

Big Pharma: A Call to Reform

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Imagine having the ability to decide what emotions you experience at any given time. This idea appeals to us all when we experience uncomfortable feelings of sadness, nervousness, or distractedness. Dick explores this idea in *Do Androids Dream of Electric Sheep?* (1968) in which human characters possess mood organs that allow them to manipulate their emotions as easily as tuning a radio. The pharmaceutical industry—or Big Pharma—also toys with this idea and produces psychotropic drugs with a similar intent of giving patients greater control over their mental illness. However, where Dick argues that such extensive control over our emotions is dehumanizing, Big Pharma portrays this control as desirable. This portrayal is just one aspect of the false pretenses of the pharmaceutical industry. While Big Pharma leads us to believe it operates with the goal of helping people overcome mental illness, its actual intent is to take financial advantage of an unsuspecting public by forcing psychotropic drugs on people who do not need them. In the following pages, I will discuss the problems riddling the pharmaceutical industry such as public misconceptions, the role of the FDA, and social attitudes toward mental illness. Additionally, I will offer suggestions for how this industry can correct these problems. Despite these issues, I believe that psychotropic drugs can be a valuable resource in treating mental illness; however, it is imperative that the pharmaceutical industry is reformed before we can guarantee the safety of today's public, as well as the safety of future generations. Ultimately, psychotropic drugs are a valuable secondary form of treatment for mental illness when coupled with psychotherapy and approached with caution rather than imprudence, but Big Pharma's quest for profits compromises the efficacy and safety of these drugs. Therefore, a

reform of the pharmaceutical industry is necessary for restoring the value of psychotropic drugs and preserving public safety.

History of Psychiatry

Many of the problems riddling the pharmaceutical industry stem from its very foundation. A look into the history of psychiatry as explained by Burwell and Stith (2008) will explain how the pharmaceutical industry is not trying to cure mental illnesses in the manner we believe they are. When psychiatry became a medical field in the early 1800s, psychiatrists were on the fringe of medicine. They worked primarily in mental institutions and asylums, but with no definitive cure to administer, psychiatrists were not respected by other doctors. So, to gain this respect, psychiatrists worked together to create the Diagnostic and Statistical Manual (DSM), which is a working list of all known mental illnesses. The DSM was created by consensus, meaning psychiatrists shared their findings and if they agreed that similar symptoms constituted a mental illness, they voted the illness into the book. When the first edition of the DSM was published in 1952, psychiatrists were finally considered doctors by the rest of the medical industry because they began working with patients who had real diseases—caused by an alleged chemical imbalance in the brain—with real cures, which restore the balance. Today, drug companies can create medications to treat any mental illness in the DSM, and this has become quite a lucrative business. In fact, in 2016, the pharmaceutical industry made roughly 446 billion dollars from the sale of psychotropic drugs (Statista, 2016). However, Big Pharma's ensuing quest for profits has distorted the purpose of these drugs. Rather than using psychotropic drugs to help patients, pharmaceutical companies push these drugs on the public, trying to sell them to anyone and everyone to make as much money as possible. Today, this has led the pharmaceutical industry to invent new mental illnesses and use marketing strategies to

convince people they have said illnesses so they can create and sell new drugs. While the central issue here is the distorted purpose of the pharmaceutical industry, these foundations have led to a plethora of other problems surrounding Big Pharma.

Problems with Big Pharma

Public Misconceptions

A major problem with Big Pharma is the misconceptions the public believes regarding this industry. The first of these misunderstandings is the exaggerated reality of mental illness. While mental illnesses cause real suffering and agony, they are not “illnesses” in the same sense as influenza or a broken leg, which have definitive tests and treatments that determine and fix the problem, respectively (Molyneaux, 2011). However, this is not what pharmaceutical companies want the public to believe. Instead, the producers of psychotropic drugs want the public believing that normal, everyday emotions such as sadness or nervousness are mental disorders that require medicinal treatment.

At the root of this exaggeration is the lie that mental illness is caused by chemical imbalance in the brain. Pharmaceutical companies use the chemical imbalance scapegoat along with fudged statistics and vague scientific research to create a convincing argument that unwanted emotions are treatable mental disorders. However, there is no scientific evidence that supports their claim. Before we can say there is a chemical imbalance in the brain, we first need a quantitative description of a normal neurochemical balance, but such data has yet to be discovered (Pies, 2014). Neurologists have offered up alternative perspectives on mental illness, proposing that they be addressed as disruptions in brain function caused by symptoms that result from developmental and social experiences. Additionally, psychiatrists should consider how environmental factors during key developmental stages have long-term effects on gene

expression, which result in unconscious behaviors later in life (Insel & Quirion, 2005). From the complexity of this definition alone, it is clear that the cause of mental illness cannot be stripped down to a simple chemical imbalance like Big Pharma would have us believe. In fact, these companies are deliberately betraying the trust of the public with this untruth. In an interview, investigative reporter Robert Whitaker describes the chemical imbalance myth as a “white lie” that helps companies sell drugs and makes it seem like psychiatry has indisputable cures for mental disorders (Levine, 2014). However, to say that this myth is a white lie implies that it is harmless, which could not be farther from the truth.

One consequence of the chemical imbalance myth is the endangerment of the public through its misplaced trust in doctors. Because Big Pharma insists on the chemical imbalance myth, patients place unwavering trust in their doctors when receiving prescriptions for psychotropic drugs, believing that since doctors know what causes mental illness, they must know what will cure it. However, prescribers do not know how any psychotropic drug will affect a given patient, even if they have prescribed a particular drug before. Unlike what Big Pharma claims, psychotropic drugs are not one-size-fits-all, and patients often do poorly on one drug and much better on another (Brody, 2004). Thus, doctors prescribe psychotropic drugs in a trial-and-error fashion, often switching prescriptions multiple times when patients find the side effects unbearable. Essentially, pharmaceutical companies use the chemical imbalance myth to deliberately mislead the public, which endangers patients who wrongly assume that doctors know exactly how psychotropic drugs will cure a mental illness.

From the chemical imbalance myth stems a second widely-held misconception regarding Big Pharma. That is, the public believes psychotropic drugs are “magic bullets,” a term coined by scientist Paul Ehrlich to describe medications that directly target the cause of a biological

abnormality (Bosch, F. & Rosich, L. 2008). The key issue with this definition is the word “cause.” Because these drugs are portrayed as exacting cures, the public believes the medications directly correct chemical imbalance in the brain—the so-called cause of mental illness. However, psychotropic drugs are aimed at curing the symptoms of mental illness rather than the cause (which has yet to be definitively determined). In the process of curing these symptoms, the drugs affect users’ minds as a whole rather than the specifically afflicted part (Moncrieff, 2008). For example, Selective Serotonin Reuptake Inhibitors (SSRIs) are a class of psychotropic drugs typically used as antidepressants. Some examples are Prozac, Zoloft, Celexa, and Paxil. These drugs work by increasing levels of serotonin—a neurotransmitter that controls many bodily functions such as sleeping patterns, appetite, and mood—in the brain by blocking its reabsorption. The subsequent increased levels of serotonin ease depression symptoms by restoring part of the brain’s control over bodily functions (Hirsch, 2018). Thus, SSRIs are not magic bullets that target a problem area in the brain. Instead, they affect the brain as a whole by increasing levels of serotonin even though there is no scientific data suggesting low serotonin levels cause mental illness. Additionally, SSRIs were originally developed to treat depression, but today they are used to treat all kinds of problems such as anxiety, posttraumatic stress disorder, obsessive compulsive disorder, and even premenstrual dysphoric disorder (SSRIs, 2000). Clearly, if these drugs treat a variety of disorders, they do not target one specific area of the brain that is causing one specific mental illness.

Moreover, tools used for measuring mental illnesses prove that psychotropic drugs treat symptoms rather than causes. One form of measurement is the Hamilton Rating Scale for Depression (HRSD), which uses a point system to rate the severity of depression based on patients’ responses to a questionnaire (Bystritsky, Khalsa, Cameron, & Schiffman, 2013). All of

these questions ask patients to rate the severity of various symptoms of depression such as loss of appetite, insomnia, headaches, etc. However, the HRSD questionnaire and other similar scales ask nothing about the alleged causes of the mental illness. There are no questions asking about serotonin levels in the brain. This is because patients and their doctors do not know what is causing the mental illness; they only know how severe the symptoms are. Thus, when researchers use improvements in HRSD scores to measure the efficacy of psychotropic drugs, they are not measuring the drug's success at rectifying the cause of the mental illness. Rather, they are measuring how well a drug improves symptoms of mental illness (Horder, Matthews, & Waldmann, 2011). So, to say that psychotropic drugs are magic bullets that target the cause of mental illnesses is an unsupported claim when scientists cannot even measure how effectively a drug acts on the cause of a problem.

On top of this misunderstanding of how psychotropic drugs work is the public's misconception that these drugs are effective as well as safe. First, all psychotropic drugs put users at risk of numerous adverse side effects. Just some of these side effects include drowsiness, dizziness, restlessness, weight gain, nausea, and vomiting. Most of these symptoms may sound like inconveniences rather than actual danger; however, some of the more serious side effects include worsening mental illness, increased aggression and violence, and increased risk of death both from overdose and suicide (Valdovinos et al., 2017). It is estimated that psychotropic drugs kill roughly three thousand people per month and that half of all Americans who commit suicide are on psychotropic drugs (Burwell & Stith, 2008). Additionally, these drugs have addictive properties. One form of evidence of these addictive properties is the problem with doctor shopping. Doctor shopping entails addicts obtaining scheduled drugs such as Adderall from multiple prescribers for the purpose of abuse. Researchers cannot determine

how many people go doctor shopping because many addicts cross state borders to obtain their drugs and thereby evade detection in the same electronic database (Cepeda et al., 2015).

However, the fact that this number cannot be determined shows the extent of the addictive properties of psychotropic drugs and the lengths addicts will go to satisfy their addiction. While Big Pharma steers the public to believe that psychotropic drugs are a safe form of treatment, the reality is that these substances are dangerous and addictive, and consumers need to be made more aware of these issues.

A fourth misconception that fuels the public's over-dependence on psychotropic drugs is the assumption that these drugs are cheaper than psychotherapy. While the amount of time spent in psychotherapy varies greatly from person to person, psychotropic drugs may be continued for the entire lifetime of a patient, ultimately costing them hundreds of thousands of dollars.

Additionally, many psychotropic drugs have addictive properties which not only forces addicts to continue spending money on these drugs, but it also increases their risk of poor treatment outcomes, making psychotropic drugs a wasteful purchase (Cocco & Carey, 1998). However, even if medicinal treatment only lasts a short time, psychotherapy is still cheaper than psychotropic drugs overall. One such form of psychotherapy is cognitive therapy, in which psychiatrists work with patients to curb negative patterns of thought about the self and the world to overcome destructive behaviors (Vujanovic et al., 2017). One study found that cognitive therapy is the least expensive form of treatment for mental illness, averaging 504.84 dollars per client. Following cognitive therapy was Rational Emotive Behavior Therapy, which takes a more philosophical approach toward mental illness and costs 518.55 dollars per client, on average. Finally, psychotropic drugs were found to be the most expensive, averaging 666.94 dollars per client (Sava, 2009). However, in all cases studied, cognitive therapy proved to be just

as effective, if not more so, in treating mental illness as psychotropic drugs (Antonuccio, Danton, & DeNelsky, 1995). Although the public generally assumes that psychotropic drugs are a cheaper treatment option than psychotherapy, cognitive therapy is the most cost-effective treatment as it works just as well as psychotropic drugs at only about 76 percent of the cost.

The fifth and final misconception regarding the pharmaceutical industry is that approval and advertising of psychotropic drugs guarantee that they are safe to use. First, patients incorrectly assume that Food and Drug Administration (FDA) approval of a drug guarantees its safety. In 1992, the U. S. Congress passed the Prescription Drug User Fee Act (PDUFA), which allowed the FDA to collect funds from drug companies to fund new and faster drug approval processes with an increased number of reviewers for each drug (Lee, 2006). Since part of the FDA's funds have to be allocated to hiring more reviewers for a drug, the FDA is not able to allocate sufficient resources to the post-approval safety monitoring of drugs. A study conducted by the U. S. General Accounting Office (2002) showed that drug recalls following FDA approval increased from 1.56 percent for 1993-96 to 5.35 percent for 1997-2001, verifying that drug reviews under PDUFA have led to sloppy analysis and increased risk to the public. Thus, patients should not interpret FDA approval as a total guarantee of their safety.

Adding to this issue of misplaced trust is the direct-to-consumer-advertising (DTCA) of psychotropic drugs. DTCA is the promotion of the availability of prescription drug products to the general public through mass media (Fenter, 2006). The problem with DTCA boils down to two sides. On the first side—the drug side—advertisements for specific drugs lead consumers to believe that they need these drugs. These ads then prompt patients to ask their doctors for certain psychotropic drugs, and they are often successful due to the fact that nine out of ten physicians reported feeling pressured to adhere to their patients' requests for certain medications (Fenter,

2006). On the second side of the DTCA issue—the illness side—advertisements offering aid for mental illnesses prompt consumers to overanalyze their negative, everyday emotions until they convince themselves that they have a mental illness and need to be medicated. Additionally, consumers wrongly assume that the fact that a drug is being widely advertised guarantees that it is safe to use. These problems with DTCA and misinterpretation of FDA approval have contributed to the public's over-dependence on psychotropic drugs and its over-willingness to believe what they are told is safe.

Despite the problems riddling the pharmaceutical industry, I argue that this industry should be reformed to make psychotropic drugs a safer and more effective option for patients rather than stopping this treatment option altogether. Many opponents of psychotropic drugs will argue that these medications are not effective enough to be a reliable form of treatment for mental illness. For example, one study found that antidepressants have a marginal effect on HRSD scores, on average raising them only by 1.8 points on a 52-point scale (Kirsch, 2008). Even pro re nata (PRN) psychotropic drugs, which are administered as needed to patients in hospitals, are only 30 to 50 percent effective (Asogwa, Okudo, & Idowu 2017). Because of the poor performance of psychotropic drugs in these and other studies, those opposed to these medications argue that they do not have enough impact to be a reliable form of treating mental illness. However, just because psychotropic drugs are not one hundred percent effective does not mean certain medications cannot be useful under the correct circumstances. Take cancer treatments for example. The survival rates of cancer vary between 13 to 75 percent depending on the type of cancer, despite the wide variety of treatments available to patients (American Cancer Society, 2016). Some treatments such as Verzenio are not even aimed at curing cancer. Rather, their purpose is to delay the onset of symptoms, much like how psychotropic drugs are

aimed at curing the symptoms of mental illness rather than the actual cause. One could argue that these cancer treatments are not 100 percent effective, but does this make them any less valuable to patients who are trying to maximize their quality of life? The same goes for psychotropic drugs. Maybe the 30 percent efficacy of PRN medications or the 1.8-point improvement in HRSD score do not look like much on paper, but these improvements represent a step in the right direction for someone fighting mental illness.

In order to preserve the potential value of psychotropic drugs, I propose two steps to reforming the pharmaceutical industry in regards to the misconceptions held by the public. First, the pharmaceutical industry should advocate and support more education of psychiatrists, family physicians, as well as the general public on the treatment options available for those suffering mental illness. Too often, patients default to psychotropic drugs because they are unaware of any other options. For example, many parents of children with ADHD immediately (and often reluctantly) put their child on the drug Ritalin, believing medication is the only solution. However, Ritalin is very dangerous and produces side effects similar to those of cocaine and amphetamines; therefore, it should not be a treatment for ADHD (Breggin, 1998). If parents were more educated on treatment options, they could work with doctors to teach their children to channel their energy in positive ways rather than reluctantly medicating them.

My second suggestion is that this industry promotes the use of psychotherapy in addition to psychotropic drugs rather than relying on medication alone. Therapy is an essential element of overcoming mental illnesses. While psychotropic drugs provide a means to attack symptoms of mental illnesses, psychotherapy allows patients to identify the actual causes of their emotional problems and attack their illness at the root rather than just trying to keep symptoms at bay (Hari, 2018). However, this does not mean that psychotropic drugs cannot provide aid in this process.

In fact, SSRIs are often used to help patients with PTSD deter unwanted emotions that would otherwise hinder their progress in psychotherapy (SSRIs, 2000). Essentially the pharmaceutical industry should promote educating the public about their options, specifically psychotherapy, so patients can learn to use psychotropic drugs as an effective secondary form of treatment rather than an insufficient and potentially dangerous singular treatment.

Problems with the FDA

In addition to the widely held misconceptions, the second major problem with Big Pharma lies with the FDA. Specifically, the FDA has been insufficient in its role of preserving public safety. First, the FDA has fallen victim to regulatory capture by the drug companies. As previously mentioned, PDUFA legislation mandates that drug companies pay user fees to the FDA for applications of new drugs. Because developing a new drug can cost hundreds of millions of dollars, drug companies put pressure on the FDA to quickly approve a new drug so they can get it on the market and start making money. Not only do these companies put pressure on the FDA, but they also have leverage over the administration through the funds they pay in the form of user fees (Lee, 2006). One example of the FDA's compliance to Big Pharma demands occurred in 1997 when the FDA lifted a 14-year moratorium on DTCA in response to intense pressure by drug companies who wished to resume advertising their products (Fenter, 2006). Essentially, the FDA has become dominated by the very industries it is supposed to regulate and can no longer warrant the amount of trust that the public places in this administration.

In addition to regulatory capture, the FDA lacks sufficient control over approved drugs. Once a drug has been approved and hits the market, there is little the FDA can do to regulate its uses. Specifically, the FDA cannot regulate off-label drug use (Fenter, 2006). However, many

problems arise from the off-label use of psychotropic drugs. First, the lack of regulations for off-label drug use allows drugs to be released in experimental stages. Prescribers can direct patients to take drugs in ways that have not been tested for safety or efficacy. Obviously, the experimental nature of these prescriptions puts patients in danger as there is no way to tell how a drug will affect them. Second, using drugs off label could lead prescribers to underuse or ignore more effective drug treatments (Sharma, 2016). Third, off-label drug use contributes to the corruption of Big Pharma as it enables drug companies to manipulate the system when seeking FDA approval. This entails drug companies requesting the approval for a drug under an alleged purpose when they know that research of the drug under its intended purpose will produce unfavorable results (Stafford, 2008). Because the FDA can do little to control the use of approved drugs, the pharmaceutical industry is able to undercut public trust in yet another way by leading patients to believe that FDA approval guarantees a drug's safety when an approved drug could still be in its experimental stage.

In regards to these problems circulating the role of the FDA, I suggest that pharmaceutical companies begin using research to legitimize its claims. For one thing, pharmaceutical companies have the means to fund more research that validates the safety and efficacy of their products. Between 1997 and 2001, spending for DTCA rose by 145 percent while spending on development and research rose by only 59 percent (Fenter, 2006). If more of these funds were spent to guarantee the public's safety rather than to take advantage of the public's trust through DTCA, Big Pharma could deter the increasing scrutiny of other medical professionals and re-legitimize itself in the eyes of the public. Additionally, Big Pharma should make all research and data regarding its products more easily accessible to the public. The efficacy data, results of research, and approved purpose should be well known among all

prescribers and patients. Easily accessible data and research results would make Big Pharma more transparent and trustworthy, allowing patients to make informed decisions about whether or not medication is the right treatment for them.

Social Attitude Toward Mental Illness

The final issue that needs to be addressed regarding the pharmaceutical companies is the general attitude of the public toward mental illness. As previously discussed, there is no scientific data that supports the chemical imbalance myth. Yet, the public continues to believe this myth because it is an easy solution. Specifically, in the United States, Americans typically do not want to change their lifestyles or give up unhealthy behaviors that contribute to their mental illness; they would much rather have an easy fix, such as a tiny pill, that allows them to carry on with their everyday life with less emotional problems. For example, many parents would much rather put their overactive child on Ritalin than spend the time it takes to work with a doctor to identify the underlying issues of the child's behavior and learn how to be better parents (Pozzi-Monzo, 2012). Not only is it important for patients and families to be more willing to change their own lives, but it is also important that everyone changes in some way to make themselves more available to someone else. In the past few years, researchers have observed a rising number of mental illnesses in the millennial generation. Many argue that this observation is due to improving methods for data collection today compared to past generations. This is a false belief. Several studies have compared earlier generations' responses to measures of various mental illnesses to the responses of Millennials and GenX'ers of the same age and concluded that levels of anxiety, depression, and other illnesses are markedly higher today (Twenge, 2015). While these numbers are on the rise, there is more work to be done regarding public attitude toward mental illness. By 1960—just a few years after the first publication of the

DSM—patients with mental illnesses were dimly regarded in the public view, in addition to being stigmatized and shunned. However, studies have shown that since then, people have become more informed and well-disposed to mental illness patients, but a major part of the population continues to be frightened and repelled by the notion of mental illness (Rabkin, 1974). This attitude leads patients to turn to psychotropic drugs as a way of quickly and discreetly treating their mental illness to compensate for the lack of a support group.

In regards to these problematic public attitudes, I propose that a shift in outlook will emphasize the power of people over the power of psychotropic drugs. Americans are currently facing a major problem with over-dependence on psychotropic drugs. On the other hand, the medical industry in Ireland has been experiencing a consumer health movement for the past few decades which focuses on the “reflexive project of the self” (Neville, 2013). Ultimately, the focus of recovering from mental illness in Ireland has shifted from depending on the alleged expertise of psychiatrists and doctors to relying on the self as a catalyst for personal change. Thus, the “self” becomes the crucial element of recovery rather than a drug. One example of these self-help treatments is Ireland’s first Book Prescription Scheme in which patients read self-help books that give direct advice on how to effectively change one’s lifestyle, or they read specific literature in which patients identify with the main character to have a cathartic reading experience that builds self-esteem (Neville, 2013). By relying on the self instead of drugs, patients can feel empowered to regain control over their lives and turn toward people for their support system rather than a pill. Ultimately, the public is partly to blame for Americans’ over-dependence on psychotropic drugs through its polarizing attitudes toward mental illness. But by starting our own self-help revolution, we could reduce the fear surrounding the mental illness

“label” in the U. S. and work toward becoming a country that values turning to people over-relying on drugs.

Future Implications of Problems

Although Big Pharma’s need for reform may seem of importance only to those who develop, prescribe, or use psychotropic drugs, the problems with this industry have significant implications for the future of society as a whole. Psychotropic drugs have extremely transformative powers that reshape users’ personalities. In *Listening to Prozac*, Kramer (1993) describes the transformative effects of Prozac through his work with various patients taking the drug. In one case, a patient adopted a new personality entirely while taking Prozac, and when built-up tolerance caused the drug to lose its effect, she claimed she no longer felt like herself. In other words, this patient began to see her Prozac-induced personality as her true self, rather than the person she is while free of any chemical influence. However, this woman is not an outlier case, and many users experience this self-transformation while taking psychotropic drugs. While this ability to adopt a new and more desirable personality simply by taking a pill may seem like an enticing idea, the adverse side effects of these drugs deter those who do not need psychotropic drugs. But what if scientists can eliminate these side effects? This is exactly the question that Fukuyama addresses in *Our Posthuman Future* (2002). With today’s technological advancements in genetic engineering, our society is quickly approaching the day when scientists could eliminate the side effects of psychotropic drugs by tailoring the pills to the specific genes of the user. This would mean free reign for psychotropic drugs, allowing everyone to take drugs like Prozac and adopt a new personality at any given time. However, this has major implications for the future of humanity.

If consequence-free psychotropic drugs become available, then people no longer have an excuse to be unhappy. If you feel sad, take a pill. Nervous? Take a pill. Jittery? Pill. Restless? Pill. Some might see a world with such a simple means to happiness as perfect; however, many have argued that such a world is a catastrophic tragedy. One such opponent is Huxley, who creates a utopian universe in *Brave New World* (1932) to satirize the idea that a world of absolute happiness is one of perfection. Huxley's utopia is dominated by soma much like how our society is dominated by psychotropic drugs. However, Huxley uses soma to argue that similar drugs enslave users by fooling them into oblivious contentment in the midst of corruption and evil. Thus, this absolute happiness that many perceive as perfection is prison-like in the way it disables our human faculties. Huxley's satire provides an effective warning for all of us as drug companies continue the development of psychotropic drugs. Consequence-free drugs that enable us to control our emotions like Huxley's soma loom on the horizon of the near future. Thus, it is crucial that we as a society take effective measures to reduce our dependence on the pharmaceutical industry, or we could soon find ourselves living in our own Brave New World.

Conclusion

Overall, there are many problems riddling the pharmaceutical industry that compromise the safety and efficacy of psychotropic drugs as well as endanger and exploit the public. However, when used correctly, these drugs can be a valuable secondary form of treatment for mental illness. Thus, it is imperative that Big Pharma undergoes the necessary changes to re-legitimize itself as a trustworthy source of safe and effective psychotropic drugs. However, it is not enough that the public simply recognizes the need for change. Rather, we as a society must demand that Big Pharma follows through with these changes and reorients its goal from financial exploitation to becoming a more legitimate source of aid. Due to developing technologies that

could eliminate side effects, it is essential that everyone plays their part in this social outcry against Big Pharma unless we wish to find ourselves in an artificial world dominated by a dehumanizing glorification of psychotropic drugs.

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