What impact does the pharmaceutical industry have on the medical definition of depression?

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Abstract

The pharmaceutical industry is instrumental in advising the medical community as well as the general populace about medications that can alleviate or cure symptoms associated with mental illness. What is unclear is the extent to how much impact the pharmaceutical industry has in defining what mental illness is or, more particularly, what constitutes depression and what treatment should be prescribed. It is being postulated that the biological model is taking hold (partly due to the Diagnostic and Statistical Manual of Mental Disorders). This emphasizes the biological aspect of depression rather than placing an emphasis on environmental issues (i.e., problems in living), hence, reducing knowledge pools into two distinct dichotomies (biological and psychological). The increased emphasis on the biological model appears to be in direct correlation with how emotions are being medicalized, ultimately impacting the rate of psychotropic therapy, which positively impacts the fiscal success of the pharmaceutical industry.

Keywords: Albert Ellis, REBT, Herman Melville, Moby Dick, Captain Ahab, American History X

Introduction

The rate of antidepressant use rose 400% between 1998 and 2008 (Luhrmann 2014, no); the rate of prescribed pills in the United Kingdom alone have tripled since 1998 from 15,000,000 to 50,000,000 (Borland, 2014, no). As I consider the numbers, I contemplate what impact the pharmaceutical industry has on the definition of depression. It seems the many subcategories of general depression are such that the biological model is superseding environmental factors. At one time, the Diagnostic and Statistical Manual for Mental Illness (DSM) was psychodynamic in nature. It is now based on the biological model. Since the biological model has taken the position over from psychodynamics, the number of symptoms associated with general depression in the DSM has increased by approximately 26%.

Cosgrove et al (2006) and Cosgrove & Krimsky (2012) determined that the pharmaceutical industry influenced what constitutes general depression by funding some of the research projects of the contributors of the DSM; Barrett (2015) found the majority of panel members of the DSM-V reported having financial ties with pharmaceutical companies. General medical practitioner Des Spence (2013) and psychiatrist Paris (2013) each maintain that the current definition of depression is too loose. Des Spence asserts that the loose definition of depression is causing widespread medicalization as this can leave room for interpretation, which may impact rate of antidepressant prescribing. This draws a connection between contributors to the DSM and financial ties to the pharmaceutical industry. Conrad (1992) maintains that medicalizing emotions pertains to human problems entering the domain of the medical profession. Leisinger (2005) maintains every one of us — corporate citizens, individuals, and society — are contributing to the pharmaceutical corporation's actions.

The purpose of this paper is to determine what impact the pharmaceutical industry has on the definition of depression. In order to achieve this goal, I feel it necessary to briefly review the histories of the DSM, mental illness, and the pharmaceutical industry. I will then discuss the current standings of each while weaving in such disciplines as economics, philosophy, culture, and sociology, and then draw a conclusion based on the resources used.

Background

A report released by IMS Health Canada indicates that, since 1995, visits to the offices of general practitioners for depression has increased by 65% and that office-based physicians are amongst the highest prescribers of antidepressants[i] (www.imshealthcanada.com). The World Health Organization has estimated by 2030, "depression will be the leading cause of disease burden worldwide" (Lepine and Briley, 2011, p.3). The Food and Drug Administration (FDA) Report found that for the year 2006 antidepressant sales comprised $14,000,000,000 of worldwide drug sales. As a result of these significant figures with respect to antidepressants, critics have targeted the pharmaceutical industry for the medicalization of emotions, which is defining emotions (existential unhappiness) as an illness treatable only with pyschotropics (i.e., antidepressants). There is evidence suggesting that the increase in pharmaceutical profits can be linked to its influence on the DSM (Cosgrove et al 2006). It is also maintained that the influence of the pharmaceutical industry sways the rate of psychotropic treatment by acting as medical informants and *detailing* their antidepressant wares using savvy marketing strategies aimed at medical practitioners and the general populace [Zimmerman et al (2004), Collier (2002), Dworkin (2001, Kirkpatrick (2000), Kaiser & Sawicki (2004), Prosser et al (2002)].

History and Purpose of the DSM

The DSM was created in an effort to standardize communication and diagnosis amongst psychiatrists around the world. It is considered "the bible of mental disorders by psychologists and psychiatrists" (Millon et al, p. 3, 2004), providing a standardized means in which to effectively communicate the mental illnesses of their patient(s) amongst mental health professionals. The people involved in its creation and revisions were/are consultants and committee members who are psychiatrists. Up until 1980, the DSM was based on the psychodynamic model. In 1980, however, it abandoned the psychodynamic model for the biological model, introducing a clear distinction between normal and abnormal. The DSM-I had 106 disorders. The DSM-5 has approximately 400 disorders (with several new depressive disorders).

The first edition of the DSM was "heavily influenced by previous systems established by the Army and the Veterans Administration to assist in the understanding of mental health problems of World War II servicemen" (DSM-IV, p. 3). The birth of the DSM, though, actually goes back to the 1840s, where it was created as a means to keep data on the number of patients confined in mental hospitals. In the late 1840s, it was determined that it would be extremely beneficial to have a uniform system in which to understand mental disorders and to collect statistical data (DSM-IV, p. xviii). Since the DSM-I, the DSM model has transitioned to psychopathology (biological). It can be said that the DSM's evolution has been instrumental in catalyzing and increasing mental health research.

A component of the DSM that has been increasingly incorporated into each edition is culture, as "culture and personality are inextricably intertwined" (Millon et al, 2004, p. 40). In essence, culture affects what is considered normal. For the DSM-5, there is tremendous effort to ensure understanding that symptoms may differ from one culture to the next as it relates to a mental illness. For example, with respect to diagnosis and treatment, the contributors to the DSM-5 make a point of saying that culture may influence acceptance or rejection of a diagnosis or adherence to treatment, and that cultural perceptions can shape the experience and expression of the symptoms, signs, and behaviors that are criteria for diagnosis (DSM-5, p. 5).

Brief History of how Mental Illness was Diagnosed

Since Freud, there have been great strides in the advancement of psychological treatments. Psychodynamic theory, stemming from Freud's psychoanalysis, is aimed at addressing the foundation and formation of psychological processes in order to alleviate symptoms and improve patient's lives. Essentially, psychodynamic theory is getting inside the patient's head in order to gain understanding of their relationships and how they understand the world; that all behavior has a cause, rooted in childhood experiences. There is speculation, however, that the change from the purely psychodynamic (or psychotherapeutic) model to include the biological model began during Freudian times. In this respect, Freud theorized that the psychological issue becomes psychogenic, that there is motivation for being sick (or neurotic), and that the choice to live with whatever is causing the neurosis is more favourable than confronting it. In other words, the neurotic symptoms are the desired (and somewhat easier) choice over mental well-being (Gaylin 2000) than confronting the catalyst of unhappiness.

The beginning of the pharmaceutical industry was not that of a publicly-traded corporation with the money, massive manufacturing, research and development, and marketing abilities it currently has. Prior to the early 19th century, they were apothecaries and

pharmacies; they were small businesses run by the owner/pharmacist (e.g., Eli Lilly, Pfizer, and Squibb) creating elixirs in order to cure various illnesses and ailments. It wasn't until about the mid-1970s that the manufacturers of certain pharmaceuticals experienced the financial windfall that would change the pharmaceutical industry to a corporately/commercially-driven one[1], trading on Wall Street. Jonas (1991) outlines how the antidepressant Prozac (deemed the Happy Pill) experienced great success due largely to the ability to mass produce, market, and advertise in a way that was deemed by one psychiatrist as the drug that one day everybody might be taking (Jonas, 1991, p. 3). The success of antidepressants such as Prozac paved the way for the pharmaceutical industry to template how they market and advertise such that it influences the medical community and potential customers. It appears the pharmaceutical industry discovered the world of consumerism.

Of all company activities, the greatest percentages of funds in the pharmaceutical industry are allocated to marketing. This amount is greater than monies allocated for research and development. For example, on average, most of the marketing budget is allocated to detailing (1 to 1 physician visits). This also includes pharmaceutical representatives monitoring the prescription activity of doctors by accessing the Prescribing Data Information Centre. The dollar amount for the years 1999 to 2000 for antidepressant pharmaceuticals were $10,000,000,000 allocated to drug promotions, of which $9,000,000,000 was allocated to detailing physicians. Wittink (2002) determined that more monies were spent on promoting and detailing psychotropics than were on research and development. The amount allocated to DTC (direct to consumer, which includes TV, print, and radio) was approximately $1,000,000,000 (Kirkpatrick, 2000). Kaiser & Sawicki (2004) found that 94% of pharmaceutical marketing is not supported by medical evidence.

> *People are forced to depend on information that is really promotional material or, at the very least, information that is filtered and shaped by various interest groups. What physicians and the public are reading about drugs and what causes mental disorders is by no means a neutral reflection of all the information that is available* (Szasz, 2004, p. 1).

Pharmaceutical ads have traditionally promoted antidepressants in a very simplistic and/or idealistic fashion; neither the medication nor the act of ingesting it is shown, and they promote antidepressants as having the power to quickly and effectively demarginalize the suffering individual (Ecks, 2005). The North American Pfizer antidepressant commercial shows two bouncing neurotransmitters feeling sad and then perky due to antidepressants. An ABILIFY commercial uses a cartoon woman explaining how life creeps up on her. Pharmaceutical commercials in countries such as India brand the antidepressant as a means to a wonderful, economically fruitful life. The people seen in the Indian commercials are attractive, happy, social, and upper-class. Cartoon-like advertisements lessen the reality of what clinical depression is and seemingly promotes existential unhappiness experiences as abnormal. There are so many more layers to the situation, that if there isn't a deeper understanding, it's easy to take as gospel. Reports have shown that the pharmaceutical industry and interest groups are misrepresenting theory, which may impact the rate of increase in antidepressant prescriptions (Szasz, 2004).

[1]http://www.pharmaphorum.com/articles/a-history-of-the-pharmaceutical-industry

Discussion

There was a time when Freud's psychoanalysis dominated the treatment process — talking about one's problems, getting to the root of it and working through it in order to heal and live happily. While psychoanalysis requires more time and effort in order to recover from existential unhappiness, the outcome may prove more beneficial to the patient than psychotropic therapy. Unfortunately, with the advent of antidepressants, treatment of all forms of depression shifted from psychoanalysis to psychotropic therapy. At the point when Prozac was introduced is when talk therapy started to fall by the wayside. The effort and energy to recover from existential unhappiness not only takes more time than psychotropic therapy, but is more costly to the patient and insurance industry, and less fiscally beneficial to the psychiatrist and pharmaceutical industry (Smith, 2012). The medical and insurance communities determined how fiscally beneficial it was to diagnose and treat depression as a medical condition. This can be an explanation for the decline in talk therapy, as "lower clinician reimbursement rates for psychotherapy and out-of-pocket costs to patients most likely contributed to the declining use of therapy" (Smith, 2012, p. 1).

The positive fiscal relationship between the pharmaceutical industry and psychiatrists who contribute to the DSM has emerged

recently. It shows the involvement the pharmaceutical industry has in maintaining and growing its relationship with academic psychiatrists. It essentially highlights the financial benefits of medicalizing emotions. United Kingdom's general physician Des Spence claims 75% of those who contribute to the DSM have links to drug companies (Cassels, 2013). In short, "it is possible for academic psychiatrists to be bought off by the pharmaceutical industry" (Paris, 2013, p. 23). In fact, psychiatrists receive more money from the pharmaceutical industry than any other group of specialists, which has the potential to corrupt both clinical practice and research (Paris, 2013). It has also been determined that being a prescriber has far greater financial benefit than being a therapist (Smith, 2012). This highlights the influence the pharmaceutical industry has on how mental illness is defined, diagnosed and interpreted; that money can influence research and clinical practices in a way that can positively impact the rate of antidepressant prescribing.

In Luhrmann's (2014) quest to understand whether the world is more depressed, he mentions contributing factors such as urbanization, as it is "the visible symbol of aspiration and faith", social media, and the pressure to perform. Jonas (1991) speaks of changing social factors — greater competition for jobs, widening gap between expectations and fulfillment as an explanation for the increase in rates of depression. Drassinower (2006) discusses Freud's theory of unhappiness and mortality and how "Freud's theory of culture is a deeply critical theory about how human beings fall short of who they can be by refusing to be the mortal beings they are" (Drassinower, 2006, p. 1). Drassinower brings to the forefront Freud's theory of the importance of humans coming to terms with their mortality. Each of Luhrmann (2014) and Jonas (1991) highlight the impact of choices and changes in living. This could connect with the morphing of current social constructs in avoiding facing our mortality by constructing our lives in such a way that we engage in avoidance behavior by generating wealth in an effort to be happy, relevant, and independent, giving a false sense of immortality. All these factors could affect the ability to truly be who you can or want to be, doing what you really want to do, impacting how you feel.

With the advent of social media, it has shown the world how various countries live. It's almost as if it fosters the '*keeping up with the Joneses*' mentality, which is a figurative meaning referring to the comparison of one's social class or the accumulation of material goods with their neighbours; failure to keep up is perceived as socio-economic or cultural inferiority. For instance, India is a country that has a lot of struggles. People of India are influenced by commercials and social media, and comparing their living conditions with countries such as North America. They see North Americans as people who live happily with all the comforts they desire. This is due to the media's 'smoke and mirrors show' of the success of other countries. What isn't delved upon is that antidepressants used in rich countries have soared in the past decade, with Canada amongst the highest consumers (Dancer, 2013). The example of India, I believe, could be extended to all parts of the world: comparison within each country/culture and between individuals and classes.

Social media can have tremendous impact on mental well-being. It is extremely influential in how one feels about their life. It can take you from feeling positive about your life, to feeling inadequate. "Facebook leads people to feel less good in the moment and less satisfied with their lives" (Luhrmann, no, 2013). Social media can spin you out of control, deflecting you from what matters to you; it can make you feel demarginalized. Demarginalizing is found to have an impact on mental health, especially where success is measured by 'keeping up with the Joneses'. India is one country where having what the 'Joneses' have is very important. To be part of the consumer society is a way to be part of middle-class society (Ecks, 2005). In India, the pharmaceutical industry has been able to posit antidepressants as a way to be part of consumer society. It appears the industry also has done the same with other countries and cultures.

The current definition of depression is causing widespread medicalization (Des Spence, 2013; Paris, 2013). Medicalizing emotions changes the scope of existential unhappiness into depression, avoiding the dilemma facing the fact that to "a certain extent, low moods, sadness and feelings of hopelessness [are] all part of 'normal' life, and should be accepted as such" (Ecks, 2005, p. 246). Medicalizing defines "behavior as a medical problem or illness and mandating or licensing the medical profession to provide some type of treatment for it" (Conrad, 1992, p. 210). By medicalizing the emotion it transitions the distinction from problems in living to chemical imbalance; it changes the focus from psychological to physiological. India, a developing country in which it was considered a cultural taboo to discuss mental illness, reports a 60% increase in depression (Luhrmann, 2013). Indians are becoming more open to discuss their neurosis perhaps due to the shift from psychological to biological, or even the change in language. It could also be as a result of the pharmaceutical industry's marketing influence in demarginalizing those who want to be part of the middle-class

consumer society by giving access to psychotropic treatment (Ecks, 2005).

From a sociological perspective the medicalization of emotions snowballs if society demands or pushes for it. Since Freudian times, neuroses have morphed into many different subcategories under mental illness. The DSM, while it influences how diagnosis is finalized, has gone through changes due to demands of interested parties, which include not only psychiatrists and pharmaceutical corporations, but society and patients. "It is clear that patients are not necessarily passive and can be active participants in the process of medicalization" (Conrad, 1992, p. 219). Participating in psychotropic therapy rather than psychotherapy allows the patient to avoid what is causing the depression. It allows them to function in a way that anesthetizes from the uneasy feelings they are unwilling to face. It also reduces the stigma in that it changes one from being responsible for their illness to not having control over their depression as it's due to a chemical imbalance. Presently, there is an increase in consumer demand of antidepressants, which is indicative of the public's lessened ability to tolerate mild symptoms and benign problems[2]. The biological model enforces the public's neurosis by abetting an inability to cope or face existential unhappiness.

Freud's theory of psychodynamics impacted how social constructions regarding neurosis and mental illness were defined and regarded. With the advent of psychotropic therapy, it seems to have changed the social constructions of mental health realities. Walker (2006) outlines how realities are socially constructed via language. The DSM is an example of how the current definition of depression started out as a mutually agreed-upon definition based on habits and distinctions of society to it being a reality of society, apparently influenced by medical professionals such as Freud. The definition of depression in the DSM-I was agreed upon based on what at the time was deemed appropriate and inappropriate habits and distinctions of society. With each subsequent edition, it went from how it was decided upon, to this is how it is done, to this is reality.. In order to transition medical illness from psychological to biological, it requires a change in perception. In order to change perception, there is the requirement to change language.

The DSM's continued impact on the definition and perception of depression continues to impact how it is diagnosed. The language that is changing is how those with mental illness are regarded. Historically, the vocabulary used as it relates to mental illness was very negative — causing those with mental illness to be considered freaks, and those who experienced mild depression to be on the verge of becoming or being a freak, thereby on the fringe of society. Drassinower (2003) suggests that how general depression (existential unhappiness) has morphed into the present definition(s) can be connected to Freud's psychodynamic and biological theories of psychopathology. Prior to Freud's psychodynamic theory, the biological model was the dominant model that influenced diagnosis of mental illness. He intimates that Freud's psychodynamic theory began the change in ideology by separating the biological model and psychodynamics into two dichotomies. In essence, Freud investigated the psychological aspect of neuroses and found that how one chose to act and resign their self to a situation had an impact on their mental health; that not confronting fears/issues/mortality leads to neurosis. He found it interesting that the choice to live with whatever was causing the neurosis was more favourable than confronting it; that the neurotic symptoms were the desired choice over mental well-being (Gaylin, 2000), hence converting the symptoms from psychological to biological.

Psychiatry and primary care have come to see unhappiness as a mental disorder (Paris, 2013).

Depression has come to be regarded by the psychiatric community as the "common cold" (Jonas & Schaumberg 1991). This can be attributed to the DSM and the way in which the language used to describe depression as a physical disease (Walker 2006), has become part of mainstream society. Describing it as the 'common cold' seems to diminish the importance of treating the cause rather than the symptoms. This seems truer than ever, as the ability to receive a prescription for antidepressants by simply visiting a general physician has become the norm rather than the exception. For example, one very successful New York general physician who sees 200 patients per week is "an enthusiastic prescriber of antidepressants" (Kirkpatrick, 2000). Meng et al (2013) determined that general physicians in Saskatchewan relied heavily on antidepressants in the treatment of their patients. Linden et al (1999) found that "psychotropic drugs have an important role in the treatment of mental disorders by general practitioners". In the United States, "four out of five prescriptions for psychotropic drugs are written by physicians who aren't psychiatrists" (Smith, 2012); in Canada, perhaps it is the same. It has also recently emerged that prescribing psychotropic treatment such as Prozac to children has become commonplace (Tencer, 2013). De Spence (2013) maintains that general physicians prescribe antidepressants too easily, for too long.

As outlined earlier, pharmaceutical industries advertise antidepressants such that those experiencing problems in living can resolve their issues through psychotropic treatment. In developing countries such as India, "corporations, through marketing, create need" (Walker, 2006, p. 78). The image of the advertisement is of happiness and fulfillment. For North America there is the cartoon commercial and a person being able to socialize; it doesn't focus on determining the root of the neurosis. Jonas & Schaumberg (1991) outline that the cause of depression is not the focus; just as with the common cold, the cause is not important, but relief from the symptoms is all that matters (p. 13). It appears the pharmaceutical industry focuses on the symptoms and not the cause, which is conveyed and received by consumers (patients) and general physicians.

Walker (2006), Szasz (1960) and Conrad (1992) all discuss social constructs of mental illness and the stigma associated with mental illness such as depression. Advocacy groups seem the best avenue to guard against stigma by actively pursuing change in language and social constructs. What is surprising is that, "Medicalization often comes not from physicians but from patient groups seeking to destigmatize problems" (Paris, 2013, p. 43). What is also surprising is that advocacy groups may also receive government grants and funding from the pharmaceutical and insurance industries[3]. While the initial motivation of an advocacy group may be altruistic, the funding source may affect their ability to carry out their activities in a way that brings about real change such as significant reduction in reliance on psychotropic therapy.

[2]Conrad, P. & Leiter, V. (2004) Medicalization, Markets and Consumers. Journal of health and Social Behavior, Vol 45: 158-176.

[3]e.g., Canadian Mental Health Association include the sponsors: Janssen Pharmaceutical Companies (a division of Johnson & Johnson), The Medicine Shoppe Pharmacy, Great-West Life; Canadian Alliance on Mental Illness and Mental Health: Janssen Pharmaceutical Companies; R&D Canada's Research-Based Pharmaceutical Companies.

Conclusion

In the last edition of the DSM, 70% of its panel members have financial ties with pharmaceutical companies; about 57% reported ties in the previous edition (Barrett 2015). The pharmaceutical industry allocates a large budget for drug promotions, of which a significant amount of the budget is used for 'detailing' physicians. Of those consumers (patients) prescribed antidepressants, 69% would not even meet the criteria for clinical depression (Barrett, 2015), but as determined by psychiatrist Joel Paris (2013), due to the loose definition of depression in the DSM, clients are diagnosed as such. As noted by the World Health Organization, sales for psychotropic treatment are predicted to escalate exponentially by 2030 based on current statistics (Lepine and Briley, 2011, p.3). There is a lot of fiscal attention being directed to psychotropic treatment rather than psychodynamic therapy, even though tremendous success has been found with the latter treatment.

Freud hit the nail on the proverbial head when he theorized that humans are not being the best they can be as a result of fear (Drassinower 2003). Ecks (2006) also highlights that 'normal' life needs to be experienced and not anaesthetized. Luhrmann's (2013) question of whether the world is more depressed seems to connect with Freud's theory. Psychodynamic theory is the best way to face the fears which plague humans from being the best they can be. Instead, it seems humans are drowning in fear. Instead of facing the fear, of understanding it is 'normal', the means of anaesthetizing the fear is being favoured by patients (consumers) and explained as a chemical imbalance by the medical and pharmaceutical communities. The pharmaceutical and insurance industries, psychiatrists and general physicians seem to favour medicalizing emotions due to the easiness and fiscal viability of psychotropic treatment. This highlights Leisinger's (2005) assertion that each of the corporate citizens, individuals, societies world-wide, and (I believe) advocacy groups, are contributing to the pharmaceutical industry's actions.

So, what impact does the pharmaceutical industry have on the definition of mental illness? Well, considering the pharmaceutical sales numbers, I believe the pharmaceutical industry influences each of the contributors to the DSM, the general physicians, the consumers (patients), cultures, and advocacy groups in a way that is mutually impactful.

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