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A Call for the Combined Pharmacological and Psychological Treatment of Depression

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Pharmacological therapies, such as antidepressants, are the most commonly used treatment for depression. However, pharmacological therapies do not offer long-term benefits that are provided by other forms of therapy, such as cognitive and cognitive-behavioral therapies. One major long-term benefit of psychological therapies is that they lower the relapse rate of depression through a change in thinking patterns. This paper will provide scientific evidence suggesting that an integration of both pharmacological and psychological treatments is of critical importance in practice. The case for combination treatments for depression will be made through the discussion of the long-term benefits of psychological therapies and the importance of pharmacological therapies. This will be done by looking at specific cohorts including patients with severe and chronic depression, and those who are unresponsive to pharmacological or psychological therapies alone. Lastly, the importance of giving clinical psychologists prescription privileges will be discussed.

During their lives, 11.3% of Canadians are diagnosed with depression (Pearson, Janz, & Ali, 2013). Antidepressants are the most commonly used treatment for depression (Mojtabai & Olfson, 2010). However, there is mixed evidence for the efficacy of antidepressants. In this review paper, empirical scientific evidence will be provided in support of the view that an integration of both pharmacological and psychological treatments is ideal for treating depression. To that end, a brief overview of common therapeutic approaches will be presented; next, the long-term efficacy of psychological treatment options will be addressed; and third, the need for combination therapies for those with severe and/or chronic depression and those who do not respond to either psychological or pharmacological therapies alone will be emphasized. Lastly, implications and future directions for prescription privileges will be discussed.

Brief Review of Common Psychological Therapies

The primary psychological therapies for depression include cognitive-behavioral therapy (CBT) and cognitive therapy (CT) (Butler, Chapman, Forman, & Beck, 2006). The main goal of CBT is to change negative thoughts and/or behaviours and apply this skill to everyday life (Butler et al., 2006). The main goal for CT is to change the maladaptive belief system that patients with depression typically possess (Crits-Christoph, Gibbons, Temes, Elkin, & Gallop, 2010).

Long-Term Benefits of Psychological Therapies: Relapse Prevention

In the long-term, psychological therapies have been found to reduce depressive symptoms. A study conducted by Blatt, Zuroff, Bondi, and Sanislow (2000) compared the effect that imipramine, which inhibits norepinephrine reuptake, and CBT had on depressive symptoms. At a six month follow-up, the researchers found that both imipramine and CBT similarly reduced symptoms. However, after 18-months, CBT helped reduce depressive symptoms significantly more than imipramine. This result supports the long-term reduction of depressive symptoms through psychological therapies over pharmacological therapies.

In contrast to pharmacological therapy, a long-term benefit of psychological therapy is a

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lower rate of relapse (Gloaguen, Cottraux, Cucherat, & Blackburn, 1998). A rate of relapse is quantified by the number of people whose symptoms worsen or revert following the termination of treatment (Thase & Denko, 2008). A meta-analysis by Gloaguen et al. (1998) found that 60% of patients treated with antidepressants relapsed, while only 29.5% of patients treated with CT relapsed. Although Gloaguen et al. did not provide an exact time frame for the follow-up assessments, the follow-ups tended to occur between one to two years following the initial treatment. In addition to Gloaguen et al., DeRubeis and Crits-Cristoph (1998) also noted a difference between pharmacological and psychological therapies. DeRubeis and Crits-Cristoph indicated that patients given unspecified antidepressants had a relapse rate of 64%, while patients given CBT had a relapse rate of 26% after a one-year follow-up. In a more recent study by DeRubeis et al. (2005), patients were given paroxetine, a selective serotonin reuptake inhibitor (SSRI). The researchers found a 76% relapse rate for patients given paroxetine versus 31% for participants given CT after a one-year follow-up. Hence, the literature provides consistent evidence that psychological therapies have lower relapse rates than pharmacological therapies, such as antidepressants.

Reasons for Lower Relapse Rates in Psychological Therapies

Several studies have tried to determine why certain psychological therapies reduce the likelihood of further depressive episodes compared to pharmacological therapies. Prior research has suggested that CT lowers relapse rates by training patients to challenge their negative thoughts (Dozois et al., 2009; Teasdale et al., 2001). A gradual alteration from a negative to positive thinking pattern occurs, which the patient continues to possess for more than three years following the end of treatment (Uher & Pavlova, 2016). Rupke, Blecke, and Renfrow (2006) suggested that CBT works similarly and is as effective as CT. A slight difference lies in the behavioural principles that constitute CBT. Such principles involve conditioning, specifically by reinforcing positive behaviors (Rupke et al., 2006). While changes in thinking patterns and behavioral conditioning are viable explanations for lower relapse rates in psychological therapies, there is still no consensus. Nonetheless, it is evident that an advantage psychological therapies have, when compared to pharmacological therapies, is relatively lower relapse rates.

Combination Treatments

Considering the research reviewed thus far, it may be inferred that psychological therapies are the most appropriate treatment for patients with depression. However, pharmacotherapy seems to be useful with certain cohorts including patients with severe and/or chronic depression. A study by Petersen et al. (2010) studied patients with chronic depression by giving them CBT and fluoxetine (a SSRI), CBT and a placebo, fluoxetine alone, or a placebo alone. Both groups of participants given fluoxetine, with or without CBT, showed a significant reduction in depressive symptoms compared to the CBT and placebo, and placebo alone groups. In accordance with Petersen et al., a meta-analysis by Fournier et al. (2010) found that the higher the severity of depression, the more antidepressants helped to reduce depressive symptoms. Therefore, compared to controls and CBT, antidepressants seem to give patients with severe and chronic depression an opportunity for recovery.

As highlighted earlier, antidepressants do not prevent relapse with the same efficacy as psychological therapies. For this reason, a number of studies have looked into the combination of both psychological and pharmacological therapies. Keller et al. (2000) divided their participants (all of whom had been diagnosed with chronic depression) into three groups: one received only CBT, another received an antidepressant, and the third group received a combination treatment of the two. The researchers found that 85% of the combined treatment group benefited. This was significantly more than the antidepressant group (55%) and the CBT alone group (52%). A study conducted several years later replicated these findings with a sample of

adolescents (March, 2007). These researchers found that 85% of adolescents with moderate to severe depression who were given a combined treatment (CBT and an antidepressant) showed reduced depressive symptoms in an 18-week follow-up. For comparison, this reduction of depressive symptoms was significantly greater than those given antidepressants alone (69%) and those given CBT alone (64%). Hence, empirical evidence lends support for the combination of both pharmacological and psychological therapies, as they tend to be more effective than either therapy alone.

Non-Responders and Combination Therapy

Interestingly, there is evidence that suggests that patients who do not respond to psychological therapies or pharmacotherapies alone may benefit from the combination of the two. A study conducted by Wiles et al. (2013) examined patients with severe depression who did not benefit from antidepressant alone. They divided their participants into two groups, one of which received CBT and the other which received both CBT and antidepressants. On a six-month follow-up, they found that participants who received both CBT and antidepressants had significantly reduced depressive symptoms compared to the CBT only group. Similarly, a review paper by Thase (2014) noted that patients with severe depression who did not benefit from antidepressant alone, or did not benefit from CBT alone, benefitted from combination therapy. Thus, the combination of CBT and antidepressants could be beneficial for those who do not respond to either psychological or pharmacotherapy separately.

In addition to this body of evidence, patients also seem to prefer combination therapies over psychological or pharmacotherapy alone. Thase (2014) suggested that combination therapies are attractive to patients since they believe that they will gain more benefits from two treatments rather than one alone, leading them to choose a combined therapy over psychological or pharmacological therapy alone. Bayliss and Holttum (2015) used a qualitative approach to study why patients used both CBT and antidepressants to manage their depression. These researchers found that patients were first prescribed antidepressants. Although, most patients also wanted to gain skills in self-managing their depression, thereby leading them to seek the addition of CBT in their treatment, as recommended by general medical practitioners. Therefore, in addition to the research which supports the usefulness of combination treatments, there are reasons why patients seem to prefer it to CBT or antidepressants alone (Bayliss & Holttum, 2015; Thase, 2014).

Implications and Future Directions: Clinical Psychologists, Prescription Privileges, and Combination Treatments

In Canada, clinical psychologists are not permitted to prescribe medications. For this reason, psychiatrists are the only healthcare professionals that can provide combination therapies for depression. Since depression is the most common mood disorder, with an 11.3% lifetime prevalence rate in Canada (Pearson, Janz, & Ali, 2013), approximately 4.1 million Canadians may face depression at some point in their lives. Even though the amount of practicing psychiatrists has increased in the last decade, the demand for psychiatrists still outstrips the supply (Kurdyak, Zaheer, Cheng, Rudoler, & Mulsant, 2016). Therefore, clinical psychologists should be given training on well-researched pharmacological therapies for prescription purposes.

There are a number of ways in which clinical psychologists can train for prescriptive privileges. Three states in the United States have already begun to train clinical psychologists successfully. New Mexico, Louisiana, and, more recently, Illinois have been applauded by the APA for the implementation of training for clinical psychologists to gain prescription privileges (Ax et al., 2008). In these states, clinical psychologists can now expand their education at the PhD level with the incorporation of psychopharmacology. For this they are required to complete a minimum of 400 hours of supervised clinical training in a

hospital, clinic, or correctional facility (Ax et al., 2008). Approximately 1,500 psychologists and counting have completed this training in New Mexico and Louisiana (Ax, Fagan, & Resnick, 2009). Consequently, New Mexico and Louisiana have seen an increase in shared on-call duties between psychiatrists and clinical psychologists, contracting of difficult-to-fill positions previously reserved for psychiatrists, and an increase in participation in pharmaceutical research (McGrath & Sammons, 2011). It is thus evident that prescription privileges are already beneficial.

Conclusion

Combination therapies are ideal because certain cohorts of patients with depression are most effectively treated through an integration of both pharmacotherapy and psychological therapies. In addition, these methods are preferred by patients. Finally, given the greater demand than supply of psychiatrists, clinical psychologists should be given training on well-researched pharmacological therapies for prescription purposes (Kurdyak et al., 2016). Hence, the plethora of scientific evidence suggests that in order to have lower relapse rates and effectively treat those with severe and/or chronic depression, or patients who are unresponsive to pharmacological or psychological therapies alone, an integration of both pharmacological and psychological therapies is of critical importance. If providing the best possible treatment requires the integration of both pharmacotherapy and psychological therapies for certain groups, then health care should increasingly move in this direction.

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