Journal of Affective Disorders 188 (2015) 89–96

Contents lists available at ScienceDirect

Journal of Affective Disorders

journal homepage: www.elsevier.com/locate/jad

Review

How much do we know about the functional effectiveness of interventions for depression? A systematic review

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ARTICLE INFO

Article history:
Received 23 June 2015
Received in revised form
23 July 2015
Accepted 15 August 2015
Available online 2 September 2015

Keywords:
Depression
Functioning
Intervention
Outcome measure
Treatment effectiveness

ABSTRACT

Background: Functional difficulties are determined as one of the reasons for the public health priority given to depression. However, previous literature shows that the evidence on treatment effectiveness in depression does not reflect all relevant functional areas affected. This paper aimed to review recent literature and identify which areas are addressed and what are the gaps in the measurement of treatment effectiveness in depression.
Methods: Electronic search was performed in PsycINFO, PubMed, Web of science, and the Cochrane Central Register of Controlled Trials. A content item analysis of outcome measures was performed.
Results: Two hundred and fourty-seven studies were included. The functional areas addressed in the measurement process did not vary across studies assessing psychotherapeutic, pharmacological or alternative interventions. The content analysis revealed that 80% of the areas covered by instruments represented symptomatology. Many functional areas were insufficiently covered, whereas others like handling stress, solving problems, maintaining daily routine, problems in education, or participation in community, political or religious life were not addressed at all.
Limitations: Only articles in English were included and the time frame was limited.
Conclusions: More than 10 years after the first global burden of disease studies have been published evidence on the treatment effectiveness in depression is still based primarily on symptoms. Many important functional areas remain unexplored. Consequently the effectiveness of well recognized interventions might be overestimated. Future steps should include use of comprehensive tools, provision of detailed information on functional areas instead of global scores of instruments, and design of functional impairment oriented therapies.

Contents

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http://dx.doi.org/10.1016/j.jad.2015.08.035
0165-0327/

1. Introduction

In spite of all evidence based treatments, unipolar depressive disorders still represent a huge burden to society and health services (Chisholm et al., 2004). Statistical data show that 11% of EU citizens experience depression at some point in their lives (European Pact for Mental Health and Well-being, 2008) and it is the second leading cause for disability worldwide (Ferrari et al., 2013).

Previous studies on global burden of disease underline the importance of functioning in all disorders (Murray and Lopez, 1996; World Health Organization, 2004). More specifically, the reports on depressive disorders particularly point out the negative impact of depression on person's functioning as one of the reasons for the public health priority given to the disease (Ferrari et al., 2013; Ustun et al., 2004). Functioning embraces not only impairment of mental or body functions, indicating symptomatology according to DSM and ICD diagnostic tools (American Psychiatric Association, 2000; World Health Organization, 1992), but also activity limitations or participation restrictions in domains of life, such as social functioning, daily activities, etc. (World Health Organization, 2001).

Existing meta-analyses on the effectiveness of interventions in depression focus primarily on outcome measures that address symptoms, such as the Hamilton Depression Rating Scale (HDRS) (Hamilton, 1960), Beck Depression Inventory (Beck et al., 1961), or Montgomery Asberg Depression Rating Scale (Montgomery and Asberg, 1979). More specifically, full remission, defined as a significant reduction in the number of symptoms, is considered the optimal outcome in clinical research (Keller, 2003).

However, many studies have reported that other functional areas beyond specific symptoms, like interpersonal problems, communication difficulties, or problems in mobility and self-care are also relevant for depression (McKnight and Kashdan, 2009) and might even predict more accurately the clinical course of the disorder (Stefos et al., 1996). Nevertheless, instruments assessing those areas of functioning, if considered, are mostly secondary outcomes and barely accounted for systematic analyses (Williams et al., 2000). Thus, a possible reason for the continuous burden of the disease might be that the evidence on which the guidelines for depression are built does not consider relevant functional problems for the disorder. Moreover, some authors point out that this lack in evidence might explain to some extent why treatment guidelines are not so widely implemented in mental health care settings (Drake et al., 2001).

A review by Brockow et al. (2004) was conducted to identify the concepts contained in outcome measures of trials on depressive disorders. The content analysis revealed that more than 80% of all functional areas covered in literature represented symptomatology. Activities of daily functioning or participation in life situations were under-represented in the assessment of treatment effectiveness in depression.

The current study was set to analyze whether the way of measuring treatment effectiveness in depression has changed and incorporated all relevant functional areas ten years after the publication of the Brockow's study and the second global burden of disease report, in which depression was marked as the first cause of disability by 2030 (Brockow et al., 2004; World Health Organization, 2004). Our overall objective was to identify which areas are addressed and what are the gaps in the measurement of treatment effectiveness in depression. The study particularly aimed to (1) identify the instruments used as outcome measures of effectiveness in studies assessing psychotherapeutic, pharmacological, and complementary and alternative interventions; (2) analyze the functional areas addressed in the instruments and whether they vary across the three types of interventions; (3) identify gaps in the measurement of effectiveness using an universally accepted framework for functional assessment of depression as a reference, the International Classification of Functioning, Disability and Health (ICF) Core Set for depression. (Cieza et al., 2004). This ICF Core Set provides a list of functioning areas covering the spectrum of symptoms and aspects of activities and participation relevant for individuals with depression. The study and analyses performed had explorative character and specific hypotheses had not been tested.

2. Methods

2.1. Search

Customized electronic search for studies assessing interventions in depressive disorders was performed in four databases – PsycINFO, PubMed, Web of science, and the Cochrane Central Register of Controlled Trials for studies published in English from January 2005 to January 2014. Studies were identified by combining terms indicative for intervention: *intervention* OR *therapy OR treatment OR pharmacotherapy OR psychotherapy OR behavior-therapy OR cognitive analytic therapy OR cognitive behavior therapy OR cognitive behavior therapy OR counseling OR family therapy OR marital therapy OR psychoanalytic therapy OR psychoanalysis OR psychodynamic OR social Skill OR relaxation therapy OR yoga OR homeopathy OR medication OR reminiscence OR life review OR rehabilitation*; depression: *Depression/ Depressive/Major Depressive disorder [Msh]*; and functioning: *psychosocial* OR Quality of Life OR Life Satisfaction OR Unemployment OR Employability OR Reemployment OR Retirement OR Traveling OR Leisure Time OR Exercise OR Physical Activity OR Physical Fitness OR Driving Behavior OR Aggressive Driving Behavior OR Driving Under the Influence OR Activities of Daily Living OR Social Support.* The reference lists of included articles and relevant systematic reviews were also checked manually for additional studies.