Healthcare interventions for depression in low socioeconomic status populations: A systematic review and meta-analysis

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HIGHLIGHTS

• 17 interventions were identified to treat DD in low-SES populations.
• There was a significant reduction in overall depressive symptoms at short-term.
• The overall effect slightly decreased at long-term.
• The effectiveness can be maximized through cultural training for providers.
• Booster sessions seem to reduce depressive symptoms at long-term.

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ABSTRACT

The prevalence and impact of depressive disorders in developed countries are associated with certain population characteristics, including socioeconomic status. The aim of this systematic review and meta-analysis was to identify, characterize and analyze the short- and long-term effectiveness of healthcare interventions for depressive disorders in low socioeconomic status populations. The main biomedical databases were searched and fifteen articles assessing seventeen interventions were included in the review. Most interventions were implemented in the US (n = 11) and culturally adapted (n = 11). We conducted two meta-analyses for assessing both the short- (n = 11) and long-term effectiveness (n = 12) of interventions. There was a statistically significant reduction in overall depressive symptoms (-0.58, 95% CI [-0.74, -0.41]) at short-term (up to three months after the intervention), especially for combined and psychotherapeutic interventions. The overall effect slightly decreased at long-term (-0.42, 95% CI [-0.63, -0.21]). Those interventions including culturally specific training for providers and booster sessions seemed to be more effective in reducing depressive disorders at short and long term, respectively. In conclusion, healthcare interventions are effective in decreasing clinically significant depressive disorders in low socioeconomic status populations. Future interventions should take into account the key characteristics identified in this review.

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1. Introduction

It has been estimated that one in four people will have a mental disorder during their lifetime (World Health Organization, 2001). Mood disorders are one of the most common types of mental disorder (Alonso et al., 2004; Kessler, Wai, Demler, & Walters, 2005; King et al., 2008). In terms of their prevalence, it has been calculated that ranges from 6.6% to 11.9% (Baumeister & Härter, 2007), of which about three quarters are depressive disorders, which makes them a leading cause of disability worldwide (Ferrari et al., 2013; Kessler et al., 2003; Marcus, Yasamy, Ommeren, Chisholm, & Saxena, 2012; Moussavi et al., 2007).

There is a considerable body of evidence suggesting that the prevalence and impact of depressive disorders in developed countries are associated with certain population characteristics, including socioeconomic status (SES) (Lorant et al., 2007; Missinne & Bracke, 2012; Ruiz-Perez, Ricci-Cabello, Plazaola-Castano, Montero-Pinar, & Escriba-Aguir, 2011; Wang et al., 2005).

Socioeconomic inequality in depression is heterogeneous and varies according to the way mental health disorder is measured, to the definition and measurement of SES, and to contextual features such as region and time (Lorant et al., 2003). Previous work has indicated that having a low SES, as ascertained by the use of proxies such as education and income, increases not only the risk of onset of depressive disorders but also their persistence (Lorant et al., 2003). In this sense, inequalities in healthcare provision are at least partially responsible for the observed health disparities. When compared with the general population, those with low-SES are less likely to be diagnosed with depression and to either seek or to receive treatment (Alegria et al., 2008; Cabassa, Zayas, & Hansen, 2006; Chung et al., 2003; Gallo, Marino, Ford, & Anthony, 1995; Grote, Swartz, & Zuckoff, 2008; Pingitore, Snowden, Sansone, & Klinkman, 2001), further contributing to the maintenance or exacerbation of the disorder.

However, the evidence regarding the effectiveness of interventions aimed at decreasing inequalities in mental health care is sparse and limited to specific population subgroups, for instance by focusing on women (Levy & O'Hara, 2010) or ethnic minorities (Beach et al., 2006). Levy and O'Hara (2010) studied psychotherapeutic interventions targeted at low income depressed women (USA, Mexico and Chile), offering a series of recommendations for clinical practice, including the need to adapt these interventions to the specific characteristics of the target population. Cabassa and Hansen (2007) conducted a systematic review of depression treatments for Latino adults in the primary care setting, observing that collaborative care models achieved the best results in reducing treatment inequalities, which was reiterated in a subsequent study including a low-SES population (Bao et al., 2011).

Other studies have also assessed the effectiveness of culturally adapted interventions for ethnic minorities, finding that interventions that were adapted to the targeted group were more likely to be successful (Benish, Quintana, & Wampold, 2011; Griner & Smith, 2006). According to the authors, cultural adaptations to mental health interventions consist of identifying how the client's culture and context might interact with the intervention and then systematically integrating his or her values and worldviews into treatment which can be done by explicitly discussing the client's cultural values and beliefs, or by using the client's preferred language during treatment, among other strategies (Benish et al., 2011).

Taken together, the existing literature indicates that low SES populations are more likely to develop and maintain depressive disorders (Lorant et al., 2003), while also being less likely to seek or receive treatment (Alegria et al., 2008). Previous work has also indicated that culturally adapted interventions might bridge the gap and increase the effectiveness of mental health interventions for populations from certain disadvantaged groups, such as ethnic and racial minorities (Benish et al., 2011; Griner & Smith, 2006). However, the evidence for interventions aimed at populations with low SES is scarcer and often entangled with other characteristics such as gender or ethnicity.

The aim of this systematic review and meta-analysis was to identify, characterize and analyze the short- and long-term effectiveness of healthcare interventions for depressive disorders specifically targeted to low SES populations.

2. Methods

The present study is part of a broader systematic review, which aimed to identify and analyze healthcare interventions to reduce social inequalities in depressive disorders. The review and its procedures were planned, conducted, and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009).

2.1. Information sources and search strategy

Specific search strategies were designed for the databases Medline (Ovid), CINAHL, Embase, PsycINFO, Scopus, and Web of Knowledge. The strategy, which combined MeSH terms and keywords (available in Online Appendix 1), was initially designed for Medline and subsequently adapted for the other databases. Additional searches were also conducted using relevant keywords in different databases such as Cochrane Library, CRD Databases, metaRegister of Controlled Trials, EURONHEED, CEA Registry, and European Action Program for Health