Journal of Affective Disorders 200 (2016) 142–147

Contents lists available at ScienceDirect

Journal of Affective Disorders

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

Review article

Healthcare team training programs aimed at improving depression management in primary care: A systematic review

Paul A. Vöhringer [a,b,c], Ariel Castro [d], Pablo Martínez [a,b,e,*], Álvaro Tala [a], Simón Medina [f], Graciela Rojas [a,b]

[a] Department of Psychiatry and Mental Health, Clinical Hospital, Universidad de Chile, Santiago, Chile
[b] Millennium Institute for Depression and Personality Research (MIDAP), Santiago, Chile
[c] Mood Disorders Program, Tufts Medical Center, Tufts University, Boston, USA
[d] Clinical Hospital, Universidad de Chile, Santiago, Chile
[e] School of Psychology, Faculty of Humanities, Universidad de Santiago de Chile, Santiago, Chile
[f] School of Medicine, Faculty of Medicine, Universidad de Chile, Santiago, Chile

ARTICLE INFO

Article history:
Received 12 January 2016
Accepted 16 April 2016
Available online 21 April 2016

Keywords:
Depressive disorder
Education
Primary health care
Systematic review

ABSTRACT

Background: Although evidence from Latin America and the Caribbean suggests that depression can be effectively treated in primary care settings, depression management remains unevenly performed. This systematic review evaluates all the international evidence on healthcare team training programs aimed at improving the outcomes of patients with depression.

Methods: Three databases were searched for articles in English or Spanish indexed up to November 20, 2014. Studies were included if they fulfilled the following conditions: clinical trials, meta-analyses, or systematic reviews; and if they evaluated a training or educational program intended to improve the management of depression by primary healthcare teams, and assessed change in depressive symptoms, diagnosis or response rates, referral rates, patients' satisfaction and/or quality of life, and the effectiveness of treatments.

Results: Nine studies were included in this systematic review. Five trials tested the effectiveness of multi-component interventions (training included), and the remaining studies evaluated the effectiveness of specific training programs for depression management. All the studies that implemented multi-component interventions were efficacious, and half of the training trials were shown to be effective.

Limitations: Contribution of training programs alone to the effectiveness of multi-component interventions is yet to be established. The lack of specificity regarding health providers' characteristics might be a confounding factor.

Conclusions: The review conducted suggests that stand-alone training programs are less effective than multi-component interventions. In applying the evidence gathered from developed countries to Latin America and the Caribbean, these training programs must consider and address local conditions of mental health systems, and therefore multi-component interventions may be warranted.

Contents

Abbreviations: LMICs, Low and Middle-Income Countries; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses; RCT, Randomized Controlled Trial; HAM-D, Hamilton Depression Rating Scale; CES-D, Centre for Epidemiological Studies-Depression Scale; EPDS, Edinburgh Postnatal Depression Scale (EPDS); HAD, Hospital Anxiety and Depression; PHQ-9, Patient Health Questionnaire

* Corresponding author at: Department of Psychiatry and Mental Health, Clinical Hospital, Universidad de Chile, Av La Paz 1003, Recoleta, Santiago, Chile.
E-mail address: pablo88.martinezdiaz@gmail.com (P. Martínez).

http://dx.doi.org/10.1016/j.jad.2016.04.029
0165-0327/

1. Introduction

Depression is a prevalent mental disorder worldwide, and one of the leading causes of disease burden (Ferrari et al., 2013). In some developing countries, it has been recognized as a public health problem, with research showing that nearly 40% of primary care patients suffer from current depressive episodes (Rojas et al., 2000; Vöhringer et al., 2013).

Additionally, evidence suggests that depression can be effectively treated with pharmacotherapy and/or psychotherapy (Schulberg et al., 1998) and collaborative stepped-care programs have proven to be effective in the management of depression in primary care clinics, by delivering treatments supported by evidence-based guidelines (Araya et al., 2003).

In order to address this public health issue, some Low and Middle-Income Countries (LMICs) have developed public health policies based on depression programs centered on the primary level of health care, which have then been scaled-up to a national level (Ministry of Health of Chile, n/d). Specifically in Chile, depression was incorporated into the so-called "Explicit Health Guarantees" public health policy, in order to achieve universal health coverage (Ministry of Health of Chile, 2006), and clinical guidelines were disseminated to ensure protocol-driven management of depression (Ministry of Health of Chile, 2013).

However, in daily practice, depression management remains unevenly performed in primary care settings, and depression tends to be an under-diagnosed condition in these services (Vöhringer et al., 2013). Further, even when it is recognized, its severity is frequently underestimated, inadequate interventions are provided, and compliance with treatment is often insufficient (Alvarado et al., 2005; Alvarado and Rojas, 2011).

In light of this, it is clear that the aforementioned research regarding depression treatment in primary care has not yet translated into the provision of optimal care. Moreover, the literature suggests that multi-component training strategies and systematic practice-based interventions are warranted, especially when changes in clinical practices are most needed (Davis et al., 1995).

Currently in Latin America and the Caribbean, evidence indicates that physicians' training has limited impact on their daily practice, although no studies have been conducted in this region to evaluate the effectiveness of training programs in improving patients' outcomes (Levav et al., 2005).

The present study is a systematic review of the effectiveness of primary healthcare team training programs aimed at improving management of depression in primary care settings.

2. Methods

Following PRISMA guidelines (Moher et al., 2009), a systematic review was conducted to identify "healthcare team training programs aimed at improving the management of depression in primary care."

The PubMed, Embase, and Cochrane Library databases were searched with no time limit.

For the PubMed database, two search strategies were performed: 1) ("Depressive Disorder"[Mesh] AND "Education"[Mesh]) AND "Primary Health Care"[Mesh] AND (Clinical Trial[ptyp] AND has abstract[text] AND (English[lang] OR Spanish[lang])); and 2) (("Primary Health Care"[Mesh] OR "Physicians, Primary Care"[Mesh] OR "Primary Care Nursing"[Mesh]) AND "education"[Subheading]) AND ("Depressive Disorder"[Mesh] OR "Depressive Disorder, Major"[Mesh]) AND (Clinical Trial[ptyp] AND (English[lang] OR Spanish[lang])).

For the Embase and Cochrane Library databases, the following combination of search terms was used: (Depression AND primary care AND education).

The cutoff date was November 20, 2014. Reference lists of articles found were reviewed to identify additional studies. Search results were restricted to published full-text articles in English or Spanish.

The inclusion criteria for this study were as follows: (a) clinical trials, meta-analyses, and systematic reviews; (b) presence of a training and/or educational intervention program aimed at improving the detection and/or management of depression by primary healthcare teams, with the inclusion of a control group; and (c) assessment of one or more of the following outcomes related to depression in patients: change in symptoms, diagnosis or response rates, referral rates, patients' satisfaction and quality of life, and treatment effectiveness.

3. Results

As shown in Fig. 1, 70 articles were identified through the database search, and 6 additional articles were included after reviewing bibliographic references. Ten studies were removed due to duplication. Applying inclusion/exclusion criteria, 48 articles were excluded after a title and abstract review: 20 did not fulfill study design requirements, 12 lacked required participants, 12 were not interventions by a primary healthcare team, 2 did not report outcomes, and 2 did not match any of the criteria. After screening, 18 full-text studies were assessed for eligibility, which led to the exclusion of 9 studies: 2 lacked required participants, 1 did not report on a training or educational intervention, 3 did not report selected outcomes, 1 did not match study design requirements, and 2 articles were not available in full-text.

Consequently, 9 articles were included in this systematic review (Aragonès et al., 2012; Gask et al., 2004; Katzelnick et al., 2000; Morrell et al., 2009; Rost et al., 2001; Thompson et al., 2000; Wells et al., 2000, 2004; Worrall et al., 1999). When discrepancies arose, two experts decided which studies should be included, by consensus (PV, PM).

All 9 studies were randomized controlled trials (RCT), which included a total of 4581 participants.

The main characteristics of the selected studies are shown in Table 1.

Five trials tested the effectiveness of multi-component interventions (Aragonès et al., 2012; Katzelnick et al., 2000; Wells et al., 2000, 2004) that included a training component for the management of depression in primary care. Aragonès et al. (2012) and Katzelnick et al. (2000) depression management programs incorporated clinician training, patient education (provided by trained staff), antidepressant treatment, treatment coordination, and support tools (guides, algorithms) for decision making. Specifically, in Aragonès et al. (2012) study, nurses were trained as case-managers. Wells et al. (2000) and Wells et al. (2004), carried out a quality improvement study in which clinicians were trained in depression management and were staff-supervised, and nurses were trained to provide clinical and follow-up assessments, patient education, medication management, and treatment adherence support; additionally, therapists were trained to deliver cognitive behavioral therapy. Finally, Rost et al. (2001) tested an intervention in which primary care teams (physicians, nurses, and administrative staff) redefined their roles through a brief training program focused on two-stage depression screening, clinical assessment of depression, patient education, pharmacotherapy, and recommendations for referral to mental health specialists.

The remaining four RCTs evaluated the effectiveness of specific training programs for disease management (Gask et al., 2004; Morrell et al., 2009; Thompson et al., 2000; Worrall et al., 1999). Worrall et al. (1999) carried out an educational intervention for physicians, which consisted of case-based training in clinical practice guidelines for depression and psychiatric consultation for advice on patient management. Secondly, Morrell et al. (2009) prepared and evaluated a training program for health visitors, who were trained to assess and identify depressive symptoms and to deliver psychologically informed sessions, based on cognitive behavioral or person-centered approaches. Third, Gask et al. (2004) training course for general practitioners utilized a multifaceted and interactive training package, which consisted of depression assessment, treatment negotiation, pharmacological treatment, problem-solving therapy and social interventions, suicide risk assessment, and cognitive and behavioral skills. Finally, Thompson et al. (2000) evaluated healthcare team training programs based on clinical practice guidelines that included recognition and diagnosis of depression, antidepressant management, non-pharmacological treatment, and assessment of suicide risk.

Brief information about the control condition in each study is reported in Table 1.

The core topics of most training programs included: clinical assessment of depression (Aragonès et al., 2012; Gask et al., 2004; Katzelnick et al. 2000; Morrell et al., 2009; Rost et al., 2001; Thompson et al., 2000; Wells et al., 2000, 2004; Worrall et al., 1999), management of antidepressants (Aragonès et al., 2012; Gask