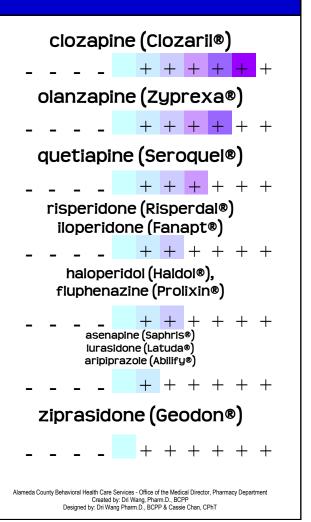
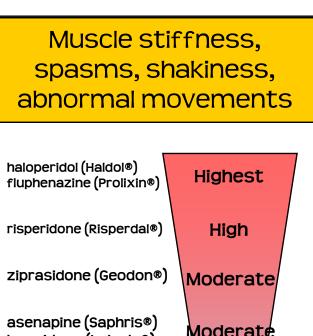
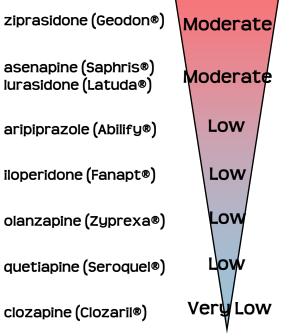
Risk for weight gain and diabetes







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Muscle stiffness, spasms, shakiness, abnormal movements

Medications for thought disorder can cause:

- Tremors, muscle rigidity, & shuffling walk
- Restlessness, where it is almost impossible to sit still
- Abnormal movements that you cannot control (such as tongue thrusting, puckering)
 - Can be reversed if caught early, otherwise movements can worsen and become irreversible
 - In rare cases, abnormal movements can become a medical emergency For example:
 - Muscle spasm that occurs in the throat
 - Severe muscle stiffness along with fever

What should I do if I experience any of these side effects?

Tell your prescriber right away. They can give you something to help with these side effects



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Risk for weight gain and diabetes

Medications for thought disorder can cause:

- ♦ Weight gain
- Increased blood sugar
- Increased cholesterol (fats in the blood) & blood pressure

Which can lead to:

- Diabetes
- ♦ Heart disease

How can I prevent this?

- \Rightarrow Eat a diet low in fat & sugar
- ⇒ Exercise at least 30 minutes a day, 5 times per week
- Have labs done on a regular basis to monitor your blood sugars and fats
- ⇒ If your levels become too high, or if you gain too much weight, your prescriber can change your medication

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Side Effects

clozapine (Clozaril®) & olanzapine (Zyprexa®)

- Weight gain
- Increased appetite
- Increased fats & sugars in the blood
- Agranulocytosis (with clozapine) - a rare, but dangerous decrease in white blood cells that can lead to deadly infections. There are important blood monitors to prevent these side effects

aripiprazole (Abilify®)

- Up to 15% of clients reported restlessness (inability to sit still)
- Headache, anxiety, and upset stomach are commonly reported



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Side Effects

asenapine (Saphris®)

- Insomnia (difficulty sleeping or staying asleep) or sleepiness
- Numbness in the mouth after dissolving the disintegrating tablet under the tongue
- Headache, restlessness, weight gain, and increased cholesterol



quetiapine (Seroquel®)

- Dizziness, drowsiness, dry mouth, and constipation are the most common side effects
- Mild weight gain (in about 20% of clients)
- Moderate weight gain (in about 10% of clients)
- Increased appetite
- Increased fats and sugars in the blood

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Side Effects

iloperidone (Fanapt®)

- Dizziness and fast heartbeat (may occur in the beginning of therapy, often goes away with time)
- Dry mouth and nasal congestion

lurasidone (Latuda®)

 Sleepiness, restlessness, tremors, and nausea



haloperidol (Haldol®)

- Muscle stiffness, spasms, restlessness, and shakiness may appear
- Clients on this medication long term can get uncontrollable movements (for example, in lips or mouth)

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Side Effects

risperidone (Risperdal®)

- Dizziness (may occur in the beginning of therapy, often goes away with time)
- Muscle stiffness, spasms, or restlessness (in about 2% of clients)
- Increased chance of high prolactin Signs of high prolactin:
 - absence of period (women)
 - loss of sexual functioning and breast growth (men)

ziprasidone (Geodon®)

- Insomnia (difficulty falling asleep or staying asleep) occurs in about 30% of clients
- Restlessness and muscle spasms or stiffness
- Rarely, heart rhythm disturbances can occur so monitoring may be needed. Tell your prescriber if you have a history of heart problems



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Sleepiness

Medications for thought disorder that may cause sleepiness

High:

- clozapine (Clozaril®)
- olanzapine (Zyprexa®)
- quetiapine (Seroquel®)

Low to moderate:

- aripiprazole (Abilify®)
- risperidone (Risperdal®)
- ziprasidone(Geodon®)
- asenapine (Saphris®)
- iloperidone (Fanapt®)
- lurasidone (Latuda®)
- haloperidol (Haldol®)
- fluphenazine (Prolixin®)

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Dry mouth, blurry vision & constipation Highest clozapine (Clozaril®)

clozapine (Clozaril®) quetiapine (Seroquel®) High Moderate olanzapine (Zyprexa®) risperidone (Risperdal®) Low aripiprazole (Abilify®) Low ziprasidone (Geodon®) Low iloperidone (Fanapt®) Low asenapine (Saphris®) **.ow** lurasidone (Latuda®) haloperidol (Haldol®) fluphenazine (Prolixin®)

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Dry mouth, blurry vision & constipation

Certain medications for thought disorder may worsen:

- Dry mouth
- Blurry vision
- Urinary retention (hard to pee)
- Constipation (hard to poop)
- ⇒ In a large study,
 quetiapine
 (Seroquel®) was
 reported as being
 the worst in this
 set of side
 effects, when
 compared to other
 medications for thought disorder
- ⇒ In a large clinical trial, 22% of patients taking olanzapine
 (Zyprexa®) experienced dry mouth, 9% reported constipation
 - Higher doses of olanzapine (Zyprexa®) tend to cause more of these type of side effects

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Sleepiness

- → Younger clients tend to get sleepier when taking aripiprazole (Abilify®) compared to
- ⇒ The highest dose of aripiprazole (Abilify®) also tends to cause more sleepiness
- ⇒ In a large study, insomnia (difficulty falling asleep or staying asleep) was one of the most reported side effects of ziprasidone (Geodon®)



older clients

in about 30% of clients

⇒ Some clients may even experience sleepiness from it

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Sexual Side Effects

Minimal to None:

aripiprazole (Abilify®) ziprasidone (Geodon®) clozapine (Clozaril®) olanzapine (Zyprexa®) quetiapine (Seroquel®) asenapine (Saphris®) lurasidone (Latuda®)



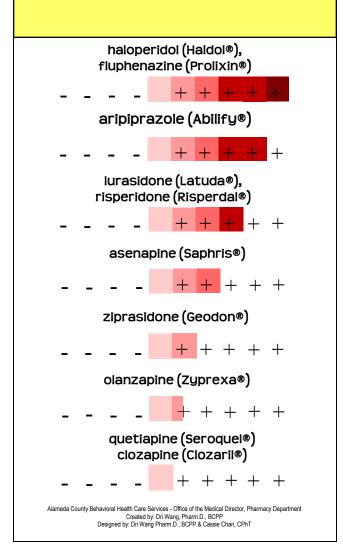


Increased chance:

risperidone (Risperdal®) haloperidol (Haldol®) fluphenazine (Prolixin®) iloperidone (Fanapt®)

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Restlessness





Restlessness

What is restlessness?

- Restlessness can develop several days or weeks after you start taking the medication
- Often described as an uncomfortable feeling, leading to difficulty sitting still
- May range from anxious feeling to severe discomfort, particularly in the knees. Some clients pace for hours to relieve the pressure
- ⇒ Studies show the highest rate of restlessness with haloperidol (Haldol®) and fluphenazine (Prolixin®) in 25-36% of clients
- ⇒ In several trials, aripiprazole (Abilify®) also shows a high rate of restlessness in 10-15% of clients

lam experiencing symptoms, is there any relief?

There are medications that your prescriber can give you to relieve this side effect

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Sexual Side Effects

Some medications for thought disorder can cause an increase in prolactin.

What is prolactin?

Prolactin is the hormone that causes milk production and can cause sexual problems

For women: Increased prolactin may disrupt your menstrual cycle or reduce sexual desire



For men: Increased prolactin can result in breast growth.

Sexual side effects may also include delayed or inability to ejaculate and difficulty achieving erection

What should I do if I am experiencing these side effects?

Tell your prescriber if you are experiencing disruption in sexual functioning, such as a decrease in sexual desire in comparison to before starting the medication

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Dizziness clozapine 19% (Clozaril®) iloperidone 10-20 % (Fanapt®) *auetiapine* 10-18 % (Seroquel®) aripiprazole 11 % (Abilify®) risperidone 9 % (Risperdal®) ziprasidone 8 % (Geodon®) asenapine 3-11 % (Saphris®) lurasidone 4 % (Latuda®) olanzapine 2.6 % (Zyprexa®) haloperidol (Haldol®) Not reported fluphenazine (Prolixin®) Alameda County Behavioral Health Care Services - Office of the Medical Director, Pharmacy Department Created by: Dri Wang, Pharm.D., BCPP Designed by: Dri Wang Pharm.D., BCPP & Cassie Chan, CPhT

Starting medications

What are some common symptoms that medications for thought disorder help with?

- $\hfill\Box$ Seeing & hearing something that is not there
- □ Fearful feelings and confusion
- □ Paranoia or suspiciousness
- Agitation, aggression, or hostility
- ☐ Rapid thoughts
- □ Pacing and restlessness
- □ Fluctuations in mood
- □ Insomnia

What can I expect when starting the medication?

- It can help calm & clear confusion in a person who is hearing or seeing things that are not there
- ⇒ It can take up to 4-6 weeks to reach their full effect
- ⇒ Helps to control symptoms, but does not cure them



- ⇒ When taken long term, prevents the same symptoms from returning
- ⇒ When combined with family therapy, peer support, and housing & employment supports, can be very helpful in managing symptoms

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Starting medications

How long should I take the medication for?

- Take the medication until the symptoms are relieved, then talk to your prescriber about whether or not to continue
- You may need to continue taking it to prevent symptoms from occurring
- If starting for longterm treatment, take it for at least a month before deciding whether or not it is working for you



How do I cut down or stop taking the medication?

- ⇒ Do it slowly! A sudden change in your dose increases the risk of your symptoms returning or becoming more intense
- Stopping can cause withdrawal effects, such as:
 - * Nausea
- * Stomach pain
- * Vomiting
- * Dizziness
- * Diarrhea
- * Shakiness



⇒ Talk to your prescriber about decreasing or stopping your medication. They may have you decrease the dose a little at a time (for example, 1-3 weeks between each dose reduction)

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Dizziness

Why does my medication for thought disorder make me feel dizzy?

Dizziness often happens due to a drop in blood pressure when the medication is first started



Dizziness usually goes away with time. During this time period, it is important to get up slowly from a lying or sitting position

What can I do to help with the dizziness?

Before getting up from bed in the morning, you can sit at the edge of the bed and dangle your feet before standing up. This allows blood to re-circulate throughout your entire body and avoid the sudden drop in blood pressure

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