Evidence-Based Psychological Treatments for Mental Disorders: Modifiable Barriers to access and Possible Solutions

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ABSTRACT

The prevalence of mental disorders is high and appears to be growing, yet the majority of individuals who meet diagnostic criteria for a mental disorder are not able to access an adequate treatment. While evidence-based psychological treatments (EBPTs) are effective single or adjunctive treatments for mental disorders, there is also evidence that access to these treatments is diminishing. We seek to highlight modifiable barriers to these problems at the patient, therapist, treatment, organization and government-levels of analysis. A range of solutions to each set of contributors is offered and domains for future research are highlighted. In particular, we focus on the need to continue to work toward innovation in treatment development while also solving the difficulties relating to the dissemination of EBPTs. Several relatively new concepts in the field will be discussed (implementation cliff, program drift, voltage drop and deployment treatment development) and we contrast America and England as examples of government-level processes that are in the process of major change with respect to EBPTs. We conclude that there is a need for people in our field to become more knowledgeable about, and get involved in, shaping public policy.

KEYWORDS: Evidence-Based, Psychological, Treatments and mental disorders

Introduction

We seek to highlight three critical problems facing our field. The first problem is that the prevalence of mental disorders is high and growing. The second problem is that the majority of individuals diagnosed with a mental disorder are not able to access an adequate treatment. The third problem is that while there is compelling evidence that evidence-based psychological treatments (EBPTs) are effective as single or adjunctive treatments for many mental disorders, there is evidence that access to these treatments is diminishing. We will then extend several excellent recent discussions of these problems (e.g., Gaudiano & Miller, 2013; Kazdin & Blase, 2011; Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2013; Shafran et al., 2009) by highlighting a range of modifiable barriers, as well as possible solutions, at 5 levels of analysis; namely, the patient, therapist, treatment, organization and government-levels of analysis.

The prevalence of mental disorder is high and growing

The National Comorbidity Study (NCS, 1990–1992; n = 8,098; 15–54 year olds) and its replication (NCS-R; 2001–2003; n = 9,282; 18+ year olds) are nationally representative surveys conducted in the United States of America (USA). According to the NCS-R, and reported by Kessler et al. (2005), 30% of people surveyed over a 12-month period, and 50% of the population over the lifespan, met diagnostic criteria for a mental disorder. In 2010, and involving 68,309 individuals in the USA aged 12 and older, the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Survey on Drug Use and Health (2012) reported that 18.6% of adults had a mental disorder, excluding a substance problem, and 4.1% of adults had a serious mental disorder. An additional 20.7 million adults were diagnosed with a substance use disorder. Forty percent of these individuals also had a comorbid mental disorder.

A cross national study conducted by the World Health Organization (WHO) included 6 less developed countries and 8 developed countries. The results indicate that the global pattern is for high rates of mental disorder, although there was some variability with lower rates in Asian countries (Demyttenaere et al., 2013). Similarly, a meta-analysis of 27 studies including over 150,000 people from 16 European countries estimated that about 27% of people were diagnosed with at least one mental disorder within the past 12 months (Wittchen & Jacobi, 2005). In terms of children and adolescents, an Institute of Medicine and National Research Council meta-analysis of over 50 studies from community samples across the world reported a prevalence rate of 17% for one or more mental, emotional, or behavioral disorder in youth, and about half reported significant functional impairment (O'Connell, Boat, & Warner, 2009). Although we need to keep in mind the limitations inherent to comparing two cross sectional studies, the results from the Global Burden of Disease study suggests that from 1990 to 2010 the disability-adjusted life years (DALYs) associated with 'mental and behavioral disorders' *increased* by approximately 36% (Murray et al., 2013). DALYs are the sum of years of life lost due to premature mortality and years lived with disability (Murray & Lopez, 1997). In sum, the evidence that has accrued across multiple studies conducted across multiple countries indicates that mental disorders are prevalent and that the number of people meeting diagnostic criteria for a mental disorder appears to be steeply growing.

Mental disorders are undertreated

SAMHSA estimated that in 2007 fewer than half of the individuals who need mental health care are receiving the care they need (SAMSHA, 2007). A similar pattern of results is evident from the NCS-R. Specifically, Wang et al. (2005) reported that approximately 60% of individuals with a mental disorder do not receive treatment and of those who do, only 32% of the treatments received fell into the 'at least minimally adequate treatment' category (p. 631). Also, Kessler et al. (2003) reported that only 52% of people diagnosed with major depressive disorder in the past 12 months received treatment and the treatment received was judged to be adequate in only 42% of cases.

Unfortunately, the trend toward under treating mental disorders is not limited to the USA. A national survey of 16–64 year olds in Great Britain over a 7-year period (1993–2000) reported that only a quarter of people with a mental disorder were receiving some kind of treatment in 2007, unchanged from 2000 (Jenkins et al., 2009). In Australia, based on the 2007 National Survey of Mental Health and Wellbeing, a nationally representative household survey of 8841 individuals aged between 16 and 85 years, only one-third of people (34.9%) meeting criteria for

a mental disorder made use of any services for a mental health problem (Burgess et al., 2009). In the analysis of 16 European countries, only 26% of all cases had any consultation with professional health care services (Wittchen & Jacobi, 2005). Also, the WHO comparison of 14 countries reported that 35.5% to 50.3% of serious cases in developed countries and 76.3% to 85.4% in less developed countries received no treatment in the prior 12 months (Demyttenaere, et al., 2013).

Evidence-based psychological treatments (EBPTs) are effective

The Director of the National Institutes of Mental Health in the USA observed that '*while psychosocial interventions have received much less marketing attention than pharmacological treatments, the results are arguably more encouraging'* (p. 29) (Insel, 2009). Indeed, progress toward establishing EBPTs for most mental disorders has been excellent (Chambless & Ollendick, 2001; Layard & Clark, 2014; Silverman & Hinshaw, 2008). There are a range of rigorous review processes that have completed lists of evidence-based therapies including the American Psychological Association's Division 12 (www.psychologicaltreatments.org), SAMHSA's National Registry of Evidence-based Programs and Practices (http://www.nrepp.samhsa.gov) and the National Institute for Health and Care Excellence (NICE). NICE is particularly remarkable because, for each disorder, a panel of experts including clinicians, researchers and consumers is formed to carefully review the scientific evidence on the best treatment/s available for each physical and mental health problem.

The treatments determined by the panel to be the frontline treatment/s for each condition are expected to be provided to the citizens of England within the National Health Service. Also, the National Health Service is often asked to report on the extent to which they are complying with NICE recommendations. NICE has concluded that EBPTs are frontline sole or adjunctive interventions for a broad range of mental disorders (Clark, 2011; Layard & Clark, 2014; Shafran, et al., 2009) and this conclusion was the basis for remarkable solutions to the difficulty of disseminating EBPTs within England, as we discuss in the 'Government-Level' section below.

Access to EBPTs is declining

In the USA there has been an ongoing analysis of the type of treatments that are being provided. An editorial by Druss (2010) in the *American Journal of Psychiatry* notes a 'sea change' in the provision of mental health services away from EBPTs from 1998 to 2007. Druss's editorial was prompted by the analysis of service use data comparing outpatient mental health care in 1998 (n = 22,953) and 2007 (n = 29,370), conducted by Olfson and Marcus (2010). The clear and puzzling trend was that spending on psychotherapy declined by more than a third, from $10.94 billion to $7.17 billion. This change was driven by a decrease in the average number of psychotherapy visits. Also, the use of only psychotherapy, as well as psychotherapy and psychotropic medication together, declined (40.0% down to 32.1%). Declines also occurred in annual psychotherapy visits per psychotherapy patient (9.7 sessions down to 7.9 sessions), a finding that raises particular concern as it appears that 16 sessions are needed for one-half of patients to be classified into a 'recovered' category (Hansen & Lambert, 2003). In contrast to the declines observed for EBPTs, the use of only psychotropic medication increased (44.1% up to 57.4%). In 2011, antidepressants were the most commonly prescribed class of drugs (264 million prescriptions), medications for attention deficit and hyperactivity disorder increased by 17%,

relative to 2010 ($7.9 billion in sales), and spending on antipsychotics was $18.2 billion. Together, this represents an increase of $2.1 billion over 2010 and 57 million prescriptions (Lindsley, 2012).

Note that across these studies the use of the term 'psychotherapy' varies. Olfson and Marcus (2010) use the term to refer to "a treatment technique for certain forms of mental disorder relying principally on talk/conversation between the mental health professional and the patient" (p. 1457). Olfson and Marcus (2009) use the term to refer to 1 visit or more that included a specific indication of "psychotherapy/mental health counseling". As such, we do not know the extent to which the treatments delivered are EBPTs. It is certainly tempting to speculate that it might be a small proportion.

This worrisome trend is not limited to the USA. The national survey of 16–64 year olds in Great Britain discussed above reported that the use of medications to treat mental disorders doubled from 1993 to 2000. In particular, antidepressant use rose from 0.16% in 1993 to 2.02% in 2000. Over the same period, the overall prevalence of mental disorders did not change markedly and the use of EBPTs did not increase significantly (Brugha et al., 2004). In an analysis of the 2007 English Adult Psychiatric Morbidity Survey, older respondents were less likely than younger adults to receive talking therapy and were less likely to have seen their GP in the last year about mental health, and they were more likely to receive benzodiazepines. Also, ethnic minorities were less likely to be taking antidepressants and were less likely to have seen their GP in the last year about their mental health (Cooper et al., 2010). In the Australian National Survey of Mental Health and Wellbeing described earlier, general practitioners were the most commonly reported providers of mental health services with 76% of those receiving any mental health care reporting using their general practitioner (Parslow & Jorm, 2000). It is unclear if general practitioners are trained in and have appointment slots that are long enough to deliver EBPTs with fidelity. Taken together, these studies point to the rise in medication use, the under treatment of mental disorders and that several groups are underserved by current mental health services, particularly elderly and minority individuals.

The rise in medication use and the decline in the provision of psychosocial treatments are of concern for a host of reasons. First, the outcomes from some widely used medications are not very encouraging (e.g., Insel, 2009). Second, there is evidence that medications, often off-label and with serious side effects, are being used to treat disorders for which the evidence base for EBPTs is well established (Comer & Barlow, 2014). Third, in some circumstances prescribing a medication may even send an unhelpful message. For example, instead of building skills and habits, a medication might serve to maintain or cover up the symptoms (Mindell & Owens, 2009). Fourth, patient choice enhances treatment effectiveness (Geers et al., 2013). Given the decline in the provision of EBPTs, there is a decline in the range of choices available for patients. Fifth, there is evidence that psychosocial interventions can be more acceptable to patients relative to medication treatments (e.g., Vincent & Lionberg, 2001). This is important because a treatment that is acceptable is more likely to be associated with adherence. Sixth, most psychosocial interventions teach skills and include a 'relapse prevention' phase to increase the odds that patients will continue to use their skills after the course of treatment has finished. As such, EBPTs tend to produce durable effects, even up to 24 months following the end of treatment (e.g., Morin, Colecchi, Stone, Sood, & Brink, 1999). Seventh, given the high comorbidity with substance use problems (Grant et al., 2008), the prescription of certain classes

of medications may increase risk for developing substance-related problems. EBPTs have no potential for such negative outcomes.

The findings reviewed in this section raise several domains for future research. There is a need for research to understand why EBPTs are declining while the use of pharmacotherapy is rising and to determine whether the latter can be accounted for by an increase in prescriptions via general practitioners rather than psychiatrists or perhaps others with prescribing privileges. It is also possible that direct-to-consumer advertising (e.g., via television) is playing a role (Donohue, Cevasco, & Rosenthal, 2007). Also, research is needed to determine how reimbursement policy or the availability of trained providers impacts the decline. Finally, there is a need for service use data from other countries to determine the extent to which of these trends are local versus global.

Modifiable Barriers

Barriers to using EBPTs can arise at various levels of analysis. We focus on five levels and summarize the main points in Table 1.

Table 1: Summary of modifiable barriers to accessing EBPTs and possible solutions

Modifiable Barriers	**Possible Solutions**
Patient-Level	
Problems such as transport, childcare, appointments at a convenient time and place, identifying a skilled therapist, attending sessions on time and overcoming stigma	Develop and test conceptual models of patient-level barriers to guide barrier-specific research and to guide treatment development efforts
Motivation to attend sessions and to adhere to treatment recommendations	Continue to translate research on motivation into interventions
Beliefs that treatment is not helpful and lack of awareness of EBPTs	Prioritize outcomes monitoring and publish the outcome data publically so it can be accessed by patients
Receiving an accurate diagnosis	Continue efforts to improve accuracy and speed of diagnosis
Therapist-Level	
Therapist beliefs such as EBPTs have an adverse impact on the therapeutic relationship, are too structured and technique focused and EBPTs do not necessarily yield a better outcome	Provide training in cognitive biases such as confirmation bias, illusory correlation and bias blind spot
Therapist preferences for eclectic, flexible approaches incorporating strategies drawn from multiple theoretical orientations	Conduct research on *how* to provide the training such as manuals, expert workshops, longer term courses with supervision, web-

	based programs

Patient-Level

There are many barriers to patients receiving an appropriate EBPT. One set of barriers that are often neglected are the practical problems like transportation problems and difficulty obtaining childcare, both of which need to be solved before an individual will be able to attend an appointment. Also, appointments for treatment may not be available at a time and in a place that is convenient for the patient, given their work, family and other responsibilities. It is not easy to identify a treatment provider among the plethora of professionals claiming to offer to treat mental disorders. So, there are many skills, and some knowledge, that patients need in order to identify a treatment provider, navigate the process of making an appointment and be on time to weekly appointments. All of these can be serious challenges for individuals with a severe mental disorder.

In addition, there are barriers related to having the motivation to seek out, and attend sessions and then adhere to the treatment recommendations, all of which are core to a successful treatment (Glenn et al., 2013). Many variables contribute to a lack of motivation including that low motivation is a common symptom of mental disorders (American Psychiatric Association, 2013). Also, there is stigma associated with meeting diagnostic criteria for a mental disorder and receiving treatment (Hinshaw & Stier, 2008). This may diminish motivation to seek out and attend sessions. Beliefs such as 'I should be able to cope with this alone' and beliefs that the available treatment options are ineffective may also reduce motivation (Stinson, Tang, & Harvey, 2006).

Public awareness of the available effective treatment options is also lacking and is well-illustrated in a report which highlights that one of the leading reasons individuals with a mental or substance use disorder don't seek treatment is a fear of needing to take medication (Institute of Medicine, 2006). Finally, diagnostic systems are regularly reviewed and updated (Kupfer, Kuhl, & Regier, 2013) and may be based on an entirely different system in the future (Hofmann, 2014; Insel et al., 2010). However, at this point, many EBPTs have been devised to treat specific disorders. Hence, receiving an accurate diagnosis may be another important patient-level variable in the process of receiving an appropriate EBPT. Indeed, it can take many years to receive an accurate diagnosis (Sorensen, Rawson, Guydish, & Zweben, 2003; Sundararaman, 2009).

We offer five pathways to begin to address these patient-level barriers.

Develop and test conceptual models

One valuable approach to address patient-level factors would be to devise and test conceptual models of the various barriers faced by patients. The conceptual model, in turn, constitutes a "road map" for organizing research and identifying solutions (Clark, 1999). As an example, the barriers-to-treatment conceptual model (Kazdin, Holland, & Crowley, 1997) addresses practical obstacles to children receiving treatment for behavioral problems. In a 4-year prospective study testing this model, 242 children referred for oppositional, aggressive and antisocial behavior were studied. The perception of few barriers reduced the risk of dropping out whereas the

perception of obstacles associated with receiving the treatment, the belief that treatment is not very relevant, and poor alliance with the therapist increased drop out. The barriers-to-treatment model could be usefully applied across age groups and types of mental disorder and holds promise for the development of interventions that specifically target patient-level contributors. One such intervention—the Participation Enhancement Intervention—will be detailed in the 'Research on motivation' section below.

Barrier-specific research

With so many important patient-level barriers there is also a great need for research programs focused on specific barriers, and there have already been several promising efforts in this domain. For example, the INDIGO Research Network (International Study of Discrimination and Stigma Outcomes) is furthering our understanding of stigma. In one study, 700 people who met diagnostic criteria for schizophrenia across 27 countries were interviewed (Brohan, Slade, Clement, & Thornicroft, 2010). Participants reported that they felt a need to conceal their diagnosis and that the anticipation of discrimination stopped them applying for work, training or education and 55% reported that their diagnosis stopped them looking for a close relationship. Moreover, 47% of participants experienced discrimination from friends, 43% from family members, 29% whilst trying to find a job, 29% whilst trying to keep a job, and 27% whilst establishing an intimate or sexual relationship. In another effort, the World Psychiatric Association (Sartorius, 2006) published 11 principles, or 'lessons learned', to guide others in developing programs to combat stigma. Examples include that the program needs to be ongoing rather than short-term and that the goals must be broadly stated and have local relevance. Also, there are detailed overviews available articulating the multiple levels of work needed to reduce stigmatization (Hinshaw, 2007).

Improve diagnosis

There have been a range of approaches to reducing the time elapsed from the onset of a mental disorder to receiving an accurate diagnosis. First, there are interventions to improve mental health literacy in order to help people to recognize their symptoms earlier, receive an appropriate diagnosis earlier and receive an efficient treatment earlier (Jorm, 2012). For example, four weeks following a brief intervention designed to improve knowledge about mental health in a school setting, adolescents exhibited marked improvement on measures of mental health literacy (Pinto-Foltz, Logsdon, & Myers, 2011). While this study raises the possibility that brief interventions may encourage earlier help-seeking, the link between mental health literacy and help seeking needs to be addressed in future research. Second, Basco et al. (2000) reported on the use of validated diagnostic screening measures within community mental health settings. This approach clearly improved the accuracy of diagnosis. Third, screening in primary care also facilitated earlier detection and referral for mental health problems, particularly for children and adolescents, whose parents frequently talk about behavioral issues with their child's pediatrician (Trupin, 2011). For example, in Massachusetts, within a year of primary care physicians being required to screen children on Medicaid insurance for mental health problems at "well-child visits," mental health visits for the children increased markedly (Kuhlthau et al., 2011). In sum, the accruing evidence suggests that accurate diagnosis can be aided by improving mental health literacy, by using diagnostic screening measures and by integrating medical and mental health care.

Progress monitoring

While weekly progress monitoring is often a feature of EBPTs, there are good reasons why there is increasing emphasis on developing progress monitoring systems and monitoring outcomes (Persons, 2012), particularly for patients who are at risk for poor outcome (Newnham, Hooke, & Page, 2010). Indeed, the use of progress monitoring results in fewer patients deteriorating during or after treatment (De Jong et al., 2013). Also, the data collected from progress monitoring helps to adjust and advance treatment, helps patients to choose a service that has good outcomes and the data also helps those who fund the service (Layard & Clark, 2014; Radhakrishnan et al., 2013).

Research on motivation

Research has focused on tackling motivational barriers to patient's seeking and attending treatment. For example, motivational interviewing aims to reduce motivational barriers via a stance that emphasizes accepting the patient as an individual, avoiding argumentation, giving lectures or ultimatums and by focusing on the process of eliciting and shaping language in favor of change (i.e. change talk). Motivational interviewing includes a straightforward review of the perceived pros and cons of change (Miller & Rollnick, 2002). Guided by the barriers-to-treatment conceptual model (Kazdin, et al., 1997) and drawing from motivational interviewing, Nock and Kazdin (2005) addressed the high drop out from interventions for children by developing a brief adjunctive intervention called the Participation Enhancement Intervention (PEI). This intervention involves three 3–15 minute doses focused on (a) providing parents with information about the importance of attending and adhering to the treatment, (b) eliciting motivational statements about attending and adhering to treatment, and (c) helping parents to identify and develop plans for overcoming barriers to treatment that may arise over the course of treatment. Compared to treatment as usual, PEI improved the motivation of parents who attended more sessions and adhered to treatment more fully.

Conclusion

It could be concluded that the number of people affected by one or more mental disorders is large and growing, the majority of people with a mental disorder are not getting treated and, even among those who do get treated, the majority are not receiving a minimally adequate treatment, far or less an EBPT. Also, the amount and quality of evidence for EBPTs as effective sole interventions for a wide range of mental disorders is a puzzling contrast to data indicating that the availability of these treatments has steeply declined.

Recommendations

1. In the assessment of the author, the principle domains during the period ahead is the need to help patients identify good providers of EBPTs.

2. There is need for training of many more providers to be able to deliver EBPTs and (3) convincing governments to devote more resources to EBPTs.

REFERENCES

American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders. 5th Edition. Washington, D.C: *American Psychiatric Association*.

Basco, M. R., Bostic, J. Q., Davies, D., Rush, A. J., Witte, B., & Hendrickse, W. (2000). Methods to improve diagnostic accuracy in a community mental health setting. *American Journal of Psychiatry*. 157(10):1599–1605.

Brohan, E., Slade, M., Clement, S., & Thornicroft, G., (2010). Experiences of mental illness stigma, prejudice and discrimination: a review of measures. *BMC Health Services Research*. 10(1):80.

Brugha, T. S., Bebbington, P. E., Singleton, N., Melzer, D., Jenkins, R. & Lewis, G. (2004). Trends in service use and treatment for mental disorders in adults throughout Great Britain. *The British Journal of Psychiatry*. 185(5):378–384.

Burgess, P. M., Pirkis, J. E., Slade, T. N., Johnston, A. K., Meadows, G. N. & Gunn, J. M. (2009). Service use for mental health problems: findings from the 2007 National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*. 43(7):615–623.

Chambless, D. L. & Ollendick, T. H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*. 52(1):685–716.

Clark, D. M. (1999). Anxiety disorders: why they persist and how to treat them. *Behaviour Research and Therapy*. 37(1)5–S27.

Clark, D. M. (2011). Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: The IAPT experience. *International Review of Psychiatry*. 23(4):318–327.

Comer, J. S. & Barlow, D. H. (2014). The occasional case against broad dissemination and implementation: Retaining a role for specialty care in the delivery of psychological treatments. *American Psychologist*. 69:1–18.

Cooper, C., Bebbington, P., McManus, S., Meltzer, H., Stewart, R. & Farrell, M. (2010). The treatment of common mental disorders across age groups: results from the 2007 adult psychiatric morbidity survey. *Journal of affective disorders*. 127(1):96–101.

De Jong, K., Timman, R., Hakkaart-Van, Roijen, L., Vermeulen, P., Kooiman, K.& Passchier, J. (2013). The effect of outcome monitoring feedback to clinicians and patients in short and long-term psychotherapy: A randomized controlled trial. *Psychotherapy Research.* 2(4) 1–11.

Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V. & Lepine, J. (2013). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *Journal of the American Medical Association*. 2(9).

Donohue, J. M., Cevasco, M. & Rosenthal, M. B. (2007). A decade of direct-to-consumer advertising of prescription drugs. *New England Journal of Medicine*. 357(7):673–681.

Druss, B. G. (2010). The changing face of US mental health care. *American Journal of Psychiatry*. 167:1491–1421.

Gaudiano, B. A. & Miller, I. W. (2013). The evidence-based practice of psychotherapy: Facing the challenges that lie ahead. *Clinical Psychology Review*. 33(7):813–824.

Geers, A. L., Rose, J. P., Fowler, S. L., Rasinski, H. M., Brown, J. A. & Helfer, S. G. (2013). Why does choice enhance treatment effectiveness? Using placebo treatments to demonstrate the role of personal control. *Journal of Personality and Social Psychology*. 105:549–566.

Glenn, D., Golinelli, D., Rose, R. D., Roy-Byrne, P., Stein, M. B. & Sullivan, G. (2013). Who gets the most out of cognitive behavioral therapy for anxiety disorders? The role of treatment dose and patient engagement. *Journal of Consulting and Clinical Psychology*. 81(4):639–649.

Grant, B. F., Goldstein, R. B., Chou, S. P., Huang, B., Stinson., F. S. & Dawson, D. A (2008). Sociodemographic and psychopathologic predictors of first incidence of DSM-IV substance use, good and anxiety disorders: results from the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions. *Molecular Psychiatry*.14(11):1051–1066.

Hansen, N. B., & Lambert, M. J. (2003). An evaluation of the dose, response relationship in naturalistic treatment settings using survival analysis. *Mental Health Services Research*. 5(1):1–12.

Hinshaw, S. P. (2007). *The mark of shame: Stigma of mental illness and an agenda for change*. New York: Oxford University Press.

Hinshaw, S. P. & Stier, A. (2008). Stigma as related to mental disorders. *Annual Review of Clinical Psychology*. 4(1) 367–393.

Hofmann, S. G. (2014). Toward a Cognitive-Behavioral Classification System for Mental Disorders. *Behavior Therapy*. 45(4):576–597.

Insel, T. R. (2009). Translating scientific opportunity into public health impact: a strategic plan for research on mental illness. *Archives of General Psychiatry*. 6(6) 128–133.

Insel, T. R., Cuthbert, B. N., Garvey, M. A., Heinssen, R. K, Pine, D. S. & Quinn, K. J. (2010). Research domain criteria (RDoC): toward a new classification framework for research on mental disorders. *American Journal of Psychiatry*.

Institute of Medicine (2006). Committee on Crossing the Quality Chasm. Improving the quality of health care for mental and substance-use conditions: *Natl Academy Pr*.

Jenkins, R., Meltzer, H., Bebbington, P., Brugha, T., Farrell, M. & McManus, S. (2009). The British mental health survey programme: achievements and latest findings. *Social psychiatry and psychiatric epidemiology.* 44(11):899–904.

Jorm, A. F. (2012) Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*. 67(3):231.

Kazdin, A. E. & Blasé, S. L. (2011). Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspectives on Psychological Science*.

Kazdin, A. E., Holland, L. & Crowley, M. (1997). Family experience of barriers to treatment and premature termination from child therapy. *Journal of Consulting and Clinical Psychology*. 65(3):453.

Kazdin, A. E. & Rabbitt, S. M. (2003). Novel models for delivering mental health services and reducing the burdens of mental illness. *Clinical Psychological Science*. 1(2):170–191.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D. & Merikangas, K. R. (2003). The epidemiology of major depressive disorder: results from the National Comorbidity Survey Replication (NCS-R). *Journal of the American Medical Association*.

Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A. & Walters, E. E. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine*. 2515–2523.

Kuhlthau, K., Jellinek, M., White, G., VanCleave, J., Simons, J. & Murphy, M. (2011). Increases in behavioral health screening in pediatric care for Massachusetts Medicaid patients. Archives of pediatrics & adolescent medicine. 165(7) 660–664.

Kupfer, D. J., Kuhl, E. A., & Regier, D. A. (2013) DSM-5. The Future Arrived. *Journal of the American Medical Association*. 309(16):1691–1692.

Layard, R. & Clark, D. M. (2014). *Thrive: The power of evidence-based psychological therapies*. London: Allen Lane.

Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Cautin, R. L. & Latzman, R. D. (2013). Why many clinical psychologists are resistant to evidence-based practice: Root causes and constructive remedies. *Clinical Psychology Review*. 33(7):883–900.

Lindsley, C. W. (2012). The top prescription drugs of 2011 in the United States: antipsychotics and antidepressants once again lead CNS therapeutics. *ACS Chemical Neuroscience*. 3(8):630–631.

Miller, W. R. & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change*. New York: Guilford Press.

Mindell, J. A. & Owens, J. A. (2009). *A clinical guide to pediatric sleep: Diagnosis and management of sleep problems.* Lippincott Williams & Wilkins.

Morin, C. M., Colecchi, C., Stone, J., Sood, R., & Brink, D. (1999). Behavioral and pharmacological therapies for late-life insomnia: a randomized controlled trial. *Journal of the American Medical Association*.

Murray, C. J. & Lopez, A. D. (1997). *Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study*. The Lancet.

Murray, C. J., Vos, T., Lozano, R., Naghavi, M., Flaxman, A. D. & Michaud, C. (2013). Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet*.

National Research Council. (2010). *Provision of Mental Health Counseling Services Under TRICARE*. Washington, DC: The National Academies Press.

Nock, M. K. & Kazdin, A. E. (2005). Randomized controlled trial of a brief intervention for increasing participation in parent management training. *Journal of Consulting and Clinical Psychology*. 73(5):872.

O'Connell, M. E., Boat, T. & Warner, K. E. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington DC: National Academies Press.

Olfson, M. & Marcus, S. C. (2010). National trends in outpatient psychotherapy. *American Journal of Psychiatry*. 167(12):1456–1463.

Parslow, R. A. & Jorm, A. F. (2000). Who uses mental health services in Australia? An analysis of data from the National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*. 34(6):997–1008.

Persons, J. B. (2012). *The case formulation approach to cognitive-behavior therapy*. New York: Guilford Press.

Pinto-Foltz, M. D., Logsdon, M. C. & Myers, J. A. (2011). Feasibility, acceptability, and initial efficacy of a knowledge-contact program to reduce mental illness stigma and improve mental health literacy in adolescents. *Social Science & Medicine.* 72(12):2011–2019.

Radhakrishnan, M., Hammond, G., Jones, P. B., Watson, A., McMillan-Shields, F. & Lafortune, L. (2013). Cost of Improving Access to Psychological Therapies (IAPT) programme: An analysis of cost of session, treatment and recovery in selected Primary Care Trusts in the East of England region. *Behaviour research and therapy*. 51(1):37–45.

SAMSHA (2007). *National Survey on Drug Use and Health*. Retrieved from: http://www.oas.samhsa.gov/NSDUHlatest.htm.

Sartorius, N. (2006). Lessons from a 10-year global programme against stigma and discrimination because of an illness 1. *Psychology, Health & Medicine.* 11(3):383–388.

Shafran, R., Clark, D. M., Fairburn, C. G., Arntz, A., Barlow, D. H. & Ehlers, A. (2009). Mind the gap: Improving the dissemination of CBT. *Behaviour Research and Therapy*. 47(11):902–909.

Silverman, W. K. & Hinshaw S. P. (2008). The second special issue on evidence-based psychosocial treatments for children and adolescents: A 10-year update. *Journal of Clinical Child and Adolescent Psychology*.3(7) 1–7.

Sorensen, J. L., Rawson, R. A., Guydish, J. E. & Zweben, J. E. (2003). Drug abuse treatment through collaboration: Practice and research partnerships that work. *American Psychological Association*.

Stinson, K., Tang, N. K. & Harvey, A. G. (2006). Barriers to treatment seeking in primary insomnia in the United Kingdom: A cross-sectional perspective. *SLEEP*. 29(12):1643.

Sundararaman, R. (2009). Congressional Research Service, The U.S Mental Health Delivery System Infrastructure: A primer. *Congressional Research Service*.

Trupin, E. (2011). Behavioral Health Screening and Intervention in Primary Care. *Archives of Pediatrics and Adolescent Medicine*. 165(7):669–669.

Vincent, N. & Lionberg, C. (2001). Treatment preference and patient satisfaction in chronic insomnia. *Sleep*. 24:411–417.

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B. & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of General Psychiatry*. 6(2) 629–640.

Wittchen, H. U. & Jacobi, F. (2005). Size and burden of mental disorders in Europe—a critical review and appraisal of 27 studies. *European Neuropsychopharmacology*. 15(4):357–376.