Psychotropic Medications in Persons with Developmental Disabilities:
An Overview for Families and Other Care Providers

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The treatment of some mental health problems has changed a lot in the last few years. New medicines have become available, and we know a lot more about how to recognize mental illnesses. Even though this review focuses on medication, it is important to remember that no pill can do everything. The most effective therapy involves the use of many approaches, of which medication may be just one. This overview on medications is divided into two parts. Part I provides a very general description of medications, how they’re used, and how to work with your doctor and pharmacist. Part II is more detailed, and may be of interest for people with a little more background in healthcare. In both sections, we will discuss a number of issues including how and why people should take medicines, what to expect from a medication, and how to work with your doctor. We’ll also review how drugs work, as this will help in the understanding of why medicines may work for some problems and not for others. In the end, we hope to make you more comfortable with some of the major issues relating to medications so that when this type of treatment is used, you can increase the chances that it will be a success.
Introduction to Part I

If you look carefully at a football team, you will notice that not all of the players’ uniforms are the same. The kicker’s shoulder pads look tiny compared to the lineman, the quarterback doesn’t have all of the padding on his forearms that some of the other players wear, and so on. What does football have to do with medication for people with disabilities? Believe it or not, when it comes to understanding why drugs are used and how they work, there are a lot of similarities to football and other sports. One of these similarities is that there are certain words that have special meaning to football, like “touchdown”, and there are also certain words that have meaning when it comes to medication.

Some Definitions

Did you know that a drug is not necessarily the same thing as a medication? It’s like saying that an athlete is not necessarily the same as a football player. Being a football player is only one kind of athlete, and a medication is only one kind of drug. It is perhaps confusing, but while all football players are also athletes, the opposite is not true. And the same concept holds for medicine: all medications are drugs, but not all drugs are medication. What makes a “medication” different from a “drug” is the reason that it is taken. Medications or medicines are taken for their effects on medical conditions, and things that are considered to be drugs might include substances like alcohol or coffee or cigarettes that are taken for reasons other than to treat a health condition. Where does the word psychotropic come in to play? This word, “psychotropic”, describes even a smaller group of medications that have something in common. “Psycho” means mind or brain, and “tropic” means to go after or to be attracted to. So “psycho-tropic” means to be attracted to or to go after the brain. “Psychotropic medications” are medicines that treat brain problems. When you hear a doctor or a nurse talking about psychotropic medications, they are talking about medicines that may be helpful in treating people with brain illnesses.
Recognizing Mental Illnesses

How do we know when someone has a brain illness? The job of the brain is to organize our thinking, feeling, and behavior. So, when the brain is sick, there will probably be signs of unusual thinking, feeling, or behavior. Someone may start to do or say things that don’t make any sense, or they may start to feel different. Some people can feel so sad that they don’t want to live anymore; others can feel so excited that they can’t even sleep. Some people may not be able to enjoy things the way they used to, and other people may be so upset that they just yell or scream at the smallest problem.

When most people notice a change in the way they think or feel, they will tell a friend or family member, and they will usually ask their doctor if they have worries about their mental health. Unfortunately, some people with developmental disabilities like mental retardation may not be able to talk about their worries. They may not know the words to use, or they may not even know how to speak at all.

From their research, scientists know that some people with developmental disabilities do suffer from brain, or mental illnesses. It can be very hard to recognize these illnesses sometimes, but if someone you know has had a change in the way they think or the way they feel or the way they act, it may be helpful to see a doctor.

Working with the Doctor when a Mental Illness is Found

If the doctor finds that a person does have a mental illness, you should be sure that you understand what symptoms led to the doctor’s diagnosis, because it will be important to know how to tell if the illness is getting better or not when treatment begins. The doctor may even ask you to fill out a questionnaire to help remind you of some of the problems that need attention. It will also be helpful to the doctor if you know which symptoms are the most important to pay attention to when treatment starts. For example, suppose the doctor says that someone has a diagnosis of “depression” because she doesn’t have any appetite, has lost energy, cries all the time, and doesn’t sleep. But suppose also that this person likes to collect trash and hide it under her bed. It may be that when the depression gets better, that she actually has more energy and more interest in trash collecting. While this could be just as much of a problem as her crying and not sleeping well, we wouldn’t say that the treatment of her depression was a failure because there was even more trash under her bed than before. If the doctor just asked you, “how is she doing?”, and you only reported on the trash problem, the doctor might get the wrong idea and think that the depression needed more treatment. It is very important to work closely with your doctor and other professional staff to be sure that everyone understands the treatment plan.
Mental Illnesses and “Behaviors”

Sometimes people wonder about the difference between a mental disorder and a behavior disorder. This question might sound something like: is this person’s bedwetting a sign of mental illness or is it just a “behavior”? The reason that this question is so often asked, and also why it is so hard to tell the difference between symptoms of mental illness and a behavioral disorder is that the same behavior can be caused by both.

Sometimes when people ask about “behaviors” it is because they want to know what to do about a particular problem behavior. For example, should they overlook a behavior, say bedwetting, because a person cannot control himself, or if they should work on a plan to change the behavior (for example if the person was wetting the bed to get back at people for some reason). The fact is that there isn’t such thing as an inappropriate behavior or problem behavior that should simply be ignored because it seems out of a person’s control. In the example above with the trash collecting problem, even though that may not have seemed like a symptom of depression and was something that was not going to be helped by medication, it would be very important to have some plan in place for how to work on the problem that trash hiding caused. A behavioral psychologist can be very helpful in trying to figure out why some behaviors are used even when they seem to be inappropriate. A plan to substitute other behaviors, and how to respond when the inappropriate behaviors occur, is usually part of such a plan.

When a Medication is Recommended

Suppose the doctor recommends a medication to treat a mental illness. It may be useful to review some of the things to expect from medication, how it works, and why it is given.

Medication is usually given to people with mental illness for two reasons: either to help a situation get better or to keep it from getting worse. If we think about the football team again, someone might have a special brace made to support his knee so that it can heal. On the other hand, players might wear helmets or pads to keep from getting hurt in the first place. Medications can be used in these same ways too, either to help heal a problem, or to prevent one from happening.

It wouldn’t do the players much good if they wore their helmets on some plays and not on others-there would be times that they wouldn’t be protected. This is another important feature of medication—it needs to be there, in the right place and at the right time for it to do its job. It also needs to be there in the right amount to work its best—just like the football players. While the kicker may need some protection to lower the risk of injury, if he wore all of the big heavy pads that the linemen wear, he wouldn’t be able to kick the ball as well. And if the linemen didn’t wear the bigger, bulkier pads, they might be more likely to be injured. The same principals are true of medication—more does not necessarily mean that it will work better, but too little may not be effective either. So how do we know how much medicine to give?
How should Medicine be Given?

When the doctor writes a prescription or an order for medication, he or she will write instructions to the pharmacist that say which medicine to give, how much, and when it should be given. The pharmacist will put these instructions right on the bottle for everyone to read. You should always be certain that you can read and understand these instructions before you take the medicine home. The pharmacist can be very helpful in reviewing not only how and when to take the medicine, but also some of the side effects to look for.

Side-Effects

When we talk about side effects, we are talking about things that a medication may do that we don’t want. With every medicine there is the possibility of some “bad” that will come with the “good”. Imagine the discussion about side effects that might come with talk about the use of shoulder pads for the football player. He might be told something like this: these shoulder pads will protect you from getting really hurt when someone comes slamming into you with his helmet, but there are side effects. You won’t be able to lift your arms as high as you can without the pads, they may rub your neck and cause some scratching, your back may get tired from holding up their weight, they might effect your balance, and so on. Some of these side effects may be very common, and some may almost never happen. The same is true of medication.

Working with the Doctor on Side-Effects

It is very important to have some understanding of common side effects for any medicine so that you can watch out for them. Your doctor and pharmacist can help you to know what to look for; every medicine has its own side effects—just like the side effects of shoulder pads are different from the side effects of helmets. It is important to remember that any change in the person taking medication could be a side-effect, from being constipated to being sleepy, from being dizzy to being angry and aggressive. If there is any question about a change in behavior or a change in body function and whether it could be medication related, the doctor should be contacted.

In addition to looking out for physical or behavioral side effects (for example, some medicines might cause upset stomach or cause sleeping problems or make behavior worse), there are some medications that can have side effects on the way the body functions. Medications may hurt the kidney or the liver or the blood, and the doctor may need to do blood tests to help watch for these kinds of side effects. Blood tests might also tell the doctor if the right amount of medicine is being taken, and whether or not to adjust the dosage so that it is in the right range.
Getting Consent for Medication

Before you give a medication, it is very important for your protection and that of the person taking the medicine, that a consent form is reviewed and signed. The purpose of the consent form is to show that you have talked about the medicine, why it was chosen, what it is supposed to do, what would happen if it was not taken, what the common side effects are going to be, and who to contact if you have more questions. The consent form is important when you are giving medicine to someone else, acting on their behalf, to show that all of these issues have been considered. If you are neither the parent or the guardian of the person taking medicine, then you probably are not allowed to sign the consent form, and will need to get the proper signature before you start giving the medication.

When a Medication Doesn’t Work

Even though you may be giving the medicine exactly as it is supposed to be given, it may be that the medicine doesn’t seem to help. Unfortunately, no medication is good for everyone. When a medicine doesn’t work, it is important to work with the doctor to figure out why. Some of the questions that will need to be asked will include whether the right dosage was found, whether enough time went by to see the effects, or whether what was thought to be the diagnosis was actually the right one. Many times a different medicine will need to be tried, and sometimes even more than one, before it is clear that things are on the right track.

How Long Should a Medication be Given After it Works?

Suppose that the medication did work and the person taking it is back to his usual self. Depending on the kind of medicine, the person may still need to take the medicine for awhile to stay healthy. In fact, the medicine should still be given just like before until the doctor says it is time to change. Remember, sometimes the medicine not only helps the problem, but may keep it from coming back.

The government (Health Care Finance Administration or HCFA) has recommended some things about how to monitor people on medication, and these guidelines are summarized in the follow section.
HCFA Guidelines for Psychotropic Medication Usage in Persons with Mental Retardation.

Before prescribing psychotropic medication:

Medical, environmental and other causes of the behavioral problem must be looked at.

A detailed description of symptoms and diagnosis is required.

Behavioral data should be collected

The least intrusive and most positive treatments should be used, including things like behavior therapy, talk therapy and teaching. Medications might be the least intrusive and most positive intervention in some cases.

When medication is prescribed:

It should be part of an overall individual active treatment program

It should not reduce the patient’s quality of life or make things worse

The lowest effective dose should be used

A gradual dose reduction should be considered (at least every year) unless the doctor says not to

Drug side-effects should be monitored

Data should be collected documenting that the drug does what it is supposed to do.

Basically, most doctors agree that nobody should be on medication forever, at least not without checking to see if the medication is still needed. The way the medication might be tested is to take it away-usually a little at a time as recommended by the doctor-to see if the symptoms of mental illness come back. These kinds of checks will usually happen every year, but sometimes they can happen more often or less often depending on the illness that is being treated. There may also be better times than others for these kinds of tests. If you know that something big is going to happen in a person’s life, something that they usually have had trouble with, it may make sense to wait until after the stress has passed before you start to take the medication away. You might have to remind the doctor about these kinds of issues, for example, to say: “Doctor, this person usually has a lot of trouble during the springtime, do you think we could wait until after his allergies have settled down before we start to reduce the medication this year?”

Summary of Part I

There are a lot of different medications, psychotropic medications, that are used to treat mental disorders. People with developmental disabilities may do very well on a medication when a specific condition can be identified and when an effective medicine is found. It can be hard to keep track of all of the effects of a medicine, and to be sure that it is given in just the right way. But although it can be difficult, it is very important that medicines be used in the right way, and that a close working relationship is developed with the doctor in charge of the medicine. There are always questions that come up along the way, and it is important that the doctor can count on you to keep him or her informed of how things are going-just as it is important that you can have questions answered as events unfold. What is true of something as simple as a football pad is also true of something as complicated as a psychotropic medication, that is, that the more you understand about what it is supposed to do and why, the better you will be able to judge whether or not it is effective and appropriate, and the better it can be used by the person who needs it.
Part II: An Overview for People with More Experience and Training

Definitions

When most people think of psychotropic drugs the images that come to mind are typically of very powerful medicines that tend to have primarily adverse effects on humans. Medications, for example, with powerful mood altering effects or drugs that induce hallucinations or other profound changes in perception. Yet in the broadest sense, a “psychotropic drug” is any molecule which acts in the brain to exert an effect on thinking, feeling, or behavior. Psychotropic drugs thus defined, may include substances in common use, like caffeine or nicotine, that are enjoyed by millions for their effects on mental alertness. Alcohol would also qualify as a very widely used psychotropic drug. In the field of developmental disabilities, the term psychotropic drug has often come to be synonymous with an “anti-psychotic drug,” and one should be careful to make the distinction between any medication that acts in the brain, and a specific class of drugs that are used for particular indications.

The brain is a collection of billions of cells interconnected through very complicated networks. These cells communicate one with another in a variety of ways, but the primary mode of communication involves a process called neurotransmission. This method of communication involves the “transmission” of a nerve impulse from one cell to another through the use of a chemical messenger. Chemical messengers, or neurotransmitters, are numerous, though the most well known are exemplified by substances like dopamine, serotonin, and noradrenaline. Other important transmitters include glutamate and the endorphins. Nerve cells or neurons tend to be linked up on the basis of the neurotransmitter that they utilize in common, thus dopaminergic networks utilize dopamine, and the primary neurotransmitter of serotonergic networks is serotonin. These networks also tend to serve common and somewhat specific functions in the brain so that dopaminergic networks, for example, may be involved in the execution of movement, and serotonergic networks may be involved in appetite and sleep regulation. There are multiple other functions that given networks perform.

Taking the dopamine system as an example, when a nerve impulse is propagated from one neuron to another, dopamine is released as the transmitter. One can imagine that the transmission of a message is similar to an old fashioned bucket brigade, were a bucket filled with water is handed from person to person and a string of people linking the water source with the fire. Buckets of water stream from one person to another in common purpose. The bucket of water in this analogy would be similar to the chemical transmitter and the hands, which release and subsequently pick up the bucket, could be likened to receptors in the brain which are specific for recognizing substances like dopamine and communicating and propagating the received message (see figure). This is how drugs work.

Drugs operate in the brain by essentially mimicking the appearance of naturally occurring neurotransmitters. Some drugs, like morphine, are recognized in the brain as if they were endorphins, and they generate, or propagate, a message that wouldn’t otherwise have been there. These kinds of drugs, called “agonists”, essentially have the effect of inserting an extra bucket or buckets in the brigade and thus moving things along.

Other drugs like, Naltrexone, might interfere with the transmission of messages through endorphinergic systems by sitting in a receptor and preventing it from receiving incoming messages. These medications, known as “antagonists”, serve the effect of holding the hand, or tying up the hand of an individual in the bucket brigade so that the buckets can not be received or handed off.

Some drugs work at still different points in the system and may not have a direct effect.
other than to increase the release of certain neurotransmitters, or make them available for longer periods of time in the brain, thus working with systems utilizing the transmitters already in place.

### Potency and Efficacy

There are a number of ways that drugs are characterized and these include sorting by structure as well as function. With regard to the later, the function of a drug can largely be described in terms of its pharmacokinetics and its pharmacodynamics. “Pharmacokinetics” refers to the way our bodies dispose of drugs while “Pharmacodynamics” refers to what drugs do to our bodies in terms of their effects. An example of the description of a drug, by virtue of its kinetics, would be a measurement of how long it takes for the drug to be absorbed, how long it takes for the drug to achieve its maximum levels in the bloodstream, how the body metabolizes or eliminates the medication and by what route the medication is eliminated. These types of measurements allow us to determine how often a medication should be taken, whether there would be interactions with other drugs and whether the medications should be taken with or without meals and so on. The pharmacodynamics of drugs are typically derived from controlled studies in which the medication is given at specific doses and subsequent effects are measured over time. The dynamics will inform clinicians about whether a drug is useful for a certain condition, for example, anxiety or depression, how long it will take for the effects to be seen, and how long those effects will last. The dynamics will also define a medication’s potency which typically is expressed in terms of how many milligrams are necessary to achieve a common effect.

### Side Effects

There is no medication that is without side effects. The basic mechanisms involved in the generation of side effects are the same as those involved in the therapeutic effects of drugs. Side effects may emerge from a medication that is not specific for a particular class of neurotransmitter. For example, an antidepressant that acts primarily at the serotonergic system to effect a change on mood may also spill over and interact with the cholinergic system to cause dry mouth or constipation. By the same token, the definition of a side effect is somewhat relative.

In some persons with developmental disabilities, drugs like propranolol have been reported to reduce aggressive behavior. But propranolol was originally developed as a drug to treat high blood pressure. If it were used to treat aggressive behavior in someone without high blood pressure, one would define the blood pressure lowering effect of propranolol as an unwelcome side effect, and yet this was precisely the reason this medication was initially developed. Side effects may also occur with medications despite relative selectivity for certain transmitter systems. As noted above, the systems in the brain are not unifunctional and thus the serotonergic system may have effects on the regulation of mood but it also may regulate appetite and sleep. So medications that are designed to have a positive effect on depression may have unwelcome side effects in terms of an impact on sleep or appetite. Development of side effects is often a difficult challenge and may require considerable sensitivity for persons with developmental disabilities who may not be able to articulate all of the subtleties in terms of side effects that a medication may have.
Mental Disorders in Persons with Developmental Disabilities

How does one recognize signs of mental illness in persons who may not be able to express exactly how they feel or problems that they are encountering with their sleeping? One must begin the process by recognizing that mental retardation is not a protective factor for mental illness and that mental illness is common. Virtually every study that has examined the prevalence of mental illness in people with developmental disabilities has revealed that the prevalence, or the risk for an individual to develop a mental illness, is greater than that for the general population. With this knowledge as a starting point, it becomes essential to pay close attention to changes in behavior and in mood. An individual who has had a long standing interest in particular activities who suddenly seems not to be interested any longer, or an individual who has had a personality characterized by being outgoing and friendly who suddenly begins to change to being more withdrawn and unapproachable, is someone who may be experiencing some early signs of mental illness.

When a mental health professional is called upon to examine an individual for whom the suspicion has been raised about the presence of a mental illness, the clinician will typically need to spend time with people who know the client well and will ask questions to attempt to establish whether changes have occurred in an person's thinking, feeling, or behavior. The clinician will also attempt to elicit a history from the client as well as observe the client to ascertain whether there is evidence of an abnormality in the way the individual perceives or responds to the world. The clinician will also typically ask about whether there have been changes in the environment that may have precipitated the emergence of the behaviors of concern. For example, has there been a change in the constellation of peers at school or at the work site? Has there been a change in important care providers in an individual's life, or a significant event, that might be perceived as traumatic? Has there been a change in the person's health, for example, a recent illness or even a current undetected medical condition? Other symptoms that will be elicited will typically include whether a change has occurred in an individual's sleeping pattern or in that individual's appetite, or whether a person has lost interest in activities that had formerly been quite pleasurable. The emergence of new behaviors, including self injury or aggression, will always be of concern. When primary care providers become worried about the well being of a client, particularly around the kinds of issues cited above, it may be very useful to obtain the consultation of a mental health professional as an aid in identifying the presence of mental illness, and as a step toward establishing an appropriate treatment plan.

“Behavior” vs “Mental Illness”

Frequently consultations to mental health clinicians are prompted by the emergence of behaviors that are difficult to manage either at home or in other settings. The question often arises for persons with mental retardation as to whether some of these behaviors, for example, running away from structured activities, engaging in self injury or aggressive behavior and so on, are manifestations of an underlying mental illness or whether they are merely “behaviors”. That is to say, are these bad behaviors just expressions of the underlying mental retardation. A similar question also emerges in the context of children passing through developmental phases, so for example, a two year old who becomes obstinate and contrary may be given latitude because the child is merely “a terrible two”, prior to making
the leap to conclude that such a child has a mental disorder. Similarly, some teenagers may be given latitude for their mood lability and expressions of individuality as merely an expression of “adolescence” as opposed to a resulting diagnosable mental disorder.

The reluctance to generate a diagnosis is certainly appropriate in that mental illness can be very stigmatizing and one does not want to inappropriately “label” an individual. At the same time, when a diagnosis is overlooked the opportunities for appropriate treatment may similarly be lost. Often times when the question is raised in the context of team meetings it is important to consider a possible subtext that can be as follows: “Is this annoying behavior a symptom of a mental disorder, and by extension should we be worried about treating the condition and not focusing so much on the specific behavior in question?” Or, “is this merely a “behavior” in which case, do we need to put up with this nonsense?”

With regard to these kinds of issues, the answer most often is neither categorically one or the either, such that even in the context of disorders that are known to be characterized by particularly severe behaviors, for example, the Lesch-Nyhan Syndrome, noteworthy for the presence of compulsive self-injurious behaviors including severe self-biting, the approach often has to be a blend. One must recognize that there is an underlying process that undeniably contributes to the expression of the behavior in question, but also that the specific behavior is one that cannot be ignored and for which a specific program is indicated. Whether or not a specific symptom rises to the level of diagnosable psychopathology should never be viewed as a license for developing a treatment plan that excludes a comprehensive approach to an individual. Moreover, in some cases whether an individual has diagnosable psychopathology, or the factors that contribute to the expression of a particular behavior, may not be fully realized until various therapeutic strategies have been explored almost in a trial and error basis.

Selection of Optimal Medication

Just as the diagnostic process may take the form of a trial and error approach, so too is the selection of the optimal medication a process that most often requires considerable fine tuning over time. This process of medication selection begins with a diagnosis, so an individual who presents with symptoms of self injury that occur in the context of a diagnosed major depressive episode, will likely have antidepressant medication included as part of his treatment plan. Whereas an individual with self injury who is diagnosed with psychosis may require an antipsychotic drug, or an individual whose primary diagnosis is one of obsessive compulsive disorder will receive an antiobsessional.

Thus, the first and most important decision with regard to the selection of a psychotropic drug has to do with the identification of the condition that is the focus of treatment. Once that decision has been made, for example, an individual has a major depressive episode, then the decision is refined on the basis of the cost benefit equation that can be established for the various antidepressant medicines. In an individual who has a tendency to be constipated, for example, one would want to avoid antidepressants that are likely to increase that problem. Similarly, one must take into account all of the coexisting medical conditions and the knowledge of the interactions of potential medications with both those conditions and other medicines that an individual may already be taking. In every case, drug selection should be the medicine that is least likely to cause significant side effects and that is most likely to provide the greatest benefit for the condition being treated.
Unfortunately for individuals with mental retardation, drug studies have not often been done with the same frequency or rigor that characterize the studies that are done for the general population. In many cases very little, if any, knowledge is available regarding the unique effects that an individual, for example, with Down Syndrome, might experience with a particular medication. The other important principal in the selection of a medication has to do with putting in place a scheme by which the effect of that drug can be assessed both with regard to the potential therapeutic benefit and also the potentially emergency side effects.

Medication Monitoring

In addition to performing a diagnostic evaluation, mental health professionals may ask primary care providers or the patient’s themselves, to fill out various rating scales and symptoms check lists. These scales have many functions. One of course is to identify the presence of potential target symptoms that might lead to a diagnosis. The other is to provide for a mechanism by which the effects of a treatment intervention may be measured.

A number of rating scales are widely used in the field for this purpose including the Adaptive Behavior Check List for adults and children residing in the community as well as institutional settings.

Very often, particularly in group homes and some other larger settings, behavioral data are collected over time to monitor the progress of individuals with regard to specific behaviors, both positive and negative. This data can also be a valuable resource in the monitoring of a response to the introduction of a psychotropic medication. One problem that can emerge with the data alone, however, is that it is only a partial look at a person’s response to a drug intervention. So, for example, if a behavior in question is self-injury or aggression, and the effects of a psychotropic drug are such that an individual essentially ceases to aggress toward others, but this is at the expense of that individual also ceasing to engage in virtually any other behavior, including getting out of bed or going to work, the medication must be regarded as a problem. Yet if the only data being collected are numbers of incidents of aggression, it may appear as if the medication is wonderful. Thus, it is important, when embarking on medication trials, to include measures of adaptive behavior or even global assessment of function measures where an individual’s participation in activities, his sleep and appetite or his mood, are somehow captured in the ratings alongside the frequency and severity counts for particular maladaptive behaviors.

It is also important, when a medication is initiated, to set the stage for the capture of side effects. This may include baseline laboratory values and ongoing follow up of important laboratory measures as well as a discussion of the most important signs and symptoms to look out for when a medication is introduced. Some of these symptoms are listed in the appendix for particular classes of medicine.

The Combination of Psychotropic Medications

Increasingly, persons with psychiatric disorders generally, and persons with developmental disorders in particular, are receiving psychotropic medications for their conditions. It is also a relatively recent and increasingly common phenomenon that individuals may be treated with more than one psychotropic drug at the same time. Certain
combinations of psychotropic medications are entirely appropriate under certain circumstances. Some individuals with psychotic depression may, for example, present with delusions that they are wicked or evil, or hopelessly contaminated, and the delusion is essentially one of the symptoms of depression. We know from experience that delusions and hallucinations are best treated with antipsychotic drugs. In the case of a major depressive episode with psychotic features, the best treatment is often a combination of an antidepressant and an antipsychotic. Thus, an individual with a major depressive episode who also has psychotic features may be treated both with an antidepressant that aims to ameliorate symptoms of depression, loss of interest in activities, insomnia, hopelessness and so on, as well as an antipsychotic drug that targets symptoms like delusional thoughts and hallucinations.

Similarly, some individuals with depression who are treated with an antidepressant drug may also suffer from considerable symptoms of anxiety. We know from experience that while anxiety may respond to an antidepressant medication, there are certain circumstances when anxiety is better treated with a drug that specifically targets those symptoms, for example, a member of the benzodiazepine family or a drug like buspirone. In these situations, a combination of medications that includes an antidepressant and an anxiolytic (or anxiolytic drug) is entirely appropriate. There are other combinations that one may see more frequently in people with developmental disabilities and these include the combination of an anticonvulsant or antiseizure medicine, whose primary indication is for treating epilepsy, that is common in people with more severe degrees of mental retardation. For example, such a person, should he develop a psychiatric condition, may also receive an additional psychotropic medication. Thus, combinations of anticonvulsant drugs with antidepressants or antipsychotic medications, or even antianxiety medications may be entirely appropriate.

There are other combinations of medications that may appear to be less clearly warranted. It is rare, for example, that an individual will require simultaneous treatment with two antidepressant medicines or with two antianxiety drugs, or with two antipsychotic agents. In these situations, the mechanism of action of the medications may have significant overlap and there is often little evidence, and difficult justification, for combinations within the same medication family. When an individual is encountered who is receiving multiple medications, some of which are clearly from the same class of drugs or which are targeted for the same conditions, it is never inappropriate to make specific inquiry as to why an individual requires such overlapping drug treatment.

It is important also to remember that when drugs are added, the side effects associated with those medications must also be considered. In some instances, even though medications come from different families, for example, an anticonvulsant and an antidepressant, their side effect profile may have considerable overlap and, while a single medication for a given individual may not have caused symptoms like dry mouth or constipation, the combination of medications may well produce those or other symptoms. Thus, it is very important whenever combination medication therapy is considered, to look carefully at the side effect profile of the drugs in question, as the risk of producing side effects increases with the addition of each new drug. Further, the interaction between the medications may decrease the effectiveness or increase the likelihood of toxicity associated with any given drug as they compete for their respective binding sites, or as their metabolism or modes of elimination may involve similar systems. As a rule of thumb, whenever two medications from the same category (see appendix) are being given simultaneously, it should alert clinicians and care providers to the need to specifically justify such combinations.
Documentation Issues and Medication Consent

In some settings, specific procedures are in place for documenting the process by which consent for the use or administration of a psychotropic medication is obtained. In a developmental center, for example, when a psychotropic medication is prescribed, it is only after the administration of that medication has been approved by the treatment team, subsequently by a behavior management or other oversight committee(s), and finally with the approval of parent or guardian. These procedures are in place to ensure that the rights of individuals who may not be able to understand or consent for medical treatment are protected, and that these individuals are not subjected to inappropriate risks.

In the community, the procedures for obtaining informed consent are typically less well organized, but increasingly treatment teams, parents and care providers should see to it that the consent process is documented. A typical consent for medication should include an assurance that the specific condition being treated was discussed, that alternatives to the medications in question were discussed, and that the risks and benefits associated with a particular choice of medication were discussed prior to its initiation. This process should assist prescribing clinicians, as well as the identified patients, in highlighting side effects that one must get vigilant for, as well as thinking through mechanisms by which therapeutic benefit will be measured and recorded.

Health Care Finance Administration Guidelines

Recently, the Health Care Finance Administration (HCFA) generated guidelines for the prescription and monitoring of psychotropic medications in persons with developmental disabilities. These guidelines are summarized in the Table above (See Part I). The intent of these guidelines is not to be prescriptive but rather to ensure that when medications are being administered, that it is with the knowledge that those medications represent the least restrictive intervention, that they are not dispensed in the absence of a thorough evaluation and specific diagnostic assessment, and that appropriate monitoring safeguards are in place. The recommendations call for periodic holidays from medication or drug tapering and withdrawal strategies as a means of ensuring that such medications continue to be needed. However, the recommendations do not mandate that everyone come off his medication, particularly when clinical judgement dictates that simply withdrawing someone for the sake of withdrawing them is not always in his or her best interests.
Appendix
Classification of Common Psychotropic Drugs and their Typical Indications.
Common Side-Effects Associated with Psychotropic Medications.
Other Mental Health Resources for Persons with Developmental Disabilities.