Abstract

This research paper investigates whether therapists need a working knowledge of psychopharmacology to effectively treat clients. The research presented analyzes the continued and evolving integration between the medical and mental health fields. The increase in the use of medications used to treat mental disorders and the need for therapists to collaborate with medical professionals is also discussed. The paper explores client expectations and ethical considerations around the use of medications in the treatment planning process. This paper also considers the importance of psychopharmacology knowledge from an Adlerian viewpoint and provides information and resources for therapists to obtain a working knowledge of psychopharmacology. The findings from this paper support the importance of therapists having a working knowledge of psychopharmacology to effectively treat clients.

Keywords: medications, psychopharmacology, psychotropic
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The Importance of Psychopharmacology Knowledge for Therapists

This paper explores whether therapists need a working knowledge of psychopharmacology to effectively treat clients. Joseph Ponterotto first published research on the connection between therapists’ knowledge of psychopharmacology and therapeutic effectiveness in 1985. In this groundbreaking publication, Ponterotto highlighted the importance of integrating psychopharmacology into the counseling profession. If therapists have knowledge of medications, communication with physicians can be enhanced, which ultimately helps ensure the client is receiving the appropriate level of treatment (Ponterotto, 1985).

Why has psychopharmacology become such an important and relevant area of study for therapists? First, the percentage of Americans disabled by mental illness has increased fivefold since 1955, and doubled since 1987 (Angell, 2011; Whitaker, 2005). Further, in a study done by Medco Health Solutions that measured psychotropic medication usage between 2001 and 2010 in a survey of 2.5 million Americans, results indicated that one out of every five U.S. adults takes medication to treat some type of mental health condition (Citizens Commission on Human Rights International, 2011). This same study also revealed that the number of U.S. adults taking medications increased 22% between 2001 and 2010.

Despite the incline in the use of medications to treat mental disorders, psychopharmacology is not part of core curriculums in most graduate school programs across the country (Dunivin & Southwell, 2000; Foxhall, 2000; Julien, 2011; Kaut, 2011). Therefore, there appears to be a gap between therapists’ knowledge of psychopharmacology and the increase in use of medications used to treat mental disorders, potentially causing less effective treatment for clients.
The significant increase of medications available to treat mental disorders, the increase in
the number of people being diagnosed with mental disorders, and the increase in the number of
clients taking medications for mental disorders necessitates further research into therapists
needing a working knowledge of psychopharmacology (Angell, 2011).

Assumptions and Limitations

This paper contains several assumptions and limitations. First, the assumption that most
graduate-level programs do not offer psychopharmacology as part of their curriculum exists.
Preliminary research indicated psychopharmacology education provided at the graduate school
level was the exception, not the norm (Barnett & Neel, 2000; Ingersoll, 2000). Another
assumption is that medications can be effective in the treatment of mental disorders. This paper
does not explore medication effectiveness in treating mental disorders, as many studies already
support this (Davis, 1976). Limitations include the lack of current literature containing relevant
information.

Several definitions are noted. The word “therapists” refers to students who have earned a
masters level degree in counseling, psychotherapy, or a related field. The word
“psychopharmacology” means the study of the use of medications in treating mental disorders.
Lastly, the words “psychotropic medications” refer to drugs that affect mental activity, behavior
or perception.

The first part of this paper analyzes the evolving integration between the medical and
mental health fields. Specifically, combined medical and mental health therapeutic approaches
are reviewed, along with how knowledge of medications can assist the collaboration process with
medical professionals. Next, client needs and ethical considerations related to
psychopharmacology will be presented. Lastly, this paper explores Adlerian viewpoints with
respect to psychopharmacology and provides information and resources to assist therapists in obtaining a working knowledge of psychopharmacology. This analysis will determine, based on the literature reviewed, whether therapists need a working knowledge of psychopharmacology to effectively treat clients.

**Literature Review**

**Background**

Frederik and Carl Lange are considered the founding fathers of psychopharmacology (Duffy & Groff, 2009). The Lange brothers were the first physicians to use medications in the treatment of mood disorders in the late 1800s. Specifically, Frederik and Carl found lithium to be an effective treatment for mood disorders, such as depression. (Duffy & Groff, 2009). In 1955, the modern era of psychopharmacology was born. This era began with the introduction of Thorazine to the market (Whitaker, 2005). This drug helped block dopamine activity in the brain and therefore normalized chemical imbalances in the brain. Another significant event in the evolution of psychopharmacology occurred in 1987, with the introduction of Prozac to the market (Angell, 2011). The number of people treated for depression tripled in the ten years that followed. Since this point in time, the occurrence of mental illness in the United States has continued to increase (Whitaker, 2005). A study conducted by the National Institute of Mental Health conducted between 2001 and 2003 found that almost 50% of those surveyed met criteria set forth by the American Psychiatric Association for having at least one mental illness at some point in their lives (National Institute of Mental Health, 2012).

In 1985, the first study was published proposing that therapists be familiar with medications used to treat mental disorders (Ponterotto, 1985). This study advocated that therapists understand the uses and drawbacks of medications since many clients who come into
counseling already take some type of medication prescribed by their doctor. The study also stated that knowledge of medications can help a therapist know when to refer a client for a psychiatric evaluation in the event medications may aid in the treatment process. Ultimately, Ponterotto concluded that if therapists have a working knowledge of psychopharmacology, they are better equipped to help clients understand available treatment options (Ponterotto, 1985).

Unfortunately, many therapists lack sufficient training in psychopharmacology (Escobedo, Beamish, Stump, & Krause, 2001; Ingersoll & Brennan, 2001; Ponterotto, 1985). In 1993, the American Psychological Association put together an ad hoc task force to address the psychopharmacology deficiencies in graduate school programs, stating and recognizing that “more formal training in psychopharmacology is needed.” (Julien, 2011, p. 446).

In 2001, Escobedo, et al., from Ohio University conducted a study of students and faculty from ten Midwestern universities to measure psychopharmacology knowledge. Eighty-one percent of students reported having no training in psychopharmacology. A 2010 study done by Springer & Harris found that 80% of the survey participants did not feel they were adequately trained about psychotropic medications in their graduate programs. Some researchers state that this lack of training can be harmful to the wellbeing of clients (Hayes & Heiby, 1996). Patterson and Magulac (1994) were the first to address therapists’ lack of training and education around medications and developed graduate level coursework to address the problem.

In 2001, the standards for the Commission on Accreditation for Marriage and Family therapy were revised to require the teaching of psychopharmacology. Subsequently, the American Association for Marriage and Family Therapy also expanded its curriculum guidelines to include psychopharmacology as a recommended area of study (Ingersoll & Brennan, 2001).
This change in standards and curriculum highlights the training deficit and acknowledges the importance of therapists having knowledge in psychopharmacology.

Several recently conducted studies measured graduate students’ desire for more knowledge of psychopharmacology and results showed students do desire more knowledge in this area (Dunivin & Southwell, 2000; Springer & Harris, 2010). These studies revealed that students feel less comfortable collaborating with other health professionals and referring clients for medication evaluations when they lack basic psychopharmacology knowledge.

In summary, use of medications to treat mental disorders over the past 50 years continues to increase. This, combined with the increase in the number of clients who currently take psychotropic medication, highlights the relevance of a therapist’s need to have a working knowledge of psychopharmacology to effectively treat clients. Additionally, the lack of psychopharmacology curriculum available in graduate school programs combined with students’ desire for more training in psychopharmacology heightens the need for this research.

**Integration of Medical and Mental Health**

**Medication use in the treatment of mental disorders.** The continued and evolving integration of medical and mental health fields contributes to the underlying purpose of this research paper. In a study conducted by Hernandez & Doherty in 2005, results showed that an estimated 91% of marriage & family therapists work with clients who are on some type of psychotropic medication, and close to 25% of a therapist’s caseload includes clients on medications. Additionally, a national survey of marriage and family therapists performed in 1996 by Doherty and Simmons indicated that almost a third of marriage and family therapists’ clients use some type of psychotropic mediation.
In his 2006 journal article, Thomas Murray suggests therapists investigate the uses and consequences of medications and states existing research that supports the use of medications in the treatment of mental disorders not be heavily relied upon. Murray admits his article is biased, as he is not a proponent of using medications in treating mental disorders. However, Murray does agree that therapists should have a working knowledge of medications in order to help educate clients about potential risks of medications and in order to better interface with medical professionals (Murray, 2006), potentially improving the therapy process.

**Collaboration with medical professionals.** Medical professionals and therapists are often the first individuals to interface with clients presenting mental health concerns. In some instances, a client may see a medical professional first seeking immediate relief from physical symptoms resulting from a mental disorder (racing heartbeat and shortness of breath related to a panic attack). In other instances, a client may see a therapist first, but present physical symptoms that may hinder the ability to do therapy without some type of medication intervention. In either instance, therapists and medical professionals should consider collaborating with one another to implement an effective treatment plan that promotes the well-being of the client (Kaut, 2011).

Even though therapists do not prescribe medications, their role in the process is still important. Since therapists often provide longer term, regular and ongoing care, they are in a unique position to assess and monitor medication side effects and behavioral changes to provide valuable feedback to prescribing physicians (Barnett & Neel, 2000; Kaut & Dickinson, 2007). A therapist may be asked to contribute information as part of a client assessment and may be asked by physicians for an opinion on the need for medication as an intervention (Kaut & Dickinson, 2007). Without basic knowledge of psychopharmacology, the therapist may not be
able to function as a fully integrated member of the health care team. Ultimately, this can have a negative impact on optimal care for the client.

Some medical professionals may not be receptive to a therapist’s medication inquiries as they may not be accustomed to non-medical persons involved in client medication discussions, decisions or monitoring. Therefore, the following are suggestions for therapists to consider when contacting medical professionals (Ponterotto, 1985):

1. The therapist should obtain a signed release from the client and ensure the medical professional has done the same so an open discussion can occur about the symptoms and goals of the medication for the client.

2. The therapist should prepare before consulting the medical professional through researching medications the client is taking and understanding side effects. The therapist should also be prepared to discuss the client’s diagnosis and reason for contacting the medical professional.

3. The therapist should feel comfortable asking questions and not pretend to know something he or she does not know, which could ultimately harm the client.

4. The therapist should build a strong partnership with the medical professional by ensuring he or she perceives the therapist as adding value to the treatment of the client. The therapist should consider asking how he or she can best help the medical professional in treating the client (e.g. ask if there are any medication side effects the medical professional would like the therapist to particularly watch out for).

5. The therapist should understand when referrals for drug therapy must be made due to a client’s presenting distressing physical symptoms, such as sleep disturbances, appetite disturbances or panic attacks. (Kaut & Dickinson, 2007). Sometimes, a
client may require medications to achieve a more normalized state of functioning prior to starting the therapy process. If a therapist does not understand when medications may be necessary when treating mental disorders with urgent and distressing physical symptoms, the client may not benefit fully from therapy.

**Medication use combined with therapy.** Psychotropic medications are frequently combined and used in conjunction with therapy (Julien, 2011). While data could not be obtained on the negative interactions between utilizing medications in conjunction with therapy, several studies have shown the benefits of a combined medication and therapy approach (Springer & Harris, 2010; Winston, Been & Serby, 2005). These studies showed that medication might increase a client’s receptiveness to therapy, decrease relapse rates and improve medication compliance (Springer & Harris, 2010). Results of schizophrenia and bipolar studies revealed that when medication treatment and traditional therapy methods are combined, relapse rates are considerably lower than when compared to medication or therapy alone (Springer & Harris, 2010). Further studies found that patients with certain mental disorders drop out of treatment less often when they are receiving a combination of medications and therapy versus only therapy (Winston, Been & Serby, 2005).

Despite these findings, many professionals have opposing views regarding the combination of medications and therapy (Buccino, 2005). Some research indicates that therapy is as or more effective than many medical treatments (Murray, 2011; Wampold, Imel & Minami, 2007). Therapy does not have the potential to cause side effects associated with medication usage. Lastly, other research indicates that long-term use of medications can actually cause brain cell damage (Beng-Choon, Andreason, Ziebell, Pierson & Magnotta, 2011) and therefore raises the question whether medication really is in the best interests of the client.
In his 2011 journal article, Kevin Kaut cautions that advancement in medications to treat mental disorders should not replace therapy. Rather, therapists are encouraged to integrate psychopharmacology and therapy to emphasize the whole person’s client care.

In summary, the use of medications to treat mental disorders has increased significantly over the years. This, combined with the increased treatment effectiveness reported on medication use combined with therapy, has resulted in the need for mental and medical health providers to more closely collaborate to ensure effective client care. In order to effectively treat clients and collaborate with medical professionals, the facts gathered seem to support therapists needing a working knowledge of psychopharmacology.

**Client Needs and Considerations**

**Client perceptions and attitudes.** Clients’ perceptions of the therapeutic relationship are critical to the successful outcome of treatment (Johnson, & Caldwell, 2011). Certain studies closely examined clients’ confidence in their therapist’s abilities. These studies found that when therapists behave confidently, clients perceive them as better therapists, which then enhances the overall therapeutic relationship (Littauer, Sexton & Wynn, 2005; Trepka, Ree, Shapiro, Hardy, & Barkham, 2005). This information directly correlates with the discussion in this paper regarding the lack of medication knowledge. If therapists are not knowledgeable when questioned by clients about medications, clients may not have confidence in the therapist’s abilities. Thus, the overall therapy process could be hindered.

Client attitudes and beliefs about medications must also be considered. Clients often bring their own understandings of mental illness and medications to therapy. Client knowledge of medications is often influenced by the media and prevalence of drugs available to treat various disorders (Kaut, 2011). As a result, therapists often receive questions about psychotropic
medications and treatment options from clients (Hasler, Hanspeter, Bachmann, Lambreva, Buddeberg & Schnyder, 2004). Some clients may insist on wanting to take medications, thinking drugs may be a quick fix solution to feeling better. Conversely, other clients may feel that taking medications is viewed as a weakness that they are unable to overcome mental struggles on their own. Therapists should be aware of the rationale for a drug a client is taking so they can communicate basic information about the medication to the client (Kaut & Dickinson, 2007). If the client does not have much knowledge about the medication he or she is taking, the therapist can help educate and ultimately empower the client to manage his or her own condition.

Based on these findings, it appears therapists may need to have a working knowledge of medications in order to answer client questions and help build trust and confidence in the therapeutic relationship. Without this, the therapy process may not be as effective.

**Treatment planning.** Some researchers advocate that the use of medications should at least be considered in the treatment planning process, and that psychopharmacology simply be viewed as one of the many interventions available to the therapist (Barnett & Neel, 2000; Kaut, 2011; Winston, Been & Serby, 2005). Additionally, in his 2011 research findings, Kevin Kaut indicated that mental health providers should have an understanding of the types of medications that are typically used in the treatment of the conditions presented by the client. Therefore, if therapists are to fully explore treatment options with clients, a working knowledge of psychopharmacology is recommended (Escobedo et al., 2001). Other researchers affirm that therapists have an obligation to inform clients of all relevant options when developing treatment plans, and that medications be considered as a relevant option in the treatment planning process (Barnett & Neel, 2000; Escobedo et al., 2001).
Therapists should also consider the importance of being knowledgeable about medications’ effects, interaction, and side effects that may mimic symptoms of other mental disorders (Barnett & Neel, 2000). This is important to ensure determination of the proper diagnosis for the client. Adverse consequences can result for the client if misdiagnoses were to occur, such as incorrect or ineffective medications prescribed for treatment.

In summary, the relationship between the client and the therapist can often be one of the most critical factors in determining therapeutic success (Hasler, Hanspeter, Bachmann, Lambreva, Buddeberg, & Schnyder, 2004). This relationship can be enhanced if the client feels the therapist is knowledgeable and confident in his or her abilities, which can include a working knowledge of psychopharmacology. Professionals should also consider psychopharmacology in the treatment planning process. Medications should be reviewed in the treatment planning due to the potential to influence client behaviors and outcomes. Medications should also be considered in the treatment planning process if in alignment with clients’ needs and to ensure a proper diagnosis. Therefore, the facts gathered for client considerations seem to support therapists having a working knowledge of psychopharmacology to effectively treat clients.

Ethical Implications

Therapist attitudes and beliefs. Attitudes and beliefs about mental illnesses, including the use of medications to treat mental illnesses can affect therapists’ knowledge of psychopharmacology. Therapists often develop their own beliefs about what factors contribute to mental illness and effective treatment options (Kaut, 2011). Therapists’ educational backgrounds, personal beliefs and professional experience can all contribute to attitudes and beliefs about medications (Kaut, 2011). While some medical professionals may view therapy skeptically, some therapists may also view medications as potentially hindering the therapeutic
process (Winston et al., 2005). Personal biases around the use of medications should be reviewed and recognized by the therapist to minimize interference with the therapy process (Kaut, 2011).

In a random survey conducted of members of the American Association of Marriage & Family Therapists around attitudes and beliefs regarding psychotropic drugs, 35.7% identified the use of medications as a viable treatment option for a client with major depression (Springer & Harris, 2010). This same survey reported that therapists who had taken a class in psychopharmacology (17.2%) were more likely to consider medication as a viable treatment option for clients.

Despite the findings noted above, historically, marriage and family therapists’ perceptions around the use of medications in treating mental disorders have been negative. (Patterson & Magulac, 1994; Springer & Harris, 2010). Some therapists believe that medications interfere with therapy (Zur, 2012). Some therapists perceive medication as defeat and others may perceive it as a crutch (Winston et al., 2005). Meanwhile, other studies have concluded that therapeutic approaches alone are inadequate to treat certain mental disorders (Pinsof & Wynn, 1995).

Attitudes and beliefs of therapists tend to play a role in the use of medications in therapy. Due to the increase in the use and availability of medications, therapists may need to consider looking outside of traditional mindsets that view medications adversely to help ensure clients are receiving optimal care.

**Professional organization standards.** In 1995, the American Psychological Association (APA) Board of Educational Affairs declared that “all providers in psychology need to have basic knowledge in the area of clinical psychopharmacology” (American Psychological
Association, 1997, p. 3). In fact, at the time the APA Board of Educational Affairs report was published, at least one member of the APA Board of Directors indicated the he/she felt it would be considered malpractice for psychologists not to have foundational knowledge in psychopharmacology (Dunivin & Southwell, 2000).

While the APA’s ethical principles apply to psychologists, they provide support for therapists to also have knowledge of psychopharmacology. General Principle A., Competence, of the APA’s ethical principles states that therapists “maintain knowledge of relevant scientific and professional information related to the services they render, and recognize the need for ongoing education.” (APA 2002, p. 1598). This principle encompasses having knowledge of medications and effects (American Psychological Association, 1997). A similar provision exists in section C (2)(f), Professional Responsibilities - Continuing Education, of the American Counseling Association (ACA) code of ethics, which states counselors “recognize the need for continuing education to acquire and maintain a reasonable level of awareness of current scientific and professional information in their fields of activity,” (ACA 1985, p. 9). There is also an ethical standard of beneficence (doing good) and nonmalefeasance (not doing harm), which supports the training of therapists in understanding the consequences of medications. Without necessary level of knowledge about medications, therapist may be inappropriately assessing and treating their patients (nonmalefeasance). Failure to possess a body of knowledge that may result in harm to clients goes against keeping with the standard of care. This ethical standard is further supported by Standard 1.04, Boundaries of Competence (APA, 2002) which states: “In those emerging areas in which generally recognized standards for preparatory training do not yet exist psychologists nevertheless take reasonable steps to ensure the competence of
their work and to protect patients, clients, students, research participants and others from harm” (APA 2002, p. 1600).

The American Counseling Association’s code of ethics and standards of practice states that a primary responsibility of counselors is to promote clients’ welfare. Some researchers argue that this ethical standard would encompass having knowledge about treatment options, which could include psychotropic medications (Ingersoll, 2000).

Conversely, there has been some ethical debate around whether or not discussions about psychotropic medications in therapy sessions by non-medical professionals would violate the ACA Code of Ethics provision that states counselors must practice within the boundaries of their competence (Ingersoll, 2000). This is still considered a gray area, however, there is not any case law supporting that therapists sharing information about medications with clients is illegal or unethical.

In summary, while therapists’ beliefs and attitudes can affect whether or not medications are considered in the treatment of mental disorders, ethical guidelines outline therapists’ responsibilities to clients. These responsibilities are believed by researchers and professional organizations to include therapists having knowledge of medications to uphold high standards of client care.

**Adlerian Considerations**

Thus far, research indicates that knowledge of psychopharmacology is necessary to effectively treat clients. Next, the relevance of psychopharmacology knowledge is presented from an Adlerian perspective.

**Four stages of Adlerian therapy.** The Adlerian approach to therapy is a relational approach and consists of four primary stages. The first, and most important stage is relationship,
which involves building a strong, trusted client-therapist alliance. Research shows that the client-therapist relationship is the most influential component of change in the therapy process (Johnson & Caldwell, 2011). As discussed previously, studies found that when therapists behave confidently, clients perceive them as better therapists. This perception of confidence can positively influence the level of client trust and enhance the therapeutic relationship (Littauer, Sexton & Wynn, 2005). Therefore, if a client is taking medications to manage symptoms relating to the presenting issues, or if medications will be part of the client’s treatment plan, a therapist’s knowledge of psychopharmacology can increase a client’s trust level and confidence. The therapeutic relationship is “one where the therapist creates an atmosphere of hope and where clients feel understood and develop an optimistic sense that their life can be different,” (Carlson, Watts & Maniacci, 2005, p.77). An important part of being able to effectively connect with clients includes gaining a full understanding of the types of medications they may be taking and what role these medications play in managing the symptoms and issues the client presents.

The second stage of Adlerian therapy is assessment. In this stage, the therapist attempts to identify the client’s lifestyle and understand the presenting issues from a social and cultural context. Therapists attempt to identify the purpose of the client’s presenting symptoms and what difficulties the client is possibly trying to avoid. There are two types of interviews that occur in the assessment phase. First, the subjective interview occurs. This involves active listening followed by a sense of wonder and interest to help the client tell his or her story as completely as possible. Second, the objective interview takes place. This involves gathering information about how the clients’ problems began, obtaining medical and social history, understanding the reasons the client chose to come to therapy, and learning the client’s coping skills through lifestyle assessment. The assessment stage is also where the Adlerian therapist gathers family
constellation information and early recollections. Early recollections are “stories of single, specific incidents in childhood which the individual is able to reconstitute in present experience as mental images or as focused sensory memories,” (Griffith & Powers, 2007, p. 26). Early recollections are believed to be indicative of a client’s convictions, biases and attitudes and are often representative of what the client’s present struggles. Similar to the relationship stage of therapy, the assessment stage would be incomplete if the therapist did not inquire whether or not the client was taking any type of medications for symptom relief and integrate this information into the overall assessment.

The third stage of Adlerian therapy involves encouraging self-understanding and providing insight to the client. During this stage, the therapist helps the client understand the motivations and behaviors in his or her life, how these motivations are contributing to the problem, and how to make adjustments to correct the situation. The fourth and final stage of Adlerian therapy is reorientation. In this stage, insights are put into practice. The therapist encourages and empowers the client to change and search for new possibilities and helps promote a higher level of social interest. In the third and fourth stages, the role of psychopharmacology must also be discussed and considered with the client to determine if the client needs or desires to take medication in his or her life moving forward (Maniacci & Sackett-Maniacci, 2002). If there are biological reasons for taking medications, medication use may continue. However, if a client is empowered and realizes he or she can function effectively without medications, the client may desire to discontinue using medications to manage distressing symptoms. Every client and every situation is different, so therapists are cautioned to not make generalizations regarding psychopharmacology. However, as previously noted, one out of every five U.S. adults takes medication to treat some type of mental health condition and
the number of U.S. adults taking medications increased 22% over the past 10 years (Citizens Commission on Human Rights International, 2011). Therefore, it is the opinion of this author that the incorporation and discussion of psychopharmacology is relevant and should not be dismissed or ignored in the therapy and treatment planning process.

**Holism.** Adlerian psychology and principals focus on treating and understanding the whole person. Holism refers to the idea that “the whole is greater than the sum of its parts and that, unified, the parts constitute a new and unique whole,” (Griffith & Powers, 2007, p. 55). Adler’s model of individual psychology means that human beings must be understood in their totality, including their social and environmental settings.

Adler is recognized as one of the first pioneers to study mind-body interactions and is considered the founder of modern psychosomatic medicine (Sperry, Griffith & Powers, 2011). Psychosomatic medicine today is based on what is known as the biopsychosocial model, which involves interventions designed to integrate therapy in the treatment of medical conditions. A biopsychosocial view is a holistic view of illness, which includes psychological and biological factors in the context of a client’s environment (Sperry, Griffith & Powers, 2011). Adler studied how medical conditions could be caused by psychological factors, which can be best evidenced through his concept of organ inferiority. Adler stated that individuals express themselves through various organ systems (e.g. nervous, cardiovascular, endocrine), and that each system can express both emotions and physical symptoms. Organ jargon is the term Adler uses to describe when the body speaks for the mind. For example, Adler believed that a large percentage of headaches are caused by stress. If a client came to therapy complaining that he or she was unable to go to work due to migraine headaches, the therapist is encouraged to look beneath the surface of the presenting symptoms in an attempt to determine what the client may
be trying to avoid. This example supports the concept of holism in that therapists cannot look at one individual symptom the client is presenting without looking at the context in which the symptom has developed for the client (Udchic, 1984).

Some psychological disorders can cause physical disorders, and some physical disorders and cause psychological disorders. An Adlerian views the client holistically, which includes looking at what social or environmental factors may be causing distress. This holistic view would also contemplate medications the client may be taking for any presenting medical or mental disorders. Adler also stated that “everything can be different,” which means a therapist should not make assumptions based on initial assessments or what seems is the obvious answer for a diagnosis. A client may be presenting certain symptoms in therapy, but those symptoms could be resulting from medications the client is taking, or from not taking medications that have been previously prescribed.

**Diagnosis and utilization of the DSM-IV-TR.** There is a close connection between the concept of holism and the utilization of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) in treating clients. The DSM-IV-TR, published by the American Psychiatric Association, includes all currently recognized mental health disorders (American Psychiatric Association, 2000). Mental health professionals use this manual when working with clients in order to better understand their illness and potential treatment, to provide psychiatric diagnoses, and to help third party payers (e.g., insurance) understand the needs of the client. The DSM-IV-TR is the common language of professionals who deal with psychopathology. The multi-axial diagnostic process examines the client holistically, and assesses the client on five axes to determine the client’s biological, psychological and social level of functioning, as well as adaptability to stressors of life.
Adlerian theory places little emphasis on symptoms and labeling or diagnosing the client, however, due to the standardization and monitoring of psychological practices, use of the DSM-IV-TR is often required, particularly for insurance reimbursement purposes. Thus, it is important for Adlerian psychologists to be open-minded to using the DSM-IV-TR as an effective diagnostic tool that can complement other core components of Adlerian psychology (Maniacci, 2002). Adlerian theory actually parallels the multi-axial assessment, but incorporates Adlerian concepts for each axis. For example, Axis I on the DSM-IV-TR is consistent with what Adlerians call the “presenting problem” – that is, what brings the client in to see the therapist. Axis II on the DSM-IV-TR reflects the client’s lifestyle – specifically how the client’s beliefs have shaped his or her lifestyle and how that lifestyle is affecting current day functioning. Axis III describes physical conditions that could be relevant to understanding the case. For an Adlerian, this would include organ inferiorities or medical conditions that could be perceived by the client as a burden. Axis IV outlines psychosocial stressors, and compliments Adlerian theory in that Adlerians stress looking at the client in his or her social context. Lastly, Axis V addresses the client’s overall level of functioning in life and also compliments Adlerian psychology, particularly with respect to the assessment of the client’s functioning in the three life tasks – love/sex, work, and social.

It is important that Adlerian therapists have an understanding of how the DSM-IV-TR multi-axial system is used in treatment planning, as insurance companies often require this. Adlerian theory closely aligns with the five DSM-IV-TR axes, as shown in Table 1.
Table 1

Multi-axial Diagnosis - Comparison of DSM to Adlerian Concepts

<table>
<thead>
<tr>
<th>Axis</th>
<th>DSM-IV-TR</th>
<th>Adlerian Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis I</td>
<td>Clinical Syndromes</td>
<td>Presenting Problem</td>
</tr>
<tr>
<td>Axis II</td>
<td>Personality Disorders</td>
<td>Lifestyle</td>
</tr>
<tr>
<td>Axis III</td>
<td>Medical Conditions</td>
<td>Organ / Jargon Inferiority</td>
</tr>
<tr>
<td>Axis IV</td>
<td>Psychosocial Stressors</td>
<td>Shock</td>
</tr>
<tr>
<td>Axis V</td>
<td>Global Assessment of Functioning</td>
<td>Life Tasks Barometer</td>
</tr>
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</table>

For example, clients present their lifestyle (Axis II), which they are not fully prepared to handle (Axis IV). Their lifestyle could have been formed by inferiority or is expressing itself as an inferiority (Axis III). Symptoms then are chosen and appear (Axis I) to avoid life tasks (Axis V). Individuals perceive stress and change differently. Some people will welcome the challenge of change or stress, while others perhaps with less courage or lower social interest, will become discouraged and suffer feelings of defeat in the face of stress.

Once the therapist completes the initial assessment, a treatment plan must be developed, which most insurance companies require. The multi-axial DSM-IV-TR diagnosis can then also be utilized to develop the treatment plan. Crisis management (Axis I), medical/somatic interventions (Axis I & III), short-term goals (Axis IV), long-term goals (Axis II) and other services (Axis V) comprise a treatment plan and are directly connected to the multi-axial diagnosis (Maniacci, 2002). Crisis management refers to serious issues that require immediate
attention and in many cases will involve a medical doctor or hospitalization referrals. Similarly, when the medical/somatic symptoms are addressed, medical specialists may also need to be consulted. If therapists do not have a working knowledge of the medications used to treat common mental disorders, they can be at a disadvantage when developing the treatment plan and possibly provide harm to the client (Julien, 2011; Kaut, 2011).

Adlerian theory and the DSM-IV-TR methods should not be viewed as independent of one another, but rather, two methods of assessment that can and should complement one another. Again, the Adlerian view that everything can be different is highlighted. The therapist must understand how medications impact the client’s presentation and symptoms and not rush to assign a diagnosis that could be incorrect.

In summary, it is evident that Adlerian therapy is interconnected with psychopharmacology in the areas of the Adlerian therapy process, the concepts of holism and in order to provide thorough and meaningful diagnoses and treatment plans for clients. Further, since Adlerians advocate that all behavior has a purpose, understanding the purpose behind why the client may be taking medications or feel that medications are necessary can also provide insight into the therapeutic process.

Obtaining a Working Knowledge of Psychopharmacology

The information provided in the next section of this paper is intended to serve as an educational tool to help bridge the knowledge gap that currently exists between therapists and psychopharmacology.

While findings in this paper point towards the necessity of therapists possessing a working knowledge of psychopharmacology to effectively treat clients, how they obtain this working knowledge can be challenging. Therefore, information will be presented to enhance
psychopharmacology knowledge and promote therapist self-education. The paper will first discuss the most common mental disorders and major classifications of psychotropic medications. Review of the affects that other substances such as caffeine and nicotine can have on the client’s functioning will be presented. Suggested psychopharmacology educational resources will also be provided to help therapists increase their knowledge of psychopharmacology.

**Most common mental disorders.** According to the National Institute of Mental Health, about 25% of American adults suffer from mental disorders in a given year, or approximately 60 million people. While the Diagnostic and Statistical Manual of Mental Disorders 4th edition contains more than 300 disorders, the most common mental disorders include anxiety, mood, and attention deficit/hyperactivity (ADHD) related disorders.

Anxiety disorders are the most common mental health disorder, affecting about 18 percent of American adults (National Institute of Mental Health, 2011). The most common of these anxiety disorders is specific phobia, where a person fears a specific item or situation. The next two most common anxiety disorders include social phobia and post-traumatic stress disorder (PTSD). Social phobia exists when performance or social related situations causes extreme distress, resulting in avoidance of these situations. Post-traumatic stress disorder often occurs after a severe trauma and causes fear of situations that remind the client of the trauma.

Mood disorders are the second most common mental health disorder, with approximately 10 percent of U.S. adults suffering from some type of mood disorder. The two main categories of mood disorders are unipolar and bipolar. Unipolar relates to more traditional depression and involves low interest in activities, depressed mood and sometimes a low sense of self-worth.
Bipolar, involves alternate moods of depression and mania. Mania (also called manic episodes) often involves symptoms that include sleeping less, racing thoughts and poor judgment.

While ADHD is one of the most common disorders affecting children, approximately five percent of adults also suffer from ADHD. However, the number of adults suffering from ADHD actually may be much higher than that. The most common symptoms associated with ADHD include inattention, lack of follow-through, and/or impulsiveness and fidgeting.

The overview presented on the most common mental disorders is not a comprehensive list of disorders. However, understanding the types of mental disorders that most affect clients can help therapists focus on learning more about the associated medications used to treat these common mental disorders.

**Major classifications of psychotropic medications.** In order to increase effectiveness in working with clients taking medications, therapists should also develop an understanding of the different medications commonly used to treat mental disorders. Psychotropic medications are divided into classes depending on the specific biochemical system affected (e.g. selective serotonin reuptake inhibitor, or SSRI), the disorder for which the medication is intended (e.g. an antipsychotic), or both (Ingersoll, 2000). Before a therapist can fully understand or appreciate why certain medications are prescribed for mental disorders, therapists should gain a basic understanding of the body’s biochemical systems (e.g. central nervous system, endocrine system) and how psychotropic medications affect those systems. While the body’s biochemistry is outside the scope of the research for this paper, the psychopharmacology education resources section discussed later provides relevant reference information on this topic.

The six main classes of psychotropic medications include:

1. Antidepressants, which treat disorders such as clinical depression, dysthymia, anxiety,
eating disorders and borderline personality disorder. The three main sub-groups of anti-depressants consist of: TCA’s (tricyclic and anti-depressants), MAOIs (monoamine oxidase inhibitors), and Atypical depressants

2. Stimulants, which treat disorders such as attention deficit hyperactivity disorder and narcolepsy, and suppress the appetite

3. Antipsychotics, which treat mental disorders such as schizophrenia and mania (Bipolar disorder). Antipsychotics, also referred to as tranquilizers or neuroleptics, are utilized to treat a wide range of mental disorders that produce psychotic symptoms

4. Mood stabilizers, which treat bipolar disorder and schizoaffective disorder

5. Anxiolytics, which treat anti-anxiety disorders and belong to the benzodiazepine family of medications

6. Depressants, which are used as hypnotics, sedatives and anesthetics

In addition to understanding the major classes of mental health medications and the associated disorders they often intend to treat, a therapist should also learn about commonly prescribed medications and the medication’s intended biochemical, behavioral, and side effects. See Appendix A for a reference guide that provides key information on commonly prescribed psychotropic medications (National Institute of Mental Health, 2012; WebMD Mental Health Center, 2012).

**Non-prescription substance considerations.** Therapists should also have an understanding of non-prescription substances and potential effects on the central nervous system (Barnett & Neel, 2000). Caffeine is the most widely used stimulant in the United States, with close to 80% of adults consuming tea or coffee daily (Larson & Carey, 1998). Research has shown that mental health clients also consume more caffeine than the general population (Larson
Caffeine is not limited to coffee, soda, or tea, but can also be found in nonprescription cold medications, diet pills, some pain relievers, energy drinks and chocolate. Multiple studies have suggested that caffeine can intensify current symptoms such as anxiety, irritability and depression (Benowitz, 1990; Lucas, et al., 2011). High usage of caffeine can also interfere with other psychotropic medications the client is taking. For example, caffeine has been shown to interfere with the effectiveness of monoamine oxidase inhibitors (MAOIs), which are often used to treat depression. When clients taking MAOIs consume a large amount of caffeine, they can have increased feelings of nervousness, irregular heartbeat and may develop high blood pressure (Larson & Carey, 1998).

Alcohol is another widely used substance that may have a negative impact on clients’ mental health when taken alone or with other medications. Alcohol also affects the central nervous system and can result in changes in personality, mood and behavior. Alcohol also can potentially interfere with other medications clients are taking such as depressants and antipsychotic medications (Barnett & Neel, 2000).

Herbal medications can hinder drug effectiveness and are used more frequently today than ever before. Some herbal medications can create symptoms upon isolated use, and others can have adverse effects when taken with other psychotropic medications. For example, St. John’s Wort, an herbal medication taken for relief of depression symptoms, can actually cause mania in some clients (Barnett & Neel, 2000).

Nicotine is another substance that affects the central nervous system. It stimulates the release of hormones in the body, along with norepinephrine and dopamine, which can cause interaction with other substances. If nicotine use is stopped suddenly, withdrawal symptoms such as restlessness, headache, and irritability often occur (Barnett & Neel, 2000).
In summary, therapists must understand the type and level of clients’ substance use and not limit assessment questions only to prescription drugs. Failure to adequately assess substance abuse history as well as current substance use patterns could lead to misdiagnosis and ineffective treatment planning.

**Psychopharmacology education resources.** Many resources are available for therapists to learn more about important aspects of psychopharmacology. Some resources include books, journal articles, psychopharmacology focused websites, and continuing education seminars.

The author recommends several texts for therapists desiring to understand more about psychopharmacology. First, the author recommends *The Therapist’s Guide to Psychopharmacology: Working with Patients, Families and Physicians to Optimize Care* (Patterson, Ablabla, McCahill & Edwards, 2006). This book is designed for therapists with minimal psychopharmacology training. The book first discusses mind-body connections and how brain function responds or reacts to medications. The next section discusses the most common DSM-IV-TR mental health diagnoses and medications used in treating common mental health disorders. Lastly, the book outlines how therapists can effectively collaborate with medical professionals.

The author also recommends the reference book entitled *The Psychotherapist’s Guide to Psychopharmacology* (Gitlin, 1996). The first section of this book outlines the basic principles of diagnosis and treatment and related psychopharmacological considerations. The second section discusses the biological basis of psychopharmacology. The remainder of the book outlines major mental disorders and specific classes of medications used to treat mental disorders. While some of the material is dated due to the continuously evolving medication
environment, the core concepts of psychopharmacology remain the same. This text can be a helpful reference tool for therapists wishing to increase their understanding of psychopharmacology.

The third recommended text is the *Physicians’ Desk Reference* (U.S. Food & Drug Administration, 2011). This reference book contains all U.S. Food & Drug Administration approved drugs. Each drug is listed along with a description, an explanation of the drug’s clinical pharmacological use, usage guidelines, warnings and precautions, adverse reactions, over-dosage implications, dosage and administration information and how the drug is supplied. Since a vast number of medications as well as generic versions of psychotropic medications exists, it would be difficult for a therapist to remember all of them. Therefore, the *Physicians’ Desk Reference* is a reference book where pertinent medication information can be easily researched and understood.

Lastly, the National Institute of Mental Health publishes a guide of mental health medications. This guide describes the types of medications used to treat mental disorders, side effects, usage information and FDA warnings. The guide is published online, and can be accessed directly through this link: National Institute of Mental Health - Guide to Mental Health Medications.

Journal articles are also an excellent resource for information on psychopharmacology. There are numerous journal articles contained in the reference section of this paper to which the reader can refer. Psychology databases such as EBSCO provide access to such journal articles.

Some websites can also serve as educational tools for therapists. RxList.com, an online medical resource dedicated to offering detailed and current pharmaceutical information on brand and generic drugs, is considered a valid and reliable Internet drug index resource. The American
Society of Clinical Psychopharmacology is another website that can serve as a resource for therapists (www.ascpp.org). Finally, as previously noted, the National Institute of Mental Health (www.nimh.nih.gov) also has an informative website which includes reference material on psychopharmacology.

Continuing education is another means of gathering current information on psychotropic medications. Both the American Association of Marriage and Family Therapist’s (www.aamft.org) and the American Counseling Association’s (www.counseling.org) websites have dedicated areas related to education, including online training options.

Additionally, there is a monthly newsletter published by the Manisses Communications Group called *Psychopharmacology Update*: a monthly advisory for mental health professionals. This monthly publication provides information on new medications and other relevant research related to the field of psychopharmacology.

**Client-centered considerations in using psychotropic medications.** Several guidelines exist for therapists to use when referring a client for medication therapy, or incorporating medication discussions into therapy sessions to help ensure clients receive the best care possible.

Examples of several guidelines that can help therapists when considering the referral of a client for a medical evaluation include:

- If the client’s symptoms are known to be responsive to medication (e.g. sleep disturbance, panic attacks, obsessive/compulsive behaviors, hallucinations, significant mood disorders) and medication may help with therapeutic progress

- If the onset of symptoms is new, a medical evaluation is often needed to rule out medical causes (e.g. hypothyroidism, neurological conditions)
• If the client is presenting suicidal or homicidal risk, an emergency medical intervention will most likely be necessary
• If the client’s family has a history of psychiatric disorder
• If the client is non-responsive to therapy

The above guidelines further highlight the need for therapists to have a working knowledge of psychopharmacology, as in some cases medications can be essential to the client’s functioning and mental health.

Therapists are encouraged to integrate open dialogue around medications in therapy when applicable for the client. First, the therapist can help the client identify a medication that may be effective for the mental illness. This can only be done if the therapist is familiar with the types of medications used to treat the symptoms the client is presenting. The therapist should also attempt to balance the client’s expectations for the medications with his or her own reasonable expectations for the medication. It is important to note that medications can have a positive therapeutic result for varying reasons, including the pharmacological effect of the medication, psychotherapy, placebo response, remission of illness, or other positive interventions. The therapist should be careful to not make incorrect assumptions about therapeutic progress and the use of medications. For example, a client may begin to take an anti-depressant and also come to therapy once a week. If the client’s symptoms start to disappear, the medication could be a factor, but so could the therapy or the client’s brain thinking he or she will get better just because of the medication (placebo effect).

Ideally, a therapist can encourage the client to work with his or her medical professional to find a medication that causes minimal, tolerable and manageable side effects. The therapist
must understand the complete picture of all medications the client is taking to ensure any new medications the client takes will not interact adversely with other prescribed medications.

The summary below includes some guidelines for therapists to take into account when considering the integration of psychopharmacology and therapy:

- Be cautious when encouraging clients to consider medications
- Be knowledgeable about alternatives to medication
- Determine what the client knows about medications, what his or her experience has been on medications, and how the client’s relationship is with the prescribing doctor
- Ensure appropriate client releases are signed so an effective dialogue can occur between the therapist and the prescribing doctor
- Support clients and help them understand the pros and cons of medications
- Understand how medications can both interfere with or contribute to the success of therapy
- Empower clients to make choices about medications – whether it is to go on a medication, reducing medication, or going off medication. Don’t make the client’s choice for them – support them in their own decision.

This information reinforces the need for therapists to have enough knowledge in psychopharmacology to consult with clients about medications when necessary and applicable. As noted previously, studies have shown that one out of five U.S. adults takes medication to treat some type of mental disorder (Citizens Commission on Human Rights International, 2011). Further studies have shown that just over 90% of marriage and family therapists work with clients who are on some type of psychotropic medication (Hernandez & Doherty, 2005).
Therefore, it is likely that therapists will have some clients who take medications, or need to discuss the option of taking medications in the treatment planning process.

Table 2 provides further guidance for therapists and represents issues a therapist should consider when medications are part of the mental health intervention (Kaut & Dickinson, 2007).

**Table 2**

*Issues to Consider when Pharmacology is a Component in Mental Health Intervention*

<table>
<thead>
<tr>
<th>Issue/Question</th>
<th>Observable Behavior</th>
<th>Drug Properties</th>
<th>Client Knowledge &amp; Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the rationale for the prescription medication?</td>
<td>How does the drug address the client’s presenting concerns?</td>
<td>What is the drug’s pharmacological and therapeutic classification?</td>
<td>What is the client’s understanding of his or her current condition?</td>
</tr>
<tr>
<td></td>
<td>▪ Anticipated behavioral, emotional or cognitive changes?</td>
<td>▪ What is the known (or proposed) mechanism of action? (neurotransmitter, receptor activity, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Is there an expected time-course for therapeutic effect?</td>
<td>▪ How is this drug metabolized and eliminated from the body?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ What precautions or contraindications are relevant for this client?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Side effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Interactions with other medications (e.g. alcohol, OTC drugs)</td>
<td></td>
</tr>
</tbody>
</table>
Table 2 - Continued

*Issues to Consider when Pharmacology is a Component in Mental Health Intervention*

---

**Client Knowledge & Expectations - Continued**

- Has the client been informed of the rationale for the prescription medication?
  - Does the client understand the nature of the drug and its effects?
    - Intended effects (i.e. therapeutic implications)
    - Side effects and potential interactions or problems
    - What expectations or biases might the client have concerning the drug
  - In general, are there specific needs for client education or clarification?

**Progress Monitoring**

- Is the client adhering to the prescription regimen as written?
- Are there any behavioral changes (i.e. intended or problematic) since drug inception?
- Is there a need for consultation with the prescribing physician?
  - Dosage adjustment
  - Drug termination (should this drug be discontinued)
  - Alternative considerations (i.e. other medications or therapies)

---


In summary, it is evident that therapists have an important role in discussing medications with clients. The more knowledgable therapists are about medications, the better they will be.
equipped to have educated discussions with clients and medical professionals to ensure effective treatment.

**Psychopharmacology workshop.** Since many graduate level programs do not include training on psychopharmacology (Dunivin & Southwell, 2000; Escobedo, et al., 2001), and studies have shown that therapists do not feel adequately trained on psychotropic medications (Springer & Harris, 2010), topics are now presented for instructors on the types of information that should be considered if a psychopharmacology workshop is developed in the future for students or therapists.

The American Psychological Association published curriculum guidelines to help train non-medical professionals develop a general understanding of psychotropic medications and effects. This basic training is also intended to help students know where to find up to date information on medications and continuing education opportunities (Ingersoll, 2000). Other research findings highlighting the gap between therapist knowledge of psychopharmacology have suggested minimum curriculum recommendations (Dunivin & Southwell, 2000; Foxhall, 2000). Additionally, Adler Graduate School previously offered a course in psychopharmacology. All three of the aforementioned resources were compiled and analyzed in identifying the suggested workshop content that is presented.

There are several recommended goals and learning objectives associated with providing a psychopharmacology workshop for therapists. These goals and objectives were developed as a result of the research completed for this paper and after gaining a better understanding of the psychopharmacology knowledge gaps that exist for therapists. Learning objectives to consider might include:
1. Gain a basic understanding of how psychotropic medications work from a biochemical perspective in the body
2. Recognize medications commonly used to treat mental disorders, their effectiveness, common side effects and potentially dangerous drug interactions of medications.
3. Increase ability to better communicate with medical professionals, and know when to refer a client for treatment with medications
4. Understand multi-cultural considerations around the integration of medications and therapy
5. Develop an appreciation of the clinical significance of psychopharmacology in one’s own practice. For example, understanding how adherence or non-adherence to medications may affect therapeutic effectiveness or a client’s mental state.

A psychopharmacology interest survey was developed to assess therapist beliefs, knowledge and areas of interest on the topic of psychopharmacology. See Appendix B for a copy of the survey. Additional learning objectives and goals could be developed if the survey was administered and other opportunities were identified from survey results.

The following is a suggested outline of topics for a psychopharmacology workshop if developed or considered in the future.

I. Biological aspects of psychopharmacology. Therapists should understand basic central nervous systems functions. This can be challenging for non-medical professionals. However, it is imperative therapists learn how chemicals work with and respond to the body’s central nervous system, neurotransmitters and hormones in order to better understand both the therapeutic benefits and side effects of medications. Factors such as how
medications work in the body, the length of time it takes for medications to be absorbed into the body, and what happens to the body if a client suddenly ceases taking the medication, are examples of important considerations.

II. General introduction to clinical psychopharmacology. It is recommended that therapists have a good understanding of the most common mental disorders and the medications most often used in treatment. Review of DSM-IV-TR disorders and symptoms coupled with an understanding of medications used for symptom management should be reviewed. It is also recommended that the six common classes of psychotropic medications be presented. Side effects of medications should be understood as well as drug-to-drug interactions that could be harmful to the client.

III. Medical professional referral guidelines. Therapists need to understand when a client should be considered for a medical referral based on symptoms presented. Therapists also need to learn how to effectively work with medical professionals by learning the medication terminology and ways to create a collaborative and effective partnership.

IV. Multi-cultural considerations. Therapists cannot assume that all cultures perceive medications; or even therapy equally. Some cultures may view medications as a weakness, where other cultures may incorporate more traditional medicinal and healing treatments into symptoms associated with mental illness. Therapists should strive to gain an understanding of the client’s cultural values before discussing medications.
In summary, therapists have many options to learn more about psychopharmacology and integrate this knowledge when working with clients, despite the fact that core curriculum for graduate level programs does not often include psychopharmacology training. Resources such as this master’s thesis paper, books, journal articles, websites and continuing education course offerings are all available and contain information to aid therapists in increasing their knowledge and understanding of psychopharmacology.

**Thesis Argument**

Based on the findings presented, it is recommended that therapists have a working knowledge of psychopharmacology to effectively treat clients. The research presented indicates that having a working knowledge of medications can aid in effective collaboration with medical professionals, thus potentially enhancing the client’s treatment. The research also shows that knowledge of psychopharmacology is often an expectation of clients, and that lack of this knowledge has ethical implications the therapist should consider.

**Summation**

There are many contributing factors that support the need for therapists to have a working knowledge of psychopharmacology to effectively treat clients. First, there has been a significant increase in the number of clients seen by therapists who take medications for mental disorders. This increase has created a heightened need for mental and medical professionals to collaborate with one another to ensure the best possible care for the client. Second, the increase in the number of clients taking medications has also put additional responsibilities on therapists to learn more about medications in the treatment planning process. Knowledge of psychopharmacology can potentially improve therapist and medical professional collaboration, help prevent misdiagnosis and assist in educating clients. The integration of the medical and mental health
fields and client’s increased usage and knowledge of medications should encourage therapists to learn more about the field of psychopharmacology. Third, ethics codes of various professional organizations for therapists impose additional standards that advocate, and in some cases mandate, a therapist having knowledge of psychopharmacology. These professional ethics codes outline expectations and standards for client care and must be adhered to by therapists.

With the growth of pharmacological alternatives available for the treatment of mental disorders, medications are more frequently considered as a potential treatment option for clients. While personal attitudes and beliefs of therapists can sometimes affect the use of medications in treatment planning, therapists are encouraged to at least obtain an awareness of how medications can influence behavior. Regardless of therapists’ views on the use of medications to treat mental disorders, drugs are a relevant and present part of the mental health environment (Kaut & Dickinson, 2007).

Case law also supports therapists having a working knowledge of medications. In the case Hood v. Philips (1976), the ruling was made against the therapist for not providing treatment that was what a “reasonable and prudent member of the profession would undertake under similar circumstances” (Packman, Cabot & Bongar, 1994, p.179). In this case, medications were not considered as a treatment option. A second case involving Osheroff v. Chestnut Lodge (1984) cited a severely depressed client who had received only therapy for 7 months and his condition worsened. When the client was moved to an alternate facility that incorporated the use of medication in conjunction with therapy, the client improved considerably and was discharged from the facility. Chestnut Lodge was found negligent for not considering medications in treatment planning.
Researchers acknowledge that there is a deficiency in psychopharmacology knowledge amongst therapists, which can negatively impact therapists’ ability to evaluate their client’s cognitive abilities, medication side effects, and recommend potential medication modifications. Ultimately, this could adversely affect optimal client care (Julien, 2011).

While psychopharmacology courses are not consistently offered in graduate level programs throughout the country (Dunivin & Southwell, 2000), there is a desire for this knowledge and ethical implications if one does not consider it. Due to the lack of formal training available, therapists may need to consider self-education through textbooks, reference books on psychotropic medication (e.g. Physician’s Desk Reference), journal articles and consultation with others knowledgeable in psychopharmacology.

Between therapists feeling a lack of training exists and results from various professional organizations recognizing a need for training, there is a growing consensus for basic psychopharmacology training to take place at the graduate level (Tulkin & Stock, 2004). While therapists do not need to be familiar with all types and classes of psychotropic medications, it is recommended that counselors at least have knowledge of those medications that are prescribed most often to help clients understand available treatment options (Ingersoll, 2000; Ponterotto, 1985).

In conclusion, it is recommended that therapists have a working knowledge of psychopharmacology to effectively treat clients. If therapists have a working knowledge of psychopharmacology, they will also be better equipped to effectively communicate with medical professionals in a collaborative manner that supports the best interests of the client (Kaut & Dickinson, 2007; Tulkin & Stock, 2004).
This paper can help mental health professionals better understand why knowledge of psychopharmacology may aid in the treatment planning process. This review may help graduate schools better understand the desire of students to learn more about the field of psychopharmacology and highlight the need for more curriculum to be developed in this area. This paper can help therapists increase their understanding of psychopharmacology. Most importantly, this review will hopefully help clients obtain more effective treatment if further action is taken as a result of the research findings.

Further Research Needed

Based on the findings in this paper, further research is recommended in certain areas. It is recommended that further research be performed around what would be considered an adequate level of knowledge for therapists to obtain a working knowledge of psychopharmacology. Since research in this review suggests that a knowledge gap exists, it is recommended that further research be performed to determine how best to bridge this gap with the right amount of knowledge and information on psychopharmacology to best meet client needs. It is also recommended that further research be considered in the area of ethical implications around counselors discussing medications with clients. Though some studies have reviewed this and concluded that a therapist’s discussion of medications with a client would not be construed as practicing medicine without a license (Ingersoll, 2000), studies are not conclusive in this area. Research on states that have changed or enacted legislation to mandate knowledge of psychopharmacology could also be considered in this area of further research.

Further research is also recommended on whether a psychopharmacology course should be provided by masters level graduate programs, including at the Adler Graduate School.
Thesis Critique

It does appear that adequate information was provided in this review to support the research question of whether or not therapists need a working knowledge of medications to effectively treat clients. However, adequate and current information could not be found around treatment effectiveness and how this translates to therapeutic success. Many factors impact therapeutic success and since clients continually change and can often regress, it is difficult to provide a direct correlation between medication knowledge and treatment effectiveness.

Findings were provided to support why a working knowledge of medications can help clients and aid in the therapy process. However, whether or not this knowledge directly correlates to effective treatment could be argued.

Additionally, the review contained heavy emphasis on the need for knowledge of medications. The review did not dive deeply into the advantages of therapy without medication interventions. The review also did not discuss or challenge the use of medications in therapy. While that wasn’t the underlying purpose of the review, providing such information may have provided a more balanced view of the issues.
# Appendix A

<table>
<thead>
<tr>
<th>Psychological Disorder and Drug Type</th>
<th>Generic Name</th>
<th>Brand Name</th>
<th>Drug Action</th>
<th>Side Effects</th>
<th>Behavioral Effects if Drug Works</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tricyclic (older) Antidepressants</td>
<td>Desipramine</td>
<td>Sinequan</td>
<td>Block the reuptake of norepinephrine, dopamine, and serotonin; some have additional effects</td>
<td>– Dry mouth – Blurred vision – Urinary retention – Constipation – Cardiac arrhythmias – Hypertension – Hypotension or dizziness – Nausea – Rash – Fatigue – Weight gain – Sexual disturbances – Increased sensitivity to sun – Most side effects disappear in a few weeks or can be managed</td>
<td>– Mood elevation – Increased physical activity – Increased mental alertness – Improved sleep and appetite</td>
</tr>
<tr>
<td></td>
<td>Imipramine</td>
<td>Elavil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protriptyline</td>
<td>Norpramin</td>
<td></td>
<td>– Dry mouth – Blurred vision – Urinary retention – Constipation – Cardiac arrhythmias – Hypertension – Hypotension or dizziness – Nausea – Rash – Fatigue – Weight gain – Sexual disturbances – Increased sensitivity to sun – Most side effects disappear in a few weeks or can be managed</td>
<td>– Mood elevation – Increased physical activity – Increased mental alertness – Improved sleep and appetite</td>
</tr>
<tr>
<td></td>
<td>Doxepin</td>
<td>Vivactil</td>
<td></td>
<td>– Dry mouth – Blurred vision – Urinary retention – Constipation – Cardiac arrhythmias – Hypertension – Hypotension or dizziness – Nausea – Rash – Fatigue – Weight gain – Sexual disturbances – Increased sensitivity to sun – Most side effects disappear in a few weeks or can be managed</td>
<td>– Mood elevation – Increased physical activity – Increased mental alertness – Improved sleep and appetite</td>
</tr>
<tr>
<td><strong>Monoamine Oxidase Inhibitors (MAOIs)</strong></td>
<td>Isocarboxazid</td>
<td>Marplan</td>
<td>Inhibits the enzyme that breaks down norepinephrine, serotonin, and epinephrine.</td>
<td>– Hypotension – Dizziness – Headache – Insomnia – Fatigue – Tremors – Liver damage</td>
<td>– Mood elevation – Increased physical activity – Increased mental alertness – Improved sleep and appetite</td>
</tr>
<tr>
<td></td>
<td>Phenelzine</td>
<td>Nardil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tranylcypromine</td>
<td>Parnate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Newer Antidepressants; Most are Serotonin-specific Reuptake Inhibitors (SSRIs).</strong></td>
<td>Fluvoxamine</td>
<td>Luvox</td>
<td>Inhibit the reuptake of serotonin and norepinephrine</td>
<td>Usually mild; include: – Dizziness – Drowsiness – Headache – Nausea – Difficulty with orgasm – Stomach cramps – Restlessness – Sleeplessness – Dry mouth</td>
<td>– Similar to tricyclic antidepressants and MAOIs above</td>
</tr>
<tr>
<td>– Some also used in treating eating disorders fluvoxamine is also used to treat obsessive-compulsive disorders</td>
<td>Fluoxetine</td>
<td>Prozac</td>
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<td></td>
<td>Sertraline</td>
<td>Zoloft</td>
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<td></td>
<td>Paroxetine</td>
<td>Paxil</td>
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<td></td>
<td>Citalopram</td>
<td>Citalopram</td>
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<td></td>
<td>Nefazodone</td>
<td>Lexapro</td>
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<tr>
<td><strong>Anxiety Disorders</strong></td>
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<tr>
<td></td>
<td>Buspiridone</td>
<td>BuSpar</td>
<td>Increases activity of serotonin and dopamine</td>
<td>– Mild nausea, headache that usually disappears</td>
<td>– Reduced anxiety</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychological Disorder and Drug Type</th>
<th>Generic Name</th>
<th>Brand Name</th>
<th>Drug Action</th>
<th>Side Effects</th>
<th>Behavioral Effects if Drug Works</th>
</tr>
</thead>
</table>
### Anxiety Disorders - continued

**Benzodiazepines**

- Clomipramine
- Lorazepam
- Alprazolam
- Clonazepam
- Diazepam

<table>
<thead>
<tr>
<th>Drug Action</th>
<th>Side Effects</th>
</tr>
</thead>
</table>
| Probably increase activity of inhibitory neurotransmitter-increased risk of addiction if used long-term | – Drowsiness  
– Increases effects of alcohol, fetal abnormalities (not prescribed for pregnant or nursing women)  
– Rare impulsiveness, confusion, and dizziness.  
– Abrupt discontinuation can cause unpleasant effects |

**SSRIs – see descriptions above**

<table>
<thead>
<tr>
<th>Drug Action</th>
<th>Side Effects</th>
</tr>
</thead>
</table>
| Inhibit the action of dopamine and/or serotonin | – Motor abnormalities  
– Neuroleptic malignant syndrome  
– Agranulocytosis (loss of bone marrow cells critical)  
– Seizures  
– Sedation  
– Weight gain  
– Not all antipsychotic drugs produce all side effects, and many are rare |

**Psychotic Disorders**

**Mood Stabilizers**

- Lithium
- Valproic Acid
- Carbamazepine
- Lamotrigine
- Oxcarbazepine

<table>
<thead>
<tr>
<th>Drug Action</th>
<th>Side Effects</th>
</tr>
</thead>
</table>
| Inhibit the action of dopamine and/or serotonin | – Motor abnormalities  
– Neuroleptic malignant syndrome  
– Agranulocytosis (loss of bone marrow cells critical)  
– Seizures  
– Sedation  
– Weight gain  
– Not all antipsychotic drugs produce all side effects, and many are rare |

**Antipsychotics**

- Olanzapine
- Aripiprazole
- Risperidone
- Ziprasidone
- Clozapine
- Haldoperidol

<table>
<thead>
<tr>
<th>Drug Action</th>
<th>Side Effects</th>
</tr>
</thead>
</table>
| Prevent the reuptake of serotonin | – See table above for side effects of these drugs  
– Reduced anxiety  
– Reduce intensity of obsessions and compulsions |

<table>
<thead>
<tr>
<th>Psychological Disorder and Drug Type</th>
<th>Generic Name</th>
<th>Brand Name</th>
<th>Drug Action</th>
<th>Side Effects</th>
<th>Behavioral Effects if Drug Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs Used in Treating Drug Addiction</td>
<td></td>
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</tr>
<tr>
<td>Drug</td>
<td>Common Name</td>
<td>Effect</td>
<td>Side Effects</td>
<td></td>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td><strong>Chlordiazepoxide</strong></td>
<td>Librium</td>
<td>Probably increase activity of inhibitory neurotransmitter GABA</td>
<td>- Drowsiness</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Increases effects of alcohol, fetal abnormalities (not prescribed for pregnant or nursing women)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Rare impulsiveness, confusion, and dizziness</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Abrupt discontinuation can cause unpleasant effects</td>
<td></td>
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<tr>
<td><strong>Disulfiram</strong></td>
<td>Antabuse</td>
<td>Inhibits enzyme that breaks down ethyl alcohol, produces toxin in blood</td>
<td>- Rarely, neuritis</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>- Liver problems</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>- Rashes</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>- Psychosis</td>
<td></td>
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<tr>
<td><strong>Clonidine</strong></td>
<td>Catapres</td>
<td>Reduces neural excitation, blood pressure</td>
<td>- Sedation</td>
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<td></td>
<td></td>
<td></td>
<td>- Dry mouth</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Light-headedness</td>
<td></td>
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<tr>
<td><strong>Naltrexone</strong></td>
<td>Revia</td>
<td>Blocks opioid receptors</td>
<td>- Nervousness</td>
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<td></td>
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<td></td>
<td>- Stomach upset</td>
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<td></td>
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<td>- Sexual problems</td>
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<td></td>
<td></td>
<td></td>
<td>- Rash</td>
<td></td>
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<tr>
<td><strong>Nicotine patches or gum</strong></td>
<td>Nicoderm, Nicorette, many others</td>
<td>Stimulant effects</td>
<td>- Nausea</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Dizziness</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Methadone</strong></td>
<td>Dolophine</td>
<td>Narcotic and analgesic</td>
<td>- Dizziness</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Nausea</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Sweating</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Sedation</td>
<td></td>
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<tr>
<td><strong>Meridia</strong></td>
<td>Sibutramine</td>
<td>Inhibits the reuptake of serotonin, norepinephrine, and possibly dopamine</td>
<td>- Increases in blood pressure</td>
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</tbody>
</table>

**Attention Deficit / Hyperactivity Disorder**

**Stimulants**

- **Methylphenidate**
- **Amphetamine**
- **Dextroamphetamine**
- **Lisdexamfetamine Dimesylate**
- **Atomoxetine**

**Non-Stimulants**

- **Ritalin**
- **Adderall**
- **Dexedrine**
- **Vyvanse**
- **Strattera**

- Blocks reuptake of dopamine
- Decreased appetite
- Sleep problems
- Stomachaches
- Headaches
- Increases ability to learn, work and focus
- Decreases impulsivity and hyperactivity
- Can improve physical coordination
Appendix B

Psychopharmacology Interest Survey

Thank you for taking the time to complete this survey. Your feedback is valuable and is helping contribute data to the development of a workshop on Psychopharmacology. This survey should only take about 5 minutes of your time. Your responses will be kept completely anonymous.

Please circle the one most appropriate response, based on an honest assessment of your current beliefs, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) for the following 14 statements.

Psychopharmacology is the study of the use of medications in treating mental disorders.

**Section I – Beliefs**

1. *I believe therapists should have a working knowledge of psychopharmacology to aid in effective treatment planning.*

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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Agree</td>
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</tbody>
</table>

2. *I believe a working knowledge of psychopharmacology can increase therapeutic effectiveness.*

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<tbody>
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<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Agree</td>
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</table>

3. *I believe medications can be an effective way to treat medical disorders.*

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<tr>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Agree</td>
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4. *I believe therapists have a lack of knowledge of medications used in the treatment of mental disorders.*

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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Agree</td>
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5. *I believe that patients can overcome mental illness without the use of medications.*

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<td>Neither Agree or Disagree</td>
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</tr>
</tbody>
</table>

Thank you for taking the time to complete this survey. Your feedback is valuable and is helping contribute data to the development of a workshop on Psychopharmacology. This survey should only take about 5 minutes of your time. Your responses will be kept completely anonymous.
Section II – Knowledge

6. I have an understanding of the medications most commonly used to treat mental disorders.


7. I have an understanding of symptoms caused by mental disorder medications.


8. I understand the medications my clients are taking.


9. I understand the types of mental disorder symptoms that can be mimicked by other medications.


10. I have knowledge of medications that are used to treat anxiety.


11. I have knowledge of medications that are used to treat depression.


Section III – Interest

12. I am interested in learning more about psychopharmacology as part of my master’s education.


13. I would attend a psychopharmacology seminar at Adler if the duration was four hours or less.

14. *I would be interested in inviting other therapists to a seminar on psychopharmacology.*

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<th>4</th>
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<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

Please choose your areas of interest by placing a checkmark by all of those that apply.

1. *If a psychopharmacology seminar were offered at Adler, I would be interested in learning about:* (Please check all that apply)
   - ___Medications used to treat depression
   - ___Medications used to treat anxiety
   - ___Side effects of medications
   - ___Non mental disorder medications that can present mental disorder symptoms
   - ___Misdiagnosis as a result of medication misunderstanding
   - ___Knowing when to refer a patient out for a medical/psychiatric evaluation
   - ___Other______________

Thank you for taking the time to complete this survey!
References


National Institute of Mental Health (2012). *The numbers count: Mental disorders in America.*


