**Hopped-Up on Happiness?**

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Depression is plaguing the developed world. Like a black cloud descending, more and more individuals are consumed by this condition each and every year. Depression is blamed for decreases in workplace efficiency, domestic problems, violence, suicide, physical conditions and the list can go on and on and on. It is likely that at least once in one’s lifetime, one will find oneself either depressed or in close contact with someone who is. This mental health condition deserves some thoughtful analysis from prevention to diagnosis and treatment.

In order to properly address this issue, a working definition of depression is integral. The National Institute of Mental Health (NIMH) describes depression as a ‘sad’ feeling that interferes with everyday functioning that lasts for a significant period of time (National Institute of Mental Health 2008). There are a variety of symptoms of depression, not all being experienced by every sufferer that includes: fatigue, guilt, concentration difficulties, changes in appetite and sleep patterns, persistent physical manifestations (cramps, headaches etc) and more (National Institute of Mental Health 2008). These symptoms lead to a diagnosis that usually falls into two main categories: Major Depressive Disorder and Dysthymic Disorder (National Institute of Mental Health 2008). Major Depressive Disorder is characterized by having depressive symptoms that affect nearly every part of an individual’s functioning and do not allow the individual to experience things that were previously found to be enjoyable (National Institute of Mental Health 2008). The symptoms of dysthymic disorder are less severe but do not allow them a feeling of wellness, hinder certain aspects of their life and persist for a period of two years or more (National Institute of Mental Health 2008). There are other smaller subcategories of depression but analysis here will be limited to the above mentioned major categories.

Before treatment options can be considered, elucidating the cause of depression is helpful. Unfortunately, both for the sufferer and their doctor, this is easier said than done. It is very difficult, or in many cases impossible, to pinpoint *one* direct cause of an individual’s depression. It is generally recognized that depression is caused by a combination of four factors: social, psychological, biochemical and genetic (National Institute of Mental Health 2008). In regards to depression and the brain, it is often seen that with depression there is a imbalance in chemical neurotransmitters, namely serotonin, norepinephrin and on occasion, dopamine (National Institute of Mental Health 2008). It is not, however, entirely known whether or not this imbalance is a cause of depression or a result (Healy 2003). With the four causes in mind, it is essential that depression be treated in a way that addresses each factor when appropriate.

Depression, both Major Depressive Disorder and Dysthymic Disorder, are mental health conditions that improve or can be cured by treatment (National Institute of Mental Health 2008). The two forms of treatment generally recognized and routinely used for treatment are psychotherapy and prescription antidepressants (National Institute of Mental Health 2008). The NIMH states, in a publication on depression, “For mild to moderate depression, psychotherapy may be the best treatment option. However, for major depression or for certain people, psychotherapy may not be enough,” indicating the appropriate use of antidepressant medication (National Institute of Mental Health 2008).

There are several classes of antidepressant medication, one that will be looked at more detail due to its exploding and, which will be shown later, inappropriate use. The first class is tricyclic antidepressants. The name refers to their structure and is increasingly being left to the wayside due to unfavourable side effects. The second group is monoamine oxidase inhibitors (MAOIs) which work by decreasing the rate at which mono amine oxidase breaks down neurotransmitters in the synaptic cleft. The last group is selective serotonin reuptake inhibitors (SSRIs) which is the newest and most prescribed of the antidepressants. The way that these work is thought to be by blocking the reuptake of serotonin into the presynaptic neuron increases the amount of serotonin available to stimulate the postsynaptic neuron. The steadily increasing prescription and use of SSRIs to dizzying heights is reason for concern. Through careful analysis it can be seen that in selective circumstances, antidepressants are being over or irresponsibly prescribed not promoting the ideal mental and physical health of the individual.

The sheer number of certain antidepressants prescribed is staggering. Zoloft (generic name Sertraline) had a total of 29 million prescriptions written in the year 2007 in the United States alone (Verispan VONA 2007). Close at its heels was prescriptions written for Prozac (generic name Fluoxetene) with 22 million prescriptions in 2007 (Verispan VONA 2007). This makes these drugs one of the most prescribed drugs (Verispan VONA 2007). Granted, although these numbers are very high, it does not instantly equate with being overprescribed. If the drugs are being prescribed in situations where the drug is required, there is no reason for alarm and instead would be reason for praise. Unfortunately, that is not the case. There is significant reason to believe that antidepressants, namely SSRIs, are being overprescribed, applying the drug to situations in which it does not apply and may do more harm than good.

One of the most worrying factors in this maze of antidepressants is that doctors themselves believe that they are writing too many of these prescriptions. In a survey done in Britain, it was found that 81% of doctors believe that they themselves are writing too many prescriptions for SSRIs, 72% saying they write more now than they did in the past five years (Kelly 2004). It is alarming that *most* doctors indicated that they were writing too many prescriptions, not just a small sampling. This indicates that there are treatment options that would be better suited to these individuals but they receive an SSRI prescription instead. One would hope and assume that a visit to the doctor would produce the best and most appropriate treatment. This clearly indicates that this is not the case for many. The overprescription of SSRIs in Britain had gotten so out of hand that British drug authorities were prompted to make a statement to doctors not to prescribe them for “normal problems of life” (Degrandpre 2004). Clearly doctors were prescribing these drugs in situations where the individual should, and likely would have been able to deal with their issues causing some form of temporary mild depression without the implementation of an antidepressant regimen or quite possibly any intervention at all. Connected to this is how, in light of a deficit in something, the pendulum swings the other way. There was a lack of concern, knowledge and treatment for depression and in the 1980s an educational program was instigated in Britain that was aimed to, in a sense, ‘shame’ into diagnosing depression because of their previously missed diagnoses (Healy 2003). Dr. David Healy, author of “Let them eat Prozac” speaks to that saying,

“This has almost certainly led to many people being diagnosed as cases of depression who do not regard themselves as being depressed or in need of treatment. In individual cases, this heightening of clinicians sensitivity to depression has probably saved lives, but on a broader front there is no evidence that mass detection and treatment has made a difference to national suicide or disability rates” (Healy 2003).

So essentially, a massive campaign that increased the depression diagnosis and treatment of non-depressed individuals, made very modest gains at the risk of, as will be examined later, possible dangerous side effects.

It has already been shown that doctors are knowingly overprescribing antidepressants but it is quite possible that doctors are unknowingly overprescribing as well. There is a marked disconnect between the literature published on the trials and what doctors know about the trials. For example a study was done which compared the individuals that were used in a study to prove that an antidepressant was effective and a group of depressed individuals (Baker 2002). The results indicated that a staggering 86% of individuals currently being prescribed the drug would not have been approved to participate in the trials because they did not meet a specific set of criterion (Baker 2002). When the group of depressed individuals, despite the fact that 86% of them would not have been able to participate in a trial, went for treatment 93% were prescribed an antidepressant (Baker 2002). This information, if is to be used responsibly, needs to be taken with a grain of salt, as it is obvious that the individuals that are used in drug trial studies will not be exactly the same as the public that it will be prescribed to because of the need for scientific “homogeneity” (Baker 2002). But nonetheless, a shocking percentage of these patients are being prescribed a drug in which there is not studies done which indicate how it will react with their conditions which would have made them ineligible for the trial. These patients may be suicidal, experiencing a psychotic condition or, most commonly, have an anxiety disorder (Baker 2002). Since it is unknown how the drug will react with the comorbid condition, it may be unsafe to prescribe to these individuals and the drug is being overprescribed just purely on the basis that this drug was essentially not approved for use in their cases. If the prescribing doctors are unaware of the drug trial sample or are not aware of which cases the drugs were not tested with, they quite possibly are overprescribing the drugs and are not aware of it. It would be possible to say, therefore, that the previously mentioned 81% of doctors admitting to knowingly overprescribing the drugs is really higher taking into account the doctors that are unknowingly overprescribing SSRIs.

Having established that these drugs are being overprescribed, it is important to look at, when these drugs are prescribed, if they being use responsibly and safely. The short answer to that question is a resounding no. In order to determine if these drugs are being used safely, even when they are overprescribed, the actual safety and efficacy of SSRIs must come under careful scrutiny.

It is important to look at how a drug is approved. In this case, the approval of Prozac will be looked at in more detail. In 1981, there were reforms made to the FDA which changed how drug trials were conducted (Healy 2003). Previously trials were done that did not compare against a placebo, but rather compared against an approved drug (Healy 2003). The reforms called for comparison against a placebo, that two ‘pivotal studies’ (placebo controlled) show its efficacy and that most of the other studies performed be similar in results (Healy 2003). In the case of Prozac, the trials had four trials that showed that Prozac did something to treat depression and four trials indicated that it was not effective (Healy 2003). As we all know, Prozac was approved by the FDA and is used widely. Zoloft, if one looks at its studies, was really only shown to be effective in one out of six trials (Healy 2003). This is definitely not overwhelmingly in favour of, and really even really showing the efficacy of, these new SSRIs. Although the point here is not to say that these drugs never work but rather to increase the awareness of the problem here. There is striking and, in many ways, shocking increase in the prescription of a drug whose effectiveness has not been clearly shown for a condition and people that deserve the best care. With this information in mind, doctors should not feel like they are doing a service to their patients by doling out these scripts. Improper prescription of medication for a condition that needs treatment is unfair, unethical and needs to be reconsidered.

It is one thing to say that we need to be careful in prescribing this medication because it may not be as effective as it was represented to be but it is another thing entirely to say that we need to be careful because the drugs might actually *cause* harm. There is no need for mass panic at this statement but rather careful consideration and mindful prescription practices. It has been known for many years that if an antidepressant is given to someone who is not depressed, it may lead to suicidal behaviour (Healy 2003). This should not be taken lightly with the overprescription of SSRIs in mind. Studies are conflicting on the suicide issue, not unlikely due the fact that drug companies have billions riding on these drugs. But Dr. David Healy, who was involved in the Prozac story from the start and who became increasingly concerned about the suicide angle of things indicated, “rates of suicide attempts were three to four times higher on Prozac than either on other antidepressants or on a placebo” (Healy 2003) 205. This is a valuable piece of information prescribers, the general public and those being prescribed Prozac to know. If one were to be prescribed Prozac, likely one would like to know that they had up to four times more chance of becoming suicidal at some point on the drug than if I did not take the drug. This is not intended to deter all people from taking the drug or to persuade clinicians not to prescribe the drug. Rather it is intended to shed light on what may be experienced with the drug, both the patient and the prescriber. It would be an injustice to halt all prescribing of SSRIs because many doctors and patients have found them to be very helpful. The public should be aware of the dangers of a particular drug and their other options if, in their case, there are other options available, which often there are.

It is dangerous to present a treatment option as harmless when there are indications that it may not be so. Knowledge is power and knowledge obviously helps to remove the unknown. Prozac’s suicidal ideations, if a patient is going to experience them, often happens in the first few weeks on the drug (Healy 2003). If a patient does not know that, or those in close contact with them, they will not know how to attribute these thoughts or seek help. The story of Caitlyn Hurcombe is an example. Caitlyn Hurcombe was a 19 year old girl experiencing some depression after dealing with a bad boyfriend amongst other things (Healy 2003). Friends recommended Prozac, mainly for its weight loss side effect, and Caitlyn began a course of treatment for her depression (Healy 2003). The first day she felt better than ever but her behaviour became increasingly bizarre and unexplainable in the coming few weeks, culminating in her suicide (Healy 2003). If she and her family knew this was a possibility, or that it had been seen in other cases, they could have been on the lookout that this bizarre behaviour was related to the drug and that they needed to vigilant for suicidal behaviour. They were warned that the drug takes a little time to have its effect felt, which is true, but there was no indication that they were warned about this type of deadly behaviour (Healy 2003). One of her parents made a few comments after her death that sheds light onto what they experienced, “[Before the suicide] How could millions of people the world over be wrong? Danger wasn’t an issue...[After the suicide] Prozac is no less dangerous to young people just because millions swear by it...So now I know that she was a normal angst-ridden and unhappy girl-woman, finding life hard to cope with. And I believe the Prozac was her executioner” (Healy 2003)

The story of Caitlyn Hurcombe is not a singularity. Matt Miller was a 13 year old boy, previously happy and well adjusted until a family move changed his surroundings for the worse and he was left facing a bought of depression (Mahler 2004). After one visit to a psychiatrist, he was prescribed Zoloft (an SSRI) (Mahler 2004). His parents inquired as to side effects and were told to be on a lookout for stomach-aches and trouble sleeping (Mahler 2004) Within one week, Matt hung himself (Mahler 2004). The Millers were devastated and baffled. They were shocked when they found out that the drug had not been approved or tested for young adults and children (Mahler 2004). His parents sued Pfizer and for quite some time were met with closing doors (Mahler 2004). That is, until SSRIs were labelled with a ‘black box’ warning in 2004 (National Institute of Mental Health 2008). This is the strongest warning that can be put on a drug by the FDA (National Institute of Mental Health 2008). This warning is to educate about the possible increase in suicide ideation that a child or youth on the drug could experience (National Institute of Mental Health 2008). Matt Miller’s parents and many other parents subsequently won their suits against the drug giant, Pfizer (Mahler 2004). Although most of the risk exists for children, in some adults as well, there is a chance of violent and suicidal behaviour in adults as well (Degrandpre 2004). It is some thought that needs to be seriously considered. It is dangerous to think that these drugs are safe in all situations.

Suicidal behaviour, thankfully, is not norm or the majority of outcomes for people taking SSRIs. As a whole, SSRIs promote more wellbeing, when they are used properly (Mahler 2004). But are they being used appropriately? Unfortunately, in many cases they are not. In order for these drugs to be used to their best potential, they need to be taken for an extended period of time (Aikens, et al. 2005). To begin with, often the drugs require three to four weeks for the drug’s effects to be felt by the patient (National Institute of Mental Health 2008). In addition, after the acute phase of the depression has ended, the drugs still need to be taken throughout the maintenance phase (ie where the patient is still feels depressed but less strongly) (Katon, Rutter, et al. 2001). In addition, often the dose of the drug or duration needs to be altered or even the actual drug to meet the specific needs of the patient (National Institute of Mental Health 2008). If these drugs were being used responsibly, the prescribing doctors would be making all the side effects and duration of the drugs clear as well as ensuring appropriate follow up. In a majority of cases, this is not happening. A recent study found that two thirds of doctors were not appropriately discuss how long to take the drug (Barber 2008). This is a major problem because discontinuing antidepressant drugs during the maintenance phase increases the chance of relapse for the patient (Katon, Rutter, et al. 2001). This only has negative impacts on the mental health of the individual as well increases costs for the healthcare system. The only group standing to benefit from this arrangement are the drug companies. As well, abruptly discontinuing a drug (if the patient is unaware how long to take them for) often causes withdrawl side effects that can be very uncomfortable and concerning (National Institute of Mental Health 2008). Not without concern the same study found that nearly half of the doctors did not appropriately indicate the dose and how often to take the dose (Barber 2008). Every person and their brain is so different so one dose and frequency shown to be right for one person may be drastically wrong for another. Doctors who do not indicate dose and frequency are being extraordinarily frivolous with their patient’s mental health. It is both irresponsible and confusing as often patients know only as much as their doctor tells them. Essentially, doctors are just not prescribing these drugs correctly and it’s at the detriment to the patient. A study done indicated that only 11% of a group of individuals separately deemed to need antidepressants, received proper dosage and duration (Katon, Von Korff, et al. 1992). Nearly 90% of patients were not using these drugs to their best potential. This cannot be the standard of mental health care we should hold in high regard.

As mentioned previously, suicidal ideations can sometimes present in individuals taking antidepressants. When this happens, it happens in the first few weeks of treatment (Barber 2008). When only 20% of depression patients who visit their primary care physician schedule a follow up appointment, how are the majority able to discuss this with their doctor if they do experience it? (Barber 2008) Without adequate support, patient’s experiences with the drugs can be, on the mild side, not near at all near optimal and, on the disastrous side, life ending. In either of the situations, the best possible mental health is not achieved and it’s even sent in the opposite direction.

This is an issue that applies to every people group, especially in developed countries, and Christians are no exception. They have every reason to be concerned and involved in tackling this issue, if not more. To begin with, depression can be a debilitating disease causing extreme suffering. It is not difficult to see that God is concerned with suffering. God heard the cry of the Israelites in Egypt and responded to their suffering to deliver them in Exodus. Similarly, God is concerned with suffering now as well and from that virtue alone, so should all Christians. Throughout the Bible there is an underlying theme of care for the needy. The needy applied to the sick and poor as well as poor in spirit. Depression requires care and understanding from the Christian. The depression epidemic is not receiving adequate care and therefore suffering and sickness is not being alleviated like we have the capacity to.

For Christians, Jesus provides our example behaviour. Jesus was obviously very concerned with people’s spiritual health but he did not neglect their physical health in the least. Often Jesus used healing as a way to spread the gospel and reach out to the needy. He cured the woman bleeding for twelve years in Matthew 9:20-22. In that same chapter, Jesus healed a blind man, a deaf man and a paralytic as well as raised a girl from the dead. Again in Matthew 12 and 14, Jesus healed *crowds* of the sick and had compassion on them. Those healed by Jesus could not help but tell others about the gift of health given to them by Jesus like the blind men he healed in Matthew 9. This is the way we should model our behaviour when we deal with the sick. Should not any one, including the sick, feel filled with the joy of Christ when they come into contact with Christians? Unfortunately this is not the case, especially in the case of depression care. In the Christian church, there seems to be a stigma against depression. One would hope it’s not intentional but it remains nonetheless. It seems that mental conditions pose a conundrum. Does the Bible not say in 1 Thessalonians 5:16, “Be joyful always”? Does it also not say in Nehemiah 8:10, “Do not grieve, for the joy of the Lord is your strength”? For many Christians it’s difficult to fit depression in with the joy that should be felt in Christ. An individual suffering from a physical illness can still be joyful but what about an illness that does not allow an individual to experience joy? Where is the joy of Christ then? Because of this, the easiest solution is to turn a blind eye or to place a label that there is something wrong with ‘that’ individual and their walk with Christ. This attitude is not conducive to supporting those that require treatment. This could be another reason why the prescription of antidepressants has sky rocketed. Pills treat a biological problem, a chemical imbalance. Looking at depression as purely or increasingly biological with no other factors helps to reduce stigma, which is positive, but it also treats depression as a one factor illness, which is negative. It is easy to fill a prescription and move on but if there are other causes involved, the prescription is really only a Band-Aid solution. Temporary solutions are not conducive to lasting mental health. Jesus did not heal someone for a day or a week or ten years even. He gave them the best that he could. So should we in the treatment of depression. That may mean a pure regimen of antidepressants for some people. For many that may mean combination therapy of antidepressants and psychotherapy. For still others it may be purely psychotherapy or support meetings or art therapy even. There are a plethora of options that are not adequately explored that very likely will have a positive effect on lasting mental health. That should be our main goal.

This situation does not to remain as such however. There are things that can be done to improve the situation. One major change that can be undertaken is to increase the number of primary care physicians. This would allow doctors to spend more time with their patients to adequately discuss the options, risks, doses and durations of drugs. This would be a strong step in the right direction. As well, increasing doctor support after prescription would allow for increased adherence to the drug. A study indicated that those who had support from their doctor were much more likely to stay on their antidepressants for the appropriate amount of time (Katon, Rutter, et al. 2001). In addition, having depression specialists available for patients to be referred to would reduce the strain on doctors and provide depression sufferers with expert advice. Lastly, it is very important to increase education about depression, the possible treatments and better health that can be achieved. That is what we should all be striving for.

# Works Cited

Aikens, J.E., D.E. Nease, D.P. Nau, M.S. Klinkman, and T.L. Schwenk. "Adherence to Maintenance-Phase Antidepressant Medication as a Function of Patients Beliefs About Medication." *Annals of Family Medicine*, 2005: 23-30.

Baker, Lori. "Antidepressant Drug Trials: Fast Track to Overprescription?" *Psychology Today*, July/August 2002: 20.

Barber, Charles. "The Medicated Americans: Antidepressant Prescriptions on the Rise." *Mind & Brain*, February 1, 2008: 1-5.

Degrandpre, Richard. "Trouble in Prozac Nation." *The Nation*, January 5, 2004.

Healy, Dr. David. *Let Them Eat Prozac.* Toronto: James Lorimer & Company Ltd., 2003.

Katon, W., et al. "A Randomized Trial of Relapse Prevention of Depression in Primary Care." *Arch Gen Psychiatry*, 2001: 241-247.

Katon, W., M. Von Korff, E. Lin, T. Bush, and J. Ormel. "Adequacy and Duration of Antidepressant Treatment in Primary Care." *Medical Care*, 1992: 67.

Kelly, Brian. "Postcode lottery is 'forcing GPs to overuse SSRIs'." *Pulse News*, April 5, 2004.

Mahler, Jonathan. "Teenage Depression has a New Anxiety." *New York Times.* 2004. http://facultystaff.richmond.edu/~bmayes/pdf/The%20Antidepressant%20Dilemma\_NYT.pdf (accessed March 31, 2009).

National Institute of Mental Health. "Depression." *National Institute of Mental Health.* 2008. http://www.nimh.nih.gov/health/publications/depression/nimhdepression.pdf (accessed March 4, 2009).

Verispan VONA. *Top 200 Generic Drugs by Units in 2007; Top 200 Brand Drugs by Units in 2007.* 2007. http://drugtopics.modernmedicine.com/drugtopics/data/articlestandard//drugtopics/072008/491181/article.pdf (accessed March 4, 2009).