White Paper: Psychiatric Drugs and Violence

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Do psychiatric drugs cause people to commit violent acts such as the many alarming incidents reported in the popular media? Unfortunately the answer to this question is not a straightforward "yes" or "no". Rather, like many answers to questions about human behavior, the causes are very complex, subtle, and probabilistic. Notwithstanding such uncertainty, this paper will argue that the use of psychiatric drugs increases a person's risk of being violent. But in order to understand this connection one must first understand violent behavior in general.

It must be noted that violence does not arise without some type of triggering event or series of events. Such events could include interpersonal ones like being rejected by a loved one, being fired from a job, or being shamed in public. But the trigger could also include an intrapersonal one such as the feelings of unease brought about by lack of sleep, by poor nutrition, the ingestion of substances, or poor self-esteem. The triggering event can have a "last straw" effect. What matters is what the person perceives, not what is noticed by others. So, if a person feels abandoned by peers, even if the peers are not intentionally doing so, this can still act as a trigger.

The important point is that human beings are meaning making and meaning reacting creatures. When it is said that someone acts "out of the blue", this merely means the trigger is not readily evident. Whether or not a person reacts violently to a trigger depends on how emotionally upset he or she becomes (i.e., how meaningful the event is to her/him), and his or her ability and willingness to inhibit reactions to the irritation, frustration, and anger that follow.

One model of human emotions (Nathanson, 1994) considers the broad concept of anger to be very unique among all other emotions. This model proposes three basic types of emotions: the feel-good ones like enjoyment, pride, and excitement; the hurtful ones like anguish, shame, disgust, and fear; and lastly, anger. In this model, anger is seen as a protective reaction to the hurtful emotions. For instance, when any hurtful emotion is too intense or long lasting, humans naturally resort to anger as a protective measure. Anger is the only "bad" emotion that feels good. It provides us with a feeling of power and assertiveness, and in that way it can protect us from the painful experiences of intense and chronic emotional angst. Anger is epitomized in the expression, "the best defense is a good offense." However, if anger is not harnessed, it leads to socially inappropriate and harmful behavior.

Once a meaningful triggering event(s) occurs, a person is presented with the challenge of managing the hurtful feelings associated with it and hopefully not resorting to anger. But this takes a considerable amount of personal control and willingness to inhibit

violent responses to emotional hurt. There are many interacting factors that can increase the risk that the person will end up acting violently in response.

The violence risk factors that consistently show up in research (Melton, Petrila, Poythress, & Slobogin, 2007) are: 1) being male; 2) being younger; 3) having a history of disregarding the rights and feelings of others; 4) prior acts of violence; 5) easy access to weapons, especially lethal ones like guns; 6) poor social support; 7) feelings of persecution; 8) difficulty controlling one's thoughts, and 9) alcohol and drug use. Keep in mind these factors increase one's risk of acting violently. They do not allow us to accurately predict whether a particular person will in fact be violent or to determine the exact factors that caused a particular violent act. The best we can do is identifying these risk factors in situations and then managing them with the goal of reducing the overall risk.

The first four of these are historical risk factors and so we obviously cannot manage them in terms of changing what has already happened. However, the last five risk factors can be managed. So this tells us when considering the possibility of someone being violent, or trying to reduce the overall risk of violent behavior in our society, we can reduce easy access to weapons, increase social support for people, reduce situations that lead to feelings of persecution, intervene to reduce confusion and thought control problems, and reduce alcohol and drug use as primary means of coping with stress.

Now let's turn to the main point of this paper, namely the relationship between psychiatric drugs and violence. You'll notice violence risk factor #9 above is alcohol and drug use. These include any chemical compounds that affect brain chemistry. Many times, the exact type of effect is poorly understood and when they are used in combination, their effects are even more difficult to understand. But it is important to realize that alcohol, illegal drugs, and prescription psychiatric drugs are all mind-altering substances. The body cannot distinguish among them in terms of whether they are legal, whether they are being used recreationally, or whether they are prescribed as "medicines".

There are many examples of current illicit substances that were once prescribed as medical treatment in the past. Heroin, for example, was prescribed in the late 19th century to treat cough, chest, and lung problems. Further, some present day prescription drugs are virtually identical to illegal drugs. For instance, the chemical structure of cocaine is very similar to Ritalin. Both are central nervous system stimulants, and both are listed as Schedule II drugs by the federal government because of their high potential for abuse and dependence. So, it should be noted that the legality or form of the drug is not important when determining risk of violence. The drug's effect on one's brain is important, whether the drug be alcohol, Seroquel, methamphetamine, caffeine, or Prozac. In all cases, the drug interferes with natural brain functioning and alters consciousness to include reduced inhibitions, agitation,

restlessness, confusion, and emotional numbing. The brain doesn't care whether the drug is legal or illegal, prescribed or recreational, it cares about the effects. The point to remember is that when they are ingested, they increase one's risk of violent behavior.

Research has verified the negative effects psychiatric drugs have on the brain, and thus on one's experiences. In a 2009 study (Price, Cole, & Goodwin, 2009), people who were taking prescription antidepressants were asked how the drug made them feel. The participants complained about flattened emotions, reduced emotional sensation, emotional detachment, a lack of caring about things, and feeling empty or like a different person. Similar results came from a 2014 study (Read, Cartwright, & Gibson, 2014) that showed the most prominent experiences of people taking antidepressants were sexual difficulties, emotional numbing, feeling like a different person, reduced positive emotions, caring less about others, and thoughts of suicide.

Research shows similar results for antipsychotic drugs. For example, a 2001 survey (Fakhoury, Wright, & Wallace, 2001) of 202 patients taking antipsychotic drugs found that half of them were dissatisfied with the drug and all of them reported some adverse effects. The most prevalent among these were low mood, sedation, and difficulty thinking and concentrating. Further, a 2009 content analysis (Moncrieff, Cohen, & Mason, 2009) of 439 Internet comments from people taking antipsychotic drugs found predominant complaints of sedation, cognitive impairment, emotional flattening or indifference.

Both these classes of drugs (antidepressants and antipsychotics) have also been known to induce akathisia, or a state of agitation, distress, and restlessness associated with aggressive behavior (Akagi & Kumar, 2002; Forcen, F., 2015; Kumar & Sachdev, 2009; Stubbs, Hutchins, & Mounty, 2000). The prevalence of akathisia is conservatively estimated to be between 20 and 30% of those taking the drugs. The evidence also shows that akathisia may be triggered during withdrawal from these drugs (Sachdev, 1995; Sachdev, 1995).

The above research results are not surprising. Most psychiatric drugs are designed to reduce emotional reaction to life events by interfering with natural emotional and thought processes. That's how they work, whether they are called antidepressants, antianxiety drugs, antipsychotics, or mood stabilizers. It is interesting to note that the proponents of psychiatric drug treatment interpret the above effects as beneficial, while the people taking the drugs consider them aversive. In the minds of the prescribers, these drugs "work" by reducing the symptoms. In the minds of the patients, these drugs chemically straightjacket them and create very unpleasant experiences to include emotional deadening, agitation, and alterations of thoughts. In the process of dampening emotion, the drugs can paradoxically trigger angst.

On the other side of the emotion continuum, psychiatric stimulants (like Ritalin, Strattera, and Vyvanse) work by increasing emotions, in particular the emotion of

excitement and interest. In essence, they artificially induce hypervigilance and an energetic state, especially if too much of the drug is ingested. Despite the fact that stimulants work oppositely than the previous two classes of drugs, they nevertheless still unnaturally alter one's thought processes to include very negative and disorienting experiences.

These negative effects of psychiatric drugs can be one or more of the triggering events for violence. In addition to falling within risk factor #9 above, they fall within risk factor #8 because of their deleterious effect on one's mental faculties. Further, it is quite reasonable that these two factors will affect and be affected by violence risk factor #6 (poor social support). One's social support is jeopardized the more problematic drug use becomes and the more one's mental faculties are negatively affected. In such a case, the person is more likely to be shunned by peers and to develop as sense of social alienation. The reverse is also likely: a person with limited social support is probably more at risk of resorting to drugs (illegal and prescribed) and to develop a sense of social isolation leading to thought control problems. It is reasonable to also assume such a situation would increase the chance that the person will develop a sense of being misunderstood, mistreated, and persecuted (risk factor #7).

The foregoing discussion was based on a critical and reasoned examination. But what does the empirical literature say about psychiatric drugs and violence? Is there hard empirical evidence that psychiatric drug use is associated with an increased risk of violence?

Even the results of the drug companies' own clinical trials attest to an empirical link. Their notorious "black box" warnings are issued because a disproportionate number of people taking the drugs during the clinical trials have thoughts or acts of violence when compared to a placebo. Consequently, governmental agencies have issued consumer warnings along these lines. It is important to note that the drug companies' studies are typically randomized and placebo controlled. This means any results showing an increased risk of violence is causative, not just correlational.

Further evidence of a link between psychiatric drug use and violence comes from a 2010 review of data from the FDA adverse drug reporting system. This review demonstrated that of the top 31 prescription drugs most associated with violent behavior between 2004 and 2009, 26 were psychiatric drugs (Moore, Glenmullen, & Furberg, 2010).

A 2001 review of the research on the link between psychiatric drugs and violence concluded that antidepressants and antianxiety prescription drugs are associated with aggressive behavior (Gillet, Pollard, Mauduit, & Allain, 2001). This review also concluded that cocaine (although currently not a psychiatric drug) increases the risk of violent behavior. Given the chemical similarity between cocaine and the stimulant psychiatric drugs prescribed to children and adolescents who have been diagnosed

with ADHD, this should cause great concern. Other research has similar results, showing that illegal stimulants like amphetamines and cocaine can lead to problems controlling anger and violent behavior, with a correspondingly high frequency of assault and weapons charges (Zweben, Cohen, Christian, Galloway, Salinardi, Parent, & Iguchi, 2004).

In 2001, the Federal Bureau of Investigations (FBI) reported, "enough anecdotal evidence and a growing body of research strongly suggest a causal connection between psychoactive medication and violent ideation and/or behavior in adolescents. The paradoxical reaction caused by these drugs is that the boost in serotonin levels in the brain triggers an unintended compensatory drop in dopamine, which results in loss of involuntary motor control. There appears to be a dosage-related effect where initial side effects like akathisia (inner restlessness) and disinhibition create aggression and impulsivity--the precursors to violent behavior…." (Blackman, Leggett, Jarvis, 2001)

A 2003 review of the research regarding human aggression showed how antianxiety drugs increase violent behavior. The review also noted that this effect might only occur in people who already have a history of hostile reactions (risk factor #4 above) (Hoaken & Stewart, 2003). A 2011 review of the research also showed significant concern about an empirical link between antianxiety prescriptions and subsequent aggression and violence (Jones , Nielsen, Bruno, Frei, & Lubman, 2011).

And finally, an earlier study provided evidence of a causative connection between antipsychotic drugs and violence (Herrera, Sramek, Costa, Roy, Heh, & Nguyen, 1988).

One of the criticisms of this research is that while there is a link between psychiatric drug use and the increased risk of violence, it is quite small, and the great majority of people who take psychiatric drugs do not act violently. While this is true, the small proportion of people who are prescribed these drugs and do act violently can still be very significant. It is important to note that with a very large population, even a small risk factor can have devastating results. A report by Medco Health Solutions, Inc. (2011), estimated that about 20% of all adults were taking at least one psychiatric drug in 2010. According to the U.S. Census Bureau, there were nearly 309 million people in the United States in 2010 and around 76% were adults. Using the data from Medco Health Solutions, Inc., this would mean there would be around 47 million adults taking psychiatric drugs. Even with a low violence risk ratio of .1%, there would still be about 47,000 people committing violent acts in the United States because of the drugs in 2010. If spread out over a year's time, that would be more than 128 violent acts each day. And keep in mind this is using a low risk rate of .1%. It is common to have adverse side effects reported in clinical trials to reach much higher rates. Also, this only includes adults. It doesn't take into consideration the risk of violence by the 74 million children and teenagers, who were at risk of being prescribed psychiatric drugs in 2010. Lastly, this is based off the estimate of 20% of adults being prescribed psychiatric drugs. This figure is likely to increase if the trend over the last few decades

of an ever-increasing number of prescriptions of psychiatric drugs for an ever-increasing number of mental illness diagnoses continues. This is not a trivial matter.

Still the advocates of psychiatric drugs frequently claim the "benefits" of those drugs outweigh any risks of violent behavior. Well, let's look at that. What are the typically touted benefits of these drugs and do they really outweigh the above risk of violent behavior?

Actually, there is only one possible benefit: you won't notice emotions as you did before taking the drugs. The symptoms are reduced. You may feel less gloom with Effexor, less nervousness with Xanax, less confusion with Seroquel, and more interest with Ritalin. But remember what was pointed out earlier: the people taking the drugs typically consider the feelings of these so-called "benefits" as problems in the form of very negative and disturbing sensations.

Moreover, a few other things are worthy of note. First, the drugs don't address the actual problems you are having. Rather, they merely suppress the emotions that stem from the problems. This would be like prescribing narcotic painkillers to deaden a pain in one's head, but ignoring the tumor that was causing the pain.

Second, there is no evidence that the symptoms of so-called mental illnesses are caused by chemical imbalances, genetic defects, or any other such brain pathology, that can be targeted with drugs. When pressed, even the most staunch psychiatric drug advocates will admit this. For instance, in July 2011, Ronald W. Pies, M.D., the Editor-in-Chief Emeritus of Psychiatric Times, and a professor in the psychiatry departments of SUNY Upstate Medical University and Tufts University School of Medicine, wrote, "In truth, the 'chemical imbalance' notion was always a kind of urban legend – never a theory seriously propounded by well-informed psychiatrists." (Pies, 2011). For those of us who have worked in the profession, this comment was dumbfounding as we know first hand how many people are told by the prescribing physician that the drug will correct a chemical imbalance. Nevertheless, despite what you hear on television and from your doctor, psychiatric drugs do not correct any supposed brain chemistry problems because there are no such brain problems to correct.

Third, it is more easily argued that the use of psychiatric drugs cause disruptions or "imbalances" in brain chemistry. And in response to these disruptions, the brain attempts to compensate by pushing in the opposite direction. So, if a psychiatric drug reduces the neurotransmitter dopamine, for instance, the brain works to increase its production of and sensitivity to dopamine. This is why there are such terrible withdrawal effects when stopping the drug. Without the drug, the brain's imbalanced state means there is far too much dopamine, which can cause hallucinations, thought control problems, and other psychotic experiences. This happens with any drug that changes brain chemistry. In fact, the symptoms of the withdrawal are very similar to the

so-called symptoms of the mental illness that prompted the person to go to the psychiatrist in the first place. So, many times you will hear a prescribing physician tell a patient who stopped taking the drug "cold turkey" that this is proof the drug was working; they stopped the drug and the mental illness returned. What is even worse, the physician might tell the patient he or she must take the drug for life.

Finally, the actual amount of "benefit" due to the drugs' chemical properties is quite minimal. Research indicates a large part of any purported effectiveness is due to the placebo effect, rater bias, publisher bias, or the relationship between the prescribing doctor and the patient (See the ISEPP White Paper – Efficacy of Psychiatric Drugs).

These four reasons make us question the actual benefit of psychiatric drugs in most cases, and even assuming some benefit, if it is actually worth the risk of triggering violent behavior, not to mention the plethora of other potential adverse events caused by psychiatric drugs.

After reviewing the research and thinking critically about the effects of psychiatric drugs and their minimal benefits, it is clear that the risks involved are significant. Even though the drugs do not cause violence in all situations and for all people taking them, and the actual risk ratio may be relatively small, the practical meaning of subsequent violent behavior is too serious to ignore and of such a consequential level to question their continued use as the first line of treatment for emotional and behavioral problems.

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