagement and effectiveness of client engagement were explored. This research also examined what barriers case managers face in engaging with their clients and how these barriers affect a client to be medication compliant. Finally, this research obtained data on the case manager's attitude of the importance of medication as a form of treatment for clients.

The study was conducted through a semi-structured process through a focus group style and through the use of 6 open-ended questions (Appendix E). The focus groups was recorded using a Iphone and through the use of interview notes. A qualitative approach through the use of a focus group lasted approximately 45-60 minutes, and was beneficial in obtaining rich data, and it provided the ability to generate more data through the use of a group versus individual

interviews and through the use of open-ended questions. The focus groups took place at agencies which provided mental health case management.

### **Sample**

Participants were recruited through convenience sampling from several mental health agencies in the Twin Cities metro area. The sample group consisted of three focus groups made of about 6 to 12 participants and one individual interview from at least four different urban community mental health agencies that provide mental health case management. The participants needed to meet certain criteria to participate in this research. They needed to provide services to clients who are suffering from a severe and persistent mental illness and worked with their clients in the community.

### **Protection of Human Subjects**

All of the participants agreed to participate in this study. The focus group participants were asked to sign an informed consent form prior to filling demographic questionnaire. Strict confidentiality was maintained, as per guidelines of the University of St. Thomas Institutional Review Board and the NASW code of ethics. Only the researcher knew the names of the participants. As required, consent forms, interview notes, tapes, and interview transcripts were numerically coded and stored in a locked file during the clinical research paper process. On May 19<sup>th</sup>, 2012, the files were destroyed. Participant names were never linked to the information provided for the study. Individual case managers were not identifiable in the final report, or in any presentation or article written up as a final product of the research.

The potential benefits of this study were that stakeholders will have a better understanding of how case managers perceive what their role is in medication therapy management, what the perceived barriers are to providing support for clients, and how this may

impact the client's ability to be adherent to their medications. Ultimately, more effective and a higher quality of mental health case management services, in the respect of medication therapy management, were explored by case manager, community organizations and funders. The risks to case managers were minimal. They included the questions that were discussed in the group which may have triggered some thoughts or emotions of how they provide services to their clients. The risk to clients was minimal as no questions about specific cases were discussed, however, this was a focus group so information, opinions, and perspectives were shared with other people in the group. While this researcher asked for and stressed the importance of confidentiality, the researcher was unable to guarantee complete confidentiality.

### **Data Collection**

A group of community mental health agencies were identified in the St. Paul and Minneapolis area. Phone calls or emails to the director of the agency were made, and the research was explained to the director. The director was asked if they are interested in participating. If the director was interested, a letter was be sent via email to the director of the agency requesting permission for mental health case managers to participate in this study (Appendix A). An invitation for the case manager to participate in this research was sent to individual case managers, if they were interested, they responded via email or by telephone (Appendix B). The researcher then sent a consent form to the case manager (Appendix C). The informed consent included the reason for the study, risks and benefits for participating, and an assurance of confidentiality. Times, dates, and location for the focus groups were then coordinated.

To gather data, 3 focus groups were conducted. Each focus group lasted about one hour and was recorded. Each participate was asked to fill out a short questionnaire (Appendix D) with

information on basic demographic information prior to the start of the focus group. The questionnaire included questions regarding the participants age, gender, amount of time working in this profession, and education. Information given on the questionnaires was anonymous.

The formation of the questions was based on the data gathered and on the information in the previous research. The groups were asked the same open-ended questions in the same order (Appendix E). The following is a list of questions that were asked in the focus groups:

- As a mental health case manager what is your role in medication management?
- What barriers do you face when attempting to fulfill this role?
- How do you help your client be adherent to their medications?
- How does your relationship with your client affect your client's ability to be adherent to their medications?
- Given your experience in case management what is your approach in working with clients who are taking psychotropic medications?
- How and why is it important for you and your client to have your views be aligned regarding psychotropic medications?

This information will be valuable for future training opportunities, what barriers need to be resolved, and to provide information to other providers for better collaboration. Other questions that were asked were; what barriers the client face in being adherent to their medication. This will provide information for funders, agencies, and the community to better meet the needs of the client. A question on how the case manager helps their client be adherent to their medications will provide information on what gaps need to be filled in better medication adherence.

Follow up questions or supporting questions were asked by the researcher. This was only done to clarify information presented within the group. For example, if a case manager stated an abbreviation the researcher does not understand, the researcher will ask for clarification. Focus group conversations were recorded and transcribed by the interviewer.

Narrative information from interviews were transcribed and subjected to a content analysis to inductively explore themes from the sample.

## **Findings**

### **Demographics**

There were 25 participants that participated in this research. All of the participants worked in social service agencies. The average age of the participants was 42 years old, with the oldest participant being 64 years old and the youngest being 25 years old. The average number of years that the participants had been working as a case manager was 9.48 years, with the most number of years being 32 years and the least number of years experience was less than one year. Of the 25 participants in this research, 10 people identified themselves as white, Caucasian, or Euro American, two of the participants identified as Latino or Latin American, two identified as Black, and 11 participants identified as Asian or Hmong. Ten of the participants were working under a masters level degree, 5 of which has a master's degree in social work, 3 having degrees in counseling, one with a masters in science, one with a masters in arts, and one with a masters in alcohol and drug studies. Ten of the participants held a degree at a bachelor's level, with 7 participants having a bachelor in Arts, two with a bachelors of Science, and one with a bachelor in social work. One of the participants had a degree as a Registered Nurse. Three of the participants did not identify as obtaining any degree. Twelve participants were female, nine participants were male, and four participants did not identify any gender.

### **The Case Managers Role in Medication Therapy Management**

The participants identified several ways in which their role is defined. These roles varied significantly and some participants thought that some roles were more important than the others.

The following section will outline how the participants identified their role in medication therapy management.

**Education.** When the participants were asked what their role was in medication therapy management, a variety of themes emerged. Education was a significant theme that was discussed in the focus groups. Many case managers would ask the clients to identify their medication, what the purpose of the medication was, and the benefits to taking the medication. The times of day to take the medication was also identified as part of the case managers role. The case managers would often use medication boxes. Case managers stated they needed to work with the client to help them understand how medications are to be taken by drawing picture on the medication boxes. “Sometimes...we put a label, like a moon for night time and a sun for day time...as a way to really help the client understand which part of the day they need to take their medications”.

**Coordination.** Participants also identified coordination as a part of their role in medication therapy management. Many participants noted that coordination with skilled nursing services, primary care providers, and family members were used to help clients remain adherent to their medications. One participant stated their role as,

facilitating...the education process with...the psychiatrist or nurse. Talking with them [the client] about side effects, talking about different concerns your client may have about taking a particular med[ication] or talking about the efficacy about taking a medication, whether or not it is going to address the symptoms that they are interested in having addressed.

Participants discussed the theme of coordination and are there when clients are unable to coordinate with their providers. Many participants noted that they fulfill the role of managing the medications by calling doctors for the client. Others stated that they would help clients fill

out forms to maintain insurance so that they are able to make appointments with their doctors or other providers. One participant stated,

Being there for those difficult situations, when they can't get a hold of their doctor's office, they have let their medication get down to the last day or two, or having some issues with their insurance. We help them figure that out.

**Monitoring.** The participants stated they will often monitor services by other providers, such as skilled nursing. Another form of monitoring was the actual monitoring of medications. This ranged from "eyes on meds", a form of monitoring in where the participant or someone from their team will watch the client take their medications, or checking in on them over the phone with daily reminders, and looking at the pill bottles. One participant stated,

Our role is based on the client's needs, the client's history. It can be anything from setting up a skilled nurse, ...it could be education, ...it could mean just being there, being an extra eye because there is no support...it really depends on the client's needs...sometime[s] [we] end up doing all those things to tie loose ends.

**Referrals.** Referrals are another significant role that the participants identified as having in working with clients. The participants noted they often refer clients to skilled nursing services, their psychiatrist, their primary care providers and pharmacists to help clients take medications that are effective and also to take them safely. The participants stated that making the proper referrals were beneficial to medication adherence. The participants further noted that making referrals to providers that worked well with their client's were also preferable.

**Assessments.** Case managers often times are conducting assessments of the clients. They are assessing for side effects, if the medications are effective in treating the symptoms,

observation of behaviors, and the providing feedback to the client based on their observation.

One case manager stated themselves as being the “ultimate observer...I’ve noticed since that med[ication] change you are sleeping all of the time...maybe they are not making the connection that this appeared after their med[ication] change”.

**Working with the culture.** Understanding the culture that the client comes from is a major factor in fulfilling the role of a case manager with medication therapy management. Many of the participants stated that they work with diverse populations and many different from their own culture. Many of the clients come from an eastern or more holistic belief in medications and will try alternative forms of medications before trying western medications.

I think for us to recognized they are going to do those other alternative medicines regardless of whether we say yes or no, so...our knowledge of it [alternative medications] and our willingness to accept it and incorporate it helps, verses maybe someone who would be more western and saying you should do that...then they [the client] will turn them away even more, because we don’t understand them, their understanding of holistic medication and incorporating that...is important.

**The relationship with the client.** The participants strongly agreed that having a relationship with the client is an important factor in helping the client remain adherent to their medication. The participants also stated that having relationships with the major supports, like family, is significant in medication therapy management. Some participants further stated that after the relationship is established, clients are more likely to communicate with the case manager on a more consistent basis. “After the relationship is built...they are calling me and saying this is my med[ication] change, I just wanted to let you know...what do you think?” Another participant stated that he had a client who would need to check with his case manager before he agreed to take the medication. “He [the client] was talking to the doctor and said, you need to call my case manager first. If my case manager thinks I need to take it, I will take it”.

Other participants note that they intentionally support clients by offering to go to psychiatric appointments with the client. The participants talked about attending appointments with client to provide feedback to the psychiatrist regarding observations that they have about the effectiveness of the medications, concerns about side effects, and to facilitate communication between the psychiatrist and the client. One participant stated that, “working side by side with them is important”.

The participants discussed the importance of having trust in all of the providers involved with medication therapy management. This included that psychiatrist, nurse, and pharmacist and case manager. One participant stated that “Having a regular psychiatrist to go to that they are seeing consistently and are comfortable talking to...helps them stay compliant for sure”. Some participants noted that clients need to have consistent access to their prescriber. One participant stated, “I find clients who can get to their psychiatrist and ask questions...and get a call back are more likely to be compliant”.

**The Enforcer.** The participants discussed how they hold a level of responsibility in making sure clients are taking their medications. Several participants discussed civil commitments. Some participants stated that clients tend to be more adherent to taking medications as prescribed when on a civil commitment. One case manager stated, “with a civil commitment, you have to be more involved...because there is a mandated role”.

### **Involving Natural Supports**

The participants noted they will often involve family members or someone they trust to help client take medications as prescribed. One participant stated, “family and friends influence them [the client]. One was telling the client not take the med[ication]s because the med[ication]s are making you too heavy...it was more important [for the client] to lose weight then to keep the

psychosis away”. Another participant stated, “sometimes it ends up being the case manager’s role of...doing a little education for the family or offering family resource for...NAMI or other places where the family can get a little education”.

### **Barriers**

Several barriers were identified during this study. The participants talked at length on how barriers played a significant role in the client’s ability to remain adherent to their medications.

**Language.** One of the focus groups worked primarily with clients who are Asian. Many participants noted that language was a significant barrier in fulfilling their role as a case manager. Many clients needed to use interpreters during appointments with doctors. Through the translation process, and doctor recommendations or orders were at times misinterpreted. Clients also are often dependant on their case manager to communicate with providers. Clients often did not understand the process of setting up an interpreter on their own when needing to communicate their needs, concerns, or side effects. One participant stated, “I had a pharmacist ask me to translate it into a happy pill”.

**Stigma.** Participants identified stigma as playing a large barrier in helping clients remain adherent to their medications. In the findings of this study the word stigma was used 17 times. One case manager stated “...some people do not believe in taking it [medications] because they think it will make them more crazy or they can be addicted...” Another case manager stated that “sometimes [clients] are more inclined to take their medications because...the client gets better and they think that they are involved with evil spirits or ...some other super natural force”. Another participant stated, “[clients] some are from east African countries, it’s a stigma and sometimes they don’t want to take the medication in front of other people”. Another participant

stated that, “I had a client that when I mentioned med[ication]s to her she automatically thought that I thought she was crazy because I was recommending that she sees a psychiatrist”.

**The mental health system.** The participants recognized that there is fear and confusion about the mental health system as a theme. One participant working with clients from a different country stated, “you have to think, before [now] taking med[ication]s is new to a lot of these clients and in their homeland there were other alternatives [to medications] and they are going to continue to do those other alternatives...”

The participants also noted that the mental health system is not forgiving to the clients. One participant stated, “a lot of mental health clinics will give you the boot if you have missed, which is...difficult. I spend a lot of my time just helping people get in to...new mental health providers cause they lost the privilege of scheduling”. Another participant echoed, “yes, that is a big one”.

**Symptoms.** Some participants noted that mental health symptoms are a factor in the client being adherent to their medications. The participants noted that client often times forgot to take their medications or were paranoid about their medications. One participant stated, “in general, poor memory causes a problem for many clients, whether they remember to go to their appointment, whether they remember to refill their med[ication]s, whether they will remember to take their med[ication]s”. Another participant stated, “the very cause of the symptoms has...prevented them [the client] from taking them [medications]...they lose focus, loss of concentration, loss of motivation to take them...” Another participant stated, “...you are competing with the voices, the doctor might be telling them something, the therapist might be telling them something and then the voices in their heads might be telling them something too”.

**Access to basic recourses.** Participants in the focus groups discussed the importance of having housing and stability to remain on their medications. “Clients need a stable place to live. Often times they lose their medications because they are living from place to place”. The participants also noted that it is difficult to focus on taking care of their mental health when they are worried where they were going to sleep at night.

**Side effects.** Many of the participants noted that side effects were a major theme in preventing clients from medication adherence. The word side effects, was used 14 times during the focus groups. One participant stated, “It [mental illness] doesn’t get resolved by taking just that one pill, you have to play with it overtime and the body is what suffers in the process”.

Another participant stated,

All antipsychotic med[ication]s have horrible, horrible side effects. There is not one that is benign. And all of them possess a component that can cause life threatening illnesses with extended use...the side effects are retched. So it’s easy to understand why people wouldn’t want to find some internal and coupled with external motivation to stay on them is sometimes a very large feat.

Another participant stated, “I have heard so many complaints that it steals their emotion...or it takes way their motivation”. One participant stated, “My general observation is that psychotropic medications tend to degenerate people...physically”.

### **Adherence**

The participants discussed how clients past experiences are a factor in how clients are adherent to their medications. Participants noted clients tend to realize and understand that medications are important in remaining out of the hospital or having a relapse in symptoms after they have experienced several relapses. Several participants stated clients need to have insight to their mental illness, “The most important thing is that they possess some kind of insight into their

own illness and/or acceptance that there is...an acceptance of that illness in some way shape or form". Another participant stated,

I think age is a big factor, it's age and experience. Because younger clients are much more likely to experiment in not taking them [medications] and see if they really need them and stuff and it does...take a few cycles...to say...its better when I'm just consistent when taking my med[ication]s.

Another participant stated, "I think understanding and really believing in their need of medication..." Another participant stated, "...they have internalized that now and they are no longer wanting to play around with that and they realize their need for and they...want to take their medications, they want to stay med compliant". Another participant stated,

motivational interviewing and illness management and recovery which is all about...trying to get...people to see, by series of questions,...getting them to come to terms of what they need and not telling them what to do but I do sometime you just have to say. Ya know what? Last time this happened...you got hospitalized...you have tried this and you are still having problems sometimes you need to have medication. We know people know that they have that choice...with that's all we really can to do.

Many participants discussed the importance of having support from providers and family members. "Well, in my experience...most clients who have more support such as family, friends, and education stay on their medications". Another participant stated, "I have to involve the family members...or someone they can trust".

Some participants noted that client's needs to possess some basic skills when taking their medications consistently. One participant stated, "If they are on a schedule...I think pill boxes...a lot of times they have really helped".

### **Case Managers Approach**

The participants identified several ways in which they approach their client's when working with them to be adherent to their medications. The following sections outline how the participants felt that their approach was most effective.

**Normalization.** The theme of normalization emerged as an approach that some participants used when working with their clients to be adherent to their medications. One participant stated,

My approach is telling them not to think of it like...that they have a mental illness to take this medicine but look at it like...people who have diabetes have to take their medicine, that if you have high blood pressure you have to take medicine, so it's just not mental illness, but to think of it more like...if you have a physical illness you would take it [medications] too.

**Autonomy.** A theme that emerged during this study was allowing the client to have autonomy in taking their medications. The participants noted that it is the client's right to choose if they want to take their medications or not. The participants also noted that client autonomy also aids the client in medication adherence. One participant stated,

I learn...that sometimes you...get better but your doctor still wants you to take the medication...[the client says] I'm better now can I cut down or can I stop? You should ask your psychiatrist and they will work with you because they want to see you well and stable, and they will educate you to why they don't want you to stop. You might want to stop after they inform you, they don't want you to stop but if you do...stop...you have that right.

Another participant stated, "I think...when you put yourself in trying to seem like you have control and you seem like you are trying to force this on someone, natural instinct is to go the opposite way". One participant stated, "Everyone has the right to fail". Another participant stated, "I try to make it clear to clients that I am not going to try to push them into taking meds. I always let them know that they are the one that gets to decide".

**Goals.** Some participants noted that they often will focus on the client's goals as an approach in helping them stay adherent to their medications. One participant stated, "I think that...focusing on what goals they have, where they would like to see their life go, and what gets in the way of that". Another participant stated,

We have the same goals...we want you to stay healthy or we want you to stay out of the hospital or keep your apartment, you want to be able to see your kids...we all want the same thing...we are all on the same page. We never take an adversary role. But sometimes we are working harder behind their backs...because the worst thing...for a case manager to see ...just seeing somebody slide slowly into [decompensation]...its one of the most painful things case managers can watch, and knowing it doesn't have to happen.

**Alternative medications.** The theme of alternative medications emerged during this study. Participants noted that clients will often times try alternative forms of treatment prior to taking a more westernized approach towards mental health treatment. The participants also noted that medications aren't the only way to treat mental illness. One participant stated,

I think that our western system is so medication oriented. We have... a healing center that is introducing other way of taking care of yourself. We do physical exercise...we talk about diet, and we are combining...the medication stuff...so that medication is not the end all to be all, that there are other ways to take care of your illness, we reinforce good sleep, good lifestyle habits...for those folks who don't always buy into medication.

Another participant stated,

...If you think about the western way of thinking that there is a pill for everything. You want lose weight, gain weight, anything really you can think of, you want to be happy? There is a pill for that...But there is a pill for everything.

## **Alignment**

There were a few themes that emerged during this discussion. Some of the participants felt that it was not necessary that they enforce their beliefs on the client but they are working together for a common goal. One participant stated,

We work closely with our client but it's not necessary that we reinforce our beliefs into them, that...they have to believe in what we believe in. I think that they know their illness, they know their symptoms...we are their case manager. We don't have the right to tell them what our belief in medication [is], so I think...their view of medication and our view of medication do not have to go together.

Another participant stated, "I don't know that it is necessary...when it comes to someone's med[ication]s...I can understand why...you don't like to take them...so it's up to you. I think you should, you don't have to agree with me, it's your life".

Other participants felt that their views of medications do impact how they approach their clients in terms of medication. One participant stated, "I am from the older generation, so I don't really believe in medication myself unless I have to, so I usually to try to understand why they don't trust medication and encourage them...to communicate with their doctor". Another participant stated, "Who are we to say you should have taken the medication that your doctor...prescribed?" Another participant stated, "I think it's really important, I think...finding areas of commonalties...we are working toward the same thing...and at least being open to that discussion".

Another theme that emerged during this discussion that the participants felt that they needed to adjust their level of alignment based on where the client was at in regard to taking their medication. One participant stated, "I've found that it is an individual basis...it depends on the level of...the relationship and the understanding between you and your client...you have to open to the culture and respect your client". Another participant stated, "It depends on how severe the

symptoms are. I mean if somebody is really actively psychotic that rationality and that reasoning are just not going to happen”.

### **Discussion**

This study was formulated to further understand the case manager’s views on their role in medication therapy management. The data collected from the research demonstrates the numerous roles that case manager fulfill in working with their clients, the barriers they face in fulfilling their roles, as well as the importance of the relationship and coordination with providers with medication therapy management. The findings of the study are supported in the reviewed literature in numerous ways including the role of the case manager, the case managers approach, and factors that impact the client’s ability to remain adherent to their medications.

#### **The Role of the Case Manager**

As stated in the literature, the case manager can play a significant role in medication (Bentley & Walsh, 2006; Rapp & Goscha, 2004). The participants discussed at length the various roles that they play in helping their clients remain adherent to their medications.

**Education.** A major theme that surfaced in regard to the role of the case manager was education. The participants of the study noted that they did a lot of work surrounding medication education with clients and their families. As Doyle and Keogh (2008) point out that many clients do not feel that they have sufficient information in regard to their medications. Cognitive behavioral strategies can be utilized to help clients incorporate medications into their daily lives (Doyle & Keogh, 2008). One participant stated, “Sometimes...we put a label, like a moon for night time and a sun for day time...as a way to really help the client understand which part of the day they need to take their medications”. These findings do support the findings in the previous research. The previous research also reveals that the case managers do not have enough

knowledge about medications and that they must possess firsthand knowledge on how medications can positively affect and adversely affect clients (Bentley & Walsh, 2006).

Although the findings of this research support the need for client knowledge about medications, more research will be needed to understand the case manager's knowledge and confidence level providing education about medications to clients.

The participants also acknowledge that the client's families also need education when it comes to supporting the client in being more adherent to their medications. One participant stated, "Sometimes it ends up being the case manager's role of...doing a little education for the family or offering family resource for...NAMI or other places where the family can get a little education".

**Coordination.** Another significant theme that emerged during this research was the emphasis that the participants placed on coordination of services with providers. The role of coordination for case managers is significantly supported in the previous research. Kelly and Stephens (1999) state that coordination is a primary function in the role of the case manager to help clients be more adherent to their medications. One participant stated that her role is to,

Being there for those difficult situations, when they can't get a hold of their doctor's office, they have let their medication get down to the last day or two, or having some issues with their insurance. We help them figure that out.

**Culture.** The culture of the client was a theme that the participants noted as playing a significant role in the client's ability to remain adherent to their medications. Many of the participants noted that they worked with clients with diverse cultures and background from their own. Many participants discussed the barriers they face when working with different cultures. The participants further noted that importance of accepting the client's culture and working

within the culture to help the client. One participant stated in regard to clients turning to alternative forms of medication rather than those prescribed by their doctor,

I think for us to recognize they are going to do those other alternative medicines regardless of whether we say yes or no, so...our knowledge of it (alternative medications) and our willingness to accept it and incorporate it helps, versus maybe someone who would be more western and saying you should do that...then they (the client) will turn them away even more, because we don't understand them, their understanding of holistic medication and incorporating that...is important.

The review of the previous research does not provide information on how the client's culture plays a role in the client's ability to remain adherent to medications and how this could impact the role of the case manager. It would be beneficial to have further research conducted on how a client's culture can impact a client's ability to remain on their medications. It also would be beneficial to know how the case manager's acceptance and willingness to work within the culture would impact the client's ability to remain adherent to their medications.

**The Relationship.** The previous research significantly supports the importance of having a good relationship with the client and the impact that it can have on the client's ability to remain adherent to their medications (Holloway, McLean, & Robertson, 1991; Diamond & Scheifler, 2007; Bordin, 1997; Konrat & Early, 2010; Summers & Early, 2010; Summers & Barber, 2010; Kihlstorm, 1998). The participants in this study also recognize the significance of having a good relationship with their client and it impacting their ability to remain adherent to their medications. One participant stated, "After the relationship is built...they are calling me and saying this is my med change, I just wanted to let you know...what you think?" Another participant stated, "He (the client) was talking to the doctor and said; you need to call my case manager first. If my case manager thinks I need to take it, I will take it". These findings significantly support the importance of the client/case manager relationship. The previous

research further notes that case manager need to move beyond the client/case manager relationship and they need to form relationships with the client's family members, providers in the community, and members of the community. The findings of this study supports that the participants are also engaging in these types of relationships. The participants noted that intentionality of forming relationships with providers and family members by attending appointments with the clients and collaborating with family members to better support the client.

### **Barriers**

The barriers that clients and case managers face when working with clients and assisting them in being more adherent to their medications were discussed at length in this study. Deegan and Drake (2006) suggest that more qualitative research be conducted regarding the barriers in which clients experience in being medication adherent.

**Stigma.** The participants in this study identified stigma as a major barrier for client in taking their medications. The participants also discussed how stigma was a barrier in fulfilling their roles in providing services aimed at medication adherence. Many participants noted that culture played a significant role in stigma. One participant stated, "(clients) some from east African countries, it's a stigma and sometimes they don't want to take the medication in front of other people". Participants in the study acknowledged that because of the client's culture they may feel pressured not to take medications or client may rely on alternative forms of medication to treat illness before taking a more Westernized approach towards medications.

**Access to resources.** The participants also noted that a client not having access to basic resources was another major barrier in remaining adherent to their medications. Having housing is a key factor in remain adherent to medications. One participant noted the lack of resources available to effectively support their client in remaining adherent to their medications. Another

participant stated, “Clients need a stable place to live. Often times they lose their medications because they are living from place to place”. Assisting clients in maintaining their basic resources plays an essential role in medication therapy management.

**The mental health system.** The participants noted that the mental health system is a very confusing and clients often times find themselves in a tangled mess. The participants acknowledged they often spend a lot of their time helping clients navigate the mental health system to help clients meet their needs to remain adherent to their medications. The participants noted that clients often times need assistance in maintaining benefits, finding providers that take their type of insurance, or in follow through with the provider’s recommendations. Previous research indicates that managed care was created as a way to provide effective, feasible, and quality services (Kihlstrom, 1998). The results of this study indicate that the managed care system may as effective as its original intention.

**Side Effects.** The participants indicated that side effects are a major barrier in medication adherence. The previous research supports these findings, side effects are a major contributor in preventing clients from being adherent to their medications (Bentley & Walsh, 2006). One participant stated,

All antipsychotic meds have horrible, horrible side effects. There is not one that is benign. And all of them possess a component that can cause life threatening illnesses with extended use...the side effects are retched. So it’s easy to understand why people wouldn’t want to find some internal and coupled with external motivation to stay on them is sometimes a very large feat.

Case manager, doctors, and other services providers need to play an active role in assisting clients manage the side effects of medications. Preventative care is essential in reducing the negative effects that the side effects cause.

## **Adherence**

Participants noted that many factors promote medication adherence. The three major themes that emerged during this research is the client's history of mental illness, the level of familial support that a client has, and that the client possess a basic skill set to take medications regularly. In a sense the participants use compliancy therapy as an interventions in helping clients remain adherent to medications. With compliancy therapy being a blend of cognitive behavioral therapy, motivational interviewing, and psychoeducation (Doyle & Keogh, 2008), the participants recognized the effectiveness of this model. The participants also recognized the importance of providing psychoeducation to the family members as an intervention in assisting the client in remaining adherent to their medications. Previous research supports this method of support and notes that clients will have better adherence to their medications (Brown & Bussel, 2011; Pathare & Paton; 1008; Doyle & Keogh, 2008).

## **Approach**

The approach that a case manager takes in working with their clients is vital and can often define the course of the working relationship between the client and the case manager (Summers & Barber, 2010).

**Normalization.** In the findings the participants approach toward supporting the client in medication adherence varied. The participants discussed the importance of normalizing the fact the clients need to take medication. One participant stated,

...people who have diabetes have to take their medicine, that if you have high blood pressure you have to take medicine, so it's just not mental illness, but to think of it more like...if you have a physical illness you would take it too.

**Autonomy.** The participants overwhelming expressed the importance of clients having autonomy in making decisions regarding their medications. Previous research also supports this

theme (Rapp & Goscha, 2004). One participant stated, "...when you put yourself in trying to seem like you have control and you seem like you are trying to force this on someone, natural instinct is to go the opposite way". The previous research significant supports the findings that in medication adherence it is always important to consider that the client has a choice, and that clients are more likely to remain adherent to their medications when their opinions, thoughts and goals are taking into consideration (Cowan, 2010; Doyle & Keogh, 2008; Mitchell, 2007; Brown & Bussel, 2001; Floersch & Jenkins, 2003).

**Goals.** Setting specific goals is another way that participants approach clients in helping them remain adherent to their medications. One participant stated, "I think that...focusing on what goals they have and where they would like to see their life go and what gets in the way of that". The previous research supports this approach as an effective intervention in helping client remain adherent to their medications. Case managers need to have ongoing assessment, revision, monitoring and adjustment of that plan to assist the client in realizing their goals (Kelly & Stephens).

**Alternative medications.** The participants emphasized the importance of acknowledging that clients will use alternative medications to treat mental illness. The participants acknowledged two different ways in which client uses alternative medications. Some participants noted that clients will use herbal medications to treat their medications and sometimes the clients benefit from it and sometimes they do not. The participants also noted that providing wellness centers and promote good overall health was an essential form of treatment for clients. One participant noted that their agency provides alternative treatment by saying,

(We have) a healing center that is introducing another way of taking care of yourself. We do physical exercise...we talk about diet, and we are combining...the medication stuff...so that medication is not the end all to be all, that there are other ways to

take care of you illness, we reinforce good sleep, good lifestyle habits...for those folks who don't always buy into medication.

Another participant stated, "...and some client's you know they use the herbal medications, and they believe in those herbal medicine and sometimes they will switch from the prescribed medication to the herbal..."

One particular focus group consisted of participants from the South East Asian Culture. Many of the participants discuss the differences in working with client from the South East Asian Culture. Their approach in working with their clients was much more focused and adapted to working with clients from the population. For example, many of the participants noted that their client would choose to try alternative medications prior to the Westernized approach with medications. Many of the participants also noted that their clients are more accustomed to using herbal medications to treat their mental illness and the participants needed to consider this in working with their client. There is little previous research on how to adapt the role of the case manager in regard to client's culture and medication therapy management. With the diverse cultures that social workers often work in, it would be beneficial to understand how a client's culture impacts their ability to remain adherent to their medications.

### **Alignment**

When discussing the participant's thoughts on how their beliefs in the medications affected how they work with their clients, thoughts were contrasting. Some of the participants felt that it did not matter what their thoughts were about medications and it impacting their work with their clients. One participant stated, "We work closely with our client but it's not necessary that we reinforce our beliefs into theirs". Conversely, other participants view points on medications did impact their work with clients. Another participant stated, "I am from the older generation, so I don't really believe in medication myself unless I have to, so I usually to try to

understand why they don't trust medication". Another participant stated, "I think, it depends on really your mind set and where you are coming from because if you think about the western way of thinking that there is a pill for everything". Previous research indicates the more aligned the client and the doctor are in their attitude towards medication, the more likely the client will be adherent to their medications (Christensen et al., 2010). It would be beneficial to know how the client's and the case manager's beliefs of medications impacts the client's adherence to their medications.

### **Social Work Implications**

The implications for social workers that arise from this research are that the medication therapy management plays a large role in functioning of case managers. Clients face many barriers in remaining adherent to their medications. It is imperative that social workers advocate, problem solve, and strategize to reduce or eliminate these barriers. Social workers need to consider continuing education in regard to psychotropic medications. With medications as a major form of treatment for mental illness, social workers need to understand the potential benefits and side effects of the medication. Finally, client autonomy is a major factor in medication adherence. Social workers must allow and foster this belief in medication therapy management.

It is well known that it is important that social workers must consider the client's culture when working with client in any setting. In regard to medication therapy management it was found that many social workers need to take different approaches in working with clients from different cultures. Social workers must consider the possibility of clients using alternative medications which may be in the form of herbal remedies. If working within a population such as the South East Asian population social workers need to be informed of what herbal

medications could be useful in treating symptoms and to also understand that most often clients from this culture will try an alternative medication prior to a more Western approach. It is also important to understand that clients who are first generation immigrants to the United States may not have had prior exposure to Western forms of medication and more education on how the medications are intended to work, what symptoms are treated when using the medication, and how to take the medication may be more necessary than working with a client who has had prior exposure to Western forms of medications.

### **Implications for Social Work Policy**

In these economic times, and resources becoming more and more limited, it is important for policy makers and social workers alike to realize the importance that access to basic resources needs to be supported as a priority in legislation as well as financially. The majority of clients that case managers serve are reliant on government assistance to meet their basic needs. Advocacy at a legislative level for services and resources that support basic needs is imperative in reducing health care costs and preventable use of emergency rooms and hospitals.

Another implication for social work policy would to also include policy on a variety of levels that culture should be acknowledged when making policy in regard to medication therapy management. It is important to understand that the Western approach is not the end all to be all approach when treating mental illness and how other cultures use medications should be considered in policy development. Other forms of treatment should be considered and possibly included in payment with insurance when used to treat mental illness.

### **Implications for Social Work Research**

Further research is needed to understand the extent and accuracy of the case manager's knowledge of psychotropic medications and the quality of medication education that is being

provided to clients. It would also be beneficial to know the confidence level in providing education about psychotropic medications.

Social workers work with clients who come from very diverse backgrounds and understanding of medications. It is important for the social worker to realize these differences and work within the culture to understand the client's perspective toward medications to provide appropriate and effective interventions in treatment for the client. It is essential that the case manager align with the client, form a relationship with the client, and provide comprehensive services to promote adherence to medication.

Finally, the culture that one comes from needs to be considered in medication adherence. Currently, there seems to be little research on how culture can impact adherence to medications. The development of evidenced-based practice with the emphasis on culture and medication adherence would promote the advancement of Social Work but also the quality of lives for our clients.

### **Strengths and Limitations**

Strengths for this study include the rich data that was collected by using a qualitative approach to this research. It was desired that at least ten case managers participate in the research, providing the opportunity to have access to a variety of experience, backgrounds, and knowledge this research included 25 participants. The participants were also very culturally diverse and the participants provided services to diverse populations. The participants' experience in working with clients was significantly higher than expected, and the number of years working in the field was also significantly higher than expected.

Some limitations to this study included limited time in conducting this research. Due to the limited amount of time allotted in conducting this research, participation may have been

limited. Another limitation to this study is that all case managers were not social workers. The eligibility for providing case management services allows people to have different educational backgrounds. Some had bachelor level degrees and some have master's level degrees. This could have impacted the outcome of this research, as a master's level social worker may have access to a different skill set when working with clients, some other participants did not provide information regarding their degree level and this is also a limitation. This research was only conducted in an urban setting. It may be beneficial for future research to focus on a rural or mixed setting. Different themes may emerge if a mixed setting or rural setting were researched.

### **Conclusion**

Social workers play a vital role in medications therapy management. Clients often depend on the support of their case manager to remain adherent to their medications. One of the most important factors between clients and case manager is the alliance (Bordin, 1979; Kontrat & Early, 2010; Summers & Early, 2010). The must be fostered to promote medication adherence. This research does support the existing research that case managers do fulfill many roles in helping clients remain adherent to their medications. It also provides a qualitative analysis of the several barriers that clients face in remaining adherent to their medications. This research also brings to light the extreme importance of considering culture in medication therapy management and the need for all Social Workers to have more research in understanding in their confidence level and knowledge of psychotropic medications.

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## **Appendices**

### **Appendix A**

Date

Dear Director:

My name is Amanda Kubista, and I am a graduate student at the University of St. Catherine (USC) and the University of St. Thomas School (UST) of Social Work and I am conducting research for my Master's clinical research paper. I have selected your agency as your

case managers provide services to clients who experience a wide range of limitations including medication management.

I am conducting a study of mental health case manager to learn what their perceived role is in medication management therapy, the barriers and challenges they face in provided services for the purpose of medication management. This study will analyze the barriers and challenges they face in provided services for the purpose of medication management, their needs for further education and training regarding medications and their approach towards medication therapy management. I am writing you this letter to ask you to pass on an invitation to your case managers for their participation in this study.

To be eligible for this study they must be 1) they must be a mental health case manager 2) work with clients in the community and 3) agree to participate in this study. I will conduct focus groups asking them questions about their work with clients in the community and what barriers they face that affect their client's ability to be adherent to their medications. The focus group will be approximately forty five minutes to one hour in length. Confidentiality as it relates to your agency and your case managers will be safe guarded. Refusal to participate would not have a negative effect on their relationship with USC or UST.

Enclosed is an invitation letter to your case managers. If you have any questions about this research, please contact me with any questions.

Thank you for considering this request,

Amanda L Kubista

## Appendix B

### Case Manager Letter

Date

Dear Case Manager:

My name is Amanda Kubista, and I am a graduate student at University of St. Catherine (USC) and the University of St. Thomas (UST) School of Social Work. I am conducting research for my Master's clinical research paper and have approached your agency to see if case managers would be interested in participating in this study.

I am conducting a study of mental health case managers to learn what your perceived role is in medication management therapy, the barriers and challenges you face in providing services to your clients for the purpose of medication management. This study will analyze the barriers and challenges you face in your work, your possible needs for further education and training regarding medications and what your attitudes are towards medications. I am writing you this letter to asking you for your participation in this study.

To be eligible for this study you must be a 1) a mental health case manager 2) work in the community with your clients and 3) agree to participate in this study. If you choose to participate in this study I will be conducting a focus groups asking you questions about your work with clients in the community and what barriers you face that affect your client's ability to be adherent to their medications. The focus group will be approximately forty five minutes to one hour in length. Confidentiality as it relates to your agency and to you will be safe guarded. Refusal to participate would not have a negative effect on your relationship with USC or UST. Please feel free to contact me with any questions.

Thank you,

Amanda Kubista

## Appendix C

### Informed Consent Form

My name is Amanda Kubista, and I am a graduate student at University of St. Catherine (USC) and the University of St. Thomas School (UST) of Social Work. I am conducting a study about how mental health case managers perceive their role in medication therapy management. I am interested in your age, gender, amount of time working in this profession, and education.

The findings of the study will be written up in my Master's clinical research paper, disseminated to the chair of my research as well as to two of my committee members and included in any other presentations and publications written up as a final product of the research.

I am asking you to participate in this study because you are a mental health case manager who works with clients in the community. To be eligible for this study you must be a 1) mental health case manager 2) work in the community with clients and 3) agree to participate in this study. If you choose to participate in this study, I will conduct a focus group including you and at least two other people to discuss your work with clients experiencing mental illness, medication therapy management and your attitudes toward medications. This focus group will last approximately forty five minutes to one hour and will be recorded for the purpose of research.

The risk to clients and yourself is minimal as no questions about specific cases will be discussed however this will be a focus group so information, opinions, and perspectives will be shared with other people in the group. While this researcher will ask for and stress the importance of confidentiality, the researcher is unable to guarantee complete confidentiality.

Benefits of participating in this study include the opportunity to contribute to research that help stakeholders to have a better understanding of how case manager perceive what their role is in medication therapy management, what the perceived barriers are to providing support for clients and how this may impact the client's ability to be adherent to their medications. Ultimately, more effective and a higher quality of mental health case management services, in the respect of medication therapy management, will be provided by case manager, community organizations and funders.

Strict confidentiality will be maintained as per guidelines of the University of St. Thomas Institutional Review Board and the NASW code of ethics. Only I will know your name. As required, consent forms, interview notes, tapes, and interview transcripts will be numerically coded and stored in a locked file during the clinical research paper process. On May 19<sup>th</sup>, 2012, the files will be destroyed. Participant names will never be linked to the information provided for the study. Individual case managers will not be identifiable in the final report, or in any presentation or article written up as a final product of the research.

Your participation in this study is completely voluntary. You may refuse to answer any interview question and may withdraw from this study without penalty. The last day to withdraw from this study will be April 1<sup>st</sup>, 2012. If you choose to withdraw from this study before April 1st, all data including consent form, interview notes, taped recordings, and interview transcripts will be destroyed. Not participating in this research will not affect your relationship with your agency or the University of St. Catherine and the University of St. Thomas.

Your signature will be obtained at the time of the focus group and indicates that you have read and understand the above information and that you have had the opportunity to ask questions about the study, your participation, and your rights, and that you agree to participate in the study. Please keep the duplicate copy provided for your own records.

\_\_\_\_\_  
Signature of participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of researcher

\_\_\_\_\_  
Date

If you have any questions, please contact me at:  
Amanda L Kubista

Appendix D

Demographic Information

Gender: Male or Female

Age: \_\_\_\_\_

Race: \_\_\_\_\_

Degree: \_\_\_\_\_

Number of years working as a case manager: \_\_\_\_\_

## Appendix E

### Focus Group Questions

As a mental health case manager what is your role in medication management?

What barriers do you face when attempting to fulfill this role?

How do you help your client be adherent to their medications?

How does your relationship with your client affect your client's ability to be adherent to their medications?

Given your experience in case management what is your approach in working with clients who are taking psychotropic medications?

How and why is it important for you and your client to have your views be aligned regarding psychotropic medications?