The long-term effects of bibliotherapy in depression treatment: Systematic review of randomized clinical trials

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Abstract

Objective: Literature shows that bibliotherapy can be helpful for moderate depression treatment. The aim of this systematic review is to verify the long-term effects of bibliotherapy.

Methods: After bibliographic research, we included RCTs articles about bibliotherapy programme treatment of depression published in English language between 1990 and July 2017. All RCTs were assessed with Cochrane's Risk of Bias tool.

Results: Ten articles (reporting 8 studies) out of 306 retrieved results were included. All studies analyze the effects of bibliotherapy after follow-up periods ranging from 3 months to 3 years and show good quality in methods and analyses. The treatment was compared to standard treatments or no intervention in all studies. After long-term period follow-ups, six studies, including adults, reported a decrease of depressive symptoms, while four studies including young people did not show significant results.

Conclusion: Bibliotherapy appears to be effective in the reduction of adults depressive symptoms in the long-term period, providing an affordable prompt treatment that could reduce further medications. The results of the present review suggest that bibliotherapy could play an important role in the treatment of a serious mental health issue. Further studies should be conducted to strengthen the evidence of bibliotherapy's efficacy.

Keywords: Bibliotherapy; Self-help therapy; Depression; Mental Health; Psychotherapy; Cognitive-Behavioral intervention.

Introduction

Depression is a multifactorial mood disorder and it is associated with increased health care costs, reduced treatment compliance, and increased morbidity and mortality (Velehorschi et al., 2014).

There are over 150 million people estimated to be suffering from depression with a prevalence of 3-10% in the general population ("WHO | Investing in mental health," 2013).

Several treatments for depressive disorders are recognized to be effective by evidence-based systematic reviews, and therefore have been included in clinical practice guidelines ("Depression in adults: recognition and management | Guidance and guidelines | NICE," 2009; Gelenberg, 2010; Jorm, Christensen, Griffiths, & Rodgers, 2002). Moreover, the consumption of antidepressants has been dramatically increasing over the last years (Gualano et al., 2014; Kantor et al., 2015).

Self-help therapies are defined as treatments that can be used by the individual without necessarily having to receive therapies of other kind, such as those administered by health-care workers or that require minimal contact with a therapist. Thus, self-administered therapies might represent one way of increasing access to, and affordability of, treatment, and to keep costs lower than those of standard services (Songprakun and McCann, 2015).

Bibliotherapy is an active self-help, brief, non-pharmacological intervention, that applies either cognitive therapy or behavioral therapy techniques (Mains and Scogin, 2003; McNaughton, 2009). The main aim of cognitive or behavioral bibliotherapy is to teach, through the reading of a standard manual, a number of strategies designed to control negative emotions and it also explains how to practice them in daily life (Jorm et al., 2002).

Examples of self-help books used for bibliotherapy include "*Feeling Good: The New Mood Therapy"* by D.D. Burns (on cognitive therapy) and *"Control Your Depression"* by Lewinsohn (on behavioral therapy) (Burns, 1980; Lewinsohn, 1986). These self-help books final objective

is to guide and encourage the reader to make changes regarding the potential presence of unhelpful thoughts and behaviors, and, moreover, to improve self-management and coping abilities (Anderson et al., 2005).

Although, a strong limitation of bibliotherapy is the reliance on reading and retention skills of people who may present reduced reading ability or education (Kavanagh and Proctor, 2011).

In literature, a number of papers show that bibliotherapy may actually be helpful for depressed patients, seeming particularly appropriate for people presenting depression of milder severity where a standard therapy is not necessarily the preferred option (Anderson et al., 2005). Moreover, the effectiveness of bibliotherapy has been demonstrated in single studies, systematic reviews and meta-analyses, showing positive results (after a post-treatment evaluation) for people presenting mild to moderate depressive symptoms (Campbell and Smith, 2003; Songprakun and McCann, 2015).

However, to our knowledge, the presence of durable treatment effects of bibliotherapy on depression has not been systematically reviewed in previous papers.

The purpose of this systematic review of randomized clinical trials (RCTs) is to describe and evaluate the presence of long-term effects of bibliotherapy treatment for depressed patients.

Methods

For the production of this systematic review we decided to observe the Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) statements (Moher et al., 2009).

We analyzed all the papers reporting data about the effectiveness of bibliotherapy in depression treatment, focusing on its long-term effects measured after a follow-up period of variable duration (minimum 3 months), in contrast with previous studies which only described post-treatment effects assessments (Campbell and Smith, 2003; Songprakun and McCann, 2015).

We performed our research on PubMed and Scopus databases. Three researchers independently conducted a systematic research of scientific evidence in literature using the following search string: “bibliotherapy” OR “reading therapy” AND “depression”.

Articles were included in the review if the following criteria were met:

- Study design of the article: Randomized Clinical Trial
- Follow-up duration: 3 months or longer
- Papers written in English language
- Publication date from 1990 to June 2017

No restriction was performed based on the country where the study was conducted.

On the other hand articles were considered ineligible if:

- they did not match the inclusion criteria described above
- they enrolled patients suffering from a psychiatric disease other than depression.

The investigators independently performed a first literature screening, selecting the sources by title and abstract. After this first step, they collected eligible studies for full text review. Subsequently, the authors completed the research examining the reference list of the selected articles. Finally, the researchers independently evaluated each of the identified articles on the basis of inclusion and exclusion criteria.

Data Extraction:

In order to sum up the retrieved results, the investigators independently extracted the data of our interest from all the selected studies, solving any disagreement among them by consensus. For each article, we collected data about follow-up period, procedure of the study, outcome measures, target population, types of intervention and results.

Quality Assessment

Two investigators independently assessed the methodological risk of bias of included studies; RCTs reported methodological quality was evaluated using Cochrane risk of bias tool (Higgins et al., 2008; Ryan et al., 2013). The results of the risk of bias assessment were included into the review.

Outcome measures

The impact of bibliotherapy programme treatment on the reduction of depressive symptoms in each study reviewed was measured with different kinds of depression evaluation scales, commonly used in clinical psychology practice.

All scales are listed in the results section and resumed in Tables 2 and 3.

Results

Our review on the two selected databases retrieved 306 results, 114 from PubMed database and 192 from Scopus database. After excluding duplicates and irrelevant results, we eventually identified 18 articles available for full text review. Finally, based on full text reading, we obtained a total number of 10 articles reporting 8 studies (Figure 1).

Quality assessment results are resumed in Table 1. All the RCTs showed a good quality assessment.

Overall, 4 studies considered the effects of bibliotherapy treatment after a three-months period (Floyd, Scogin, McKendree-Smith, Floyd, & Rokke, 2004; Jamison & Scogin, 1995; Mead et al., 2005; Moldovan, Cobeanu, & David, 2013), 1 article investigated if treatment effects were maintained after a 6 months follow-up interval (Stice et al., 2007), 4 studies evaluated the maintenance of the effects after two years (Floyd et al., 2006; Rohde et al., 2015; Scogin et al., 1990; Stice et al., 2010a) and 1 paper analyzed the intervention effects after three years from the completion of the bibliotherapy programme (Smith et al., 1997). Table 2 and Table 3 summarize the studies included in this review.

The sample size of each study ranged from 23 (Floyd et al., 2006) to 378 participants (Rohde et al., 2015). In order to evaluate depressive symptoms severity, eight out of ten articles used the Hamilton Rating Scale for Depression (HRSD) and/or the Beck Depression Inventory (BDI-I and BDI-II) (Floyd et al., 2006, 2004; Jamison and Scogin, 1995; Mead et al., 2005; Moldovan et al., 2013b; Scogin et al., 1990; Smith et al., 1997; Stice et al., 2010b); other evaluation scales were used as well in the considered studies, in function of the different sample characteristics. The most used were the following: Geriatric Depression Scale (GDS) (Floyd et al., 2006, 2004; Scogin et al., 1990), Symptom Checklist-90 (SCL-90) (Jamison and Scogin, 1995), Automatic Thought Questionnaire (ATQ) (Jamison and Scogin, 1995; Moldovan et al., 2013a), Dysfunctional Attitude Scale-Form (DAS-A) (Jamison and Scogin, 1995), Brief Symptom Inventory (BSI) (Floyd et al., 2004), Cognitive Bibliotherapy Test (CBT) (Floyd et al., 2004), Cognitive Therapy Scale (CTS) (Floyd et al., 2004), Hospital Anxiety and Depression Scale (HADS) (Mead et al., 2005), Social Adjustment Scale (SAS) (Mead et al., 2005; Rohde et al., 2015; Stice et al., 2010a), Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS) (Rohde et al., 2015; Stice et al., 2010a) and General Attitudes and Beliefs Scale (GABS) (Moldovan et al., 2013a). The participants of the studies were different for age and enrolment setting: six studies enrolled adults from the general population with symptoms of depression and anxiety but not in treatment at the beginning of the study, while 4 studies enrolled students attending high school and/or college and presenting subthreshold or mild depressive symptoms (Moldovan et al., 2013a; Rohde et al., 2015; Stice et al., 2010a, 2007).

General adult population

The participants of the following studies were adults (age > 18 years) enrolled from the general population.

In the first study, published in 1990 (Scogin et al., 1990), 67 older adults enrolled from the community were randomly assigned to behavioral bibliotherapy (BB), consisting of the reading of a self-help book named "Control your depression", cognitive bibliotherapy (CB), consisting of the reading of a self-help book called "Feeling Good", or delayed treatment (DT). The participants were assessed at pre-treatment, post-treatment, after 1-month of follow up, 6-months follow-up and a 2-years period of follow-up. The evaluation did not show any significant difference between the BB and CB group, while both showed a significant improvement of the depression severity score compared to the control group. The improvements were maintained either after a 6-months follow-up either at 2-years follow-up. In these assessments patients reported a decrease in depression severity, measured with GDS scale, showing significant differences within different time periods.

These results were supported by two other studies performed in 1995 and 1997 (Jamison and Scogin, 1995; Smith et al., 1997). The first study (Jamison and Scogin, 1995), assigned 80 participants presenting mild to moderate depressive symptoms (measured with both BDI and HRSD) to a CB therapy group or to DT group and assessed the results after 3-months of follow-up. The experimental group showed significant treatment-related improvements and these were maintained at follow-up, since 75% of the participants did not meet the criteria for depression. Data by Smith and coworkers (Smith et al., 1997) were consistent with the results of the study conducted by Jamison et al., with 71% of the patients enrolled who were no longer meeting criteria for major depression at the 3-years follow-up evaluation. This second study is a follow-on study of Jamison & Scogin's one and enrolled 50 participants of the previous study (since 32 were not eligible at 3 years follow-up); participants were randomly assigned to CB or DT and evaluated the results at 3-years follow-up, performed via telephone interview.

Other studies compared bibliotherapy not only to a control group, consisting of no treatment or delayed treatment, but also to other kinds of therapeutic approach. For example, a study by

Floyd et al. (Floyd et al., 2004) compared the results of CB to Individual Psychotherapy and to DT. In this study 46 volunteers aged over sixty were randomly assigned to one of the three intervention groups and were then evaluated at pre-treatment, post-treatment and after a 3-months period of follow-up. Although CB was significantly superior to DT at post-treatment evaluation, Individual Psychotherapy was significantly superior to both of them (depressive symptoms severity was measured with HRSD, GDS and BSI scales). On the other hand, a permanent improvement was recorded for the CB group at 3-months follow-up, while no significant changes were registered for the other groups. Another article (Floyd et al., 2006) analyzed the results at 2-years follow-up of 23 participants of the Floyd study (Floyd et al., 2004), since only 31 of the 46 original participants completed the treatment and were eligible; however, 7 patients were no more reachable for study purposes and 1 refused to participate. A significant improvement in depression severity was registered from the pretreatment assessment to the 2-years FU, and no significant differences between the CB or individual psychotherapy group were found. Nonetheless, there were significantly more recurrences of depressive symptoms during the 2-years follow-up in the CB group than in the individual psychotherapy one.

Another study (Mead et al., 2005) compared a waiting list control group, attending routine care, to guided self-help intervention, which consisted of reading a self-help manual designed for the trial or in one-to-one sessions with an assistant psychologist. There were 114 enrolled participants and at 3-months follow-up the guided self-help intervention showed no significant improvement of depressive symptoms compared to the psychologist treatment. Description and design characteristics of these studies are reported in Table 2.

Adolescents and young adults (attending high school and college)

These studies included adolescents and young people with subthreshold depression (Moldovan et al., 2013a) or with elevated depressive symptoms (Rohde et al., 2015; Stice et al., 2010a, 2007).

All participants were enrolled from peculiar settings, such as high schools and colleges, with age ranging from 14 to 22 years.

These studies were performed on young patients to evaluate the role of bibliotherapy in depression treatment, as a potential alternative or as a further tool to be added to standard psychotherapy interventions. The observation period was different among the different studies, ranging from 3 months (Moldovan et al., 2013a) to 2 years (Rohde et al., 2015; Stice et al., 2010a).

The first included study, that enrolled 96 students who were attending their first year of psychology classes at university, examined the results after the shortest follow-up period (3 months) (Moldovan et al., 2013a). They were randomly assigned to Cognitive Bibliotherapy (CB), Delayed Treatment (DT), placebo or No Treatment (NT). The delayed treatment group was treated after 1 month, placebo group received a book similar to "Feeling Good" used for CB while NT was told not to be eligible for this study. All the groups were evaluated with BDI-II, ATQ, DAS and GABS scales at pre-treatment, mid-treatment, post-treatment and at 3-months follow-up. In this case the CB group showed a significant decrease in depressive symptoms which was maintained at the follow-up observation. Similar results were found at 6-months follow-up by Stice and coworkers (Stice et al., 2007). In this study 225 students between 15 and 22 years old were randomly assigned to a cognitive prevention programme, a supportive-expressive group, a cognitive bibliotherapy, journaling or to a waiting list control group. Students included in the cognitive bibliotherapy group were the only ones to show a significant reduction of depressive symptoms severity from pre-treatment to post-treatment, results that were also confirmed at a 6-months follow-up. Although the cognitive programme

demonstrated a significantly greater improvement of scales scores from pre-treatment to post-treatment and after a month follow-up, these improvements were not maintained at the 6-months follow-up evaluation.

In conclusion, the results after a longer observation period did not show a considerable improvement for patients in the cognitive bibliotherapy group (Rohde et al., 2015; Stice et al., 2010a). In particular, the study conducted by Stice et al. (Stice et al., 2010a) enrolled 341 teenagers, ranging from 14 to 19 years old, through emails and handbills. They were randomly assigned to the cognitive behavioural therapy group, supportive-expressive group, cognitive bibliotherapy or educational control group and thereafter they were assessed with K-SADS, BDI-II and SAS scales at 6 months, 1 year and 2 years follow-up. Cognitive therapy and supportive-expressive therapy groups showed a significant greater reduction in depressive symptoms than cognitive bibliotherapy group at 1 year and 2 years follow-up, while the cognitive bibliotherapy group did not show any significant difference from the control group when referring to symptoms reduction. Similar results were outlined by a study (Rohde et al., 2015) that enrolled 378 high school students, randomly assigned to a cognitive behavioural group, a cognitive bibliotherapy group or to a brochure control group. Finally, the results were assessed at 2-years follow-up. No differences were recorded between the 3 groups regarding social adjustment and substances use, but the presence of a major depressive disorder or the onset of minor depression was found to be significantly greater among the patients included in the cognitive bibliotherapy group rather than in those who completed the cognitive intervention.

Description and design characteristics of these studies are reported in Table 3.

Discussion

Bibliotherapy could present several advantages and benefits in the treatment of depression. In the first instance, it represents a cheap and time-saving option, because it would require a minimal therapist contact (Rohde et al., 2015); these features are shared with other types of self-help interventions (such as Internet-Delivered Cognitive Behavior Therapy) (Hedman et al., 2011; Nordgren et al., 2014). Moreover, it represents an efficient and high quality therapeutic method based on a clear rationale about the causes of depression, which also provides a structured approach to the illness treatment and training of skills focused to the patients' relief. Finally, this form of therapy is non-stigmatizing and may help patients to feel more at ease with their condition. Thus, it can be used for depressed patients who are not yet prepared or willing to talk to a therapist about their personal problems, because of prejudices or resistance or perceived stigma (Cuijpers, 1997).

Other reviews showed the post-treatment effects of this intervention on the reduction of depressive symptoms (Anderson et al., 2005; Bower et al., 2001; McKendree-Smith et al., 2003), while the present study, to our knowledge, is the first to systematically review long-term effects of bibliotherapy on depression.

Bibliotherapy showed durable effects on the general adult population, by reducing symptoms also throughout a long-term follow-up observation. In some cases the results were comparable to individual psychotherapy, although more recurrences were recorded in the bibliotherapy group. The effects recorded at post-tretment follow-ups suggested the efficacy of bibliotherapy, but this was not confirmed in clinical trials considering longer observation periods.

Beside statistical significance of the results presented in the reviewed articles, based on depression's scales evaluations, a clinical improvement of depressive symptoms of the participants is described in some of the studies, as declared by the patients themselves (Scogin

et al., 1990) or assessed by the researchers (Floyd et al., 2006, 2004; Jamison and Scogin, 1995).

Although, the present review presents potential limitations. Firstly, the Cochrane's Risk of Bias showed a high risk of bias for some of the considered studies, and publication bias may have influenced the inclusion of the papers and their described findings. Secondly, the majority of the studies used small samples and major differences occur among the studies, regarding follow-up periods, outcome measures, contact with therapists and target population; these differences may interfere with a reliable standardization of the results among the different studies. Finally, the restriction to studies published in English language represents a further limitation.

Due to the assessed risk of bias and the presence of peculiar differences/heterogeneity of settings and populations among the studies, which make difficult the generalization of the results to a larger population, the authors decided not to perform a meta-analysis.

In conclusion, bibliotherapy may be considered a useful intervention for the general adult population that might provide an immediate treatment, possibly able to delay or reduce the need for other medications in patients who may be vulnerable from a physical standpoint. Furthermore, the results of the present review could be an important starting point to consider the role of this cheap intervention, which is potentially addressed to a great number of subjects suffering from depression, and to implement public health policies in order to possibly develop a population-targeted therapy. Further studies need to be performed to gather more evidence, also analysing how to maximize the benefits of bibliotherapy in different settings and on different patients, and to evaluate its cost-effectiveness throughout time.

References:

Anderson, L., Lewis, G., Araya, R., Elgie, R., Harrison, G., Proudfoot, J., Schmidt, U., Sharp, D., Weightman, A., Williams, C., 2005. Self-help books for depression: how can practitioners and patients make the right choice? Br. J. Gen. Pract. 55, 387–92.

Bower, P., Richards, D., Lovell, K., 2001. The clinical and cost-effectiveness of self-help treatments for anxiety and depressive disorders in primary care: a systematic review. Br. J. Gen. Pract. 51, 838–45.

Burns, D.D., 1980. Feeling good : the new mood therapy. Avon Books.

Campbell, L.F., Smith, T.P., 2003. Integrating self-help books into psychotherapy. J. Clin. Psychol. 59, 177–186. doi:10.1002/jclp.10140

Cuijpers, P., 1997. Bibliotherapy in unipolar depression: a meta-analysis. J. Behav. Ther. Exp. Psychiatry 28, 139–47.

Depression in adults: recognition and management | Guidance and guidelines | NICE, 2009.

Floyd, M., Rohen, N., Shackelford, J.A.M., Hubbard, K.L., Parnell, M.B., Scogin, F., Coates, A., 2006. Two-Year Follow-Up of Bibliotherapy and Individual Cognitive Therapy for Depressed Older Adults. Behav. Modif. 30, 281–294. doi:10.1177/0145445503261176

Floyd, M., Scogin, F., McKendree-Smith, N.L., Floyd, D.L., Rokke, P.D., 2004. Cognitive therapy for depression: a comparison of individual psychotherapy and bibliotherapy for depressed older adults. Behav. Modif. 28, 297–318. doi:10.1177/0145445503259284

Gelenberg, A.J., 2010. A Review of Current Guidelines for Depression Treatment. J. Clin. Psychiatry 71, e15. doi:10.4088/JCP.9078tx1c

Gualano, M.R., Bert, F., Mannocci, A., La Torre, G., Zeppegno, P., Siliquini, R., 2014. Consumption of Antidepressants in Italy: Recent Trends and Their Significance for Public Health. Psychiatr. Serv. 65, 1226–1231. doi:10.1176/appi.ps.201300510

Hedman, E., Andersson, G., Ljótsson, B., Andersson, E., Rück, C., Mörtberg, E., Lindefors, N., 2011. Internet-Based Cognitive Behavior Therapy vs. Cognitive Behavioral Group Therapy for Social Anxiety Disorder: A Randomized Controlled Non-inferiority Trial. PLoS One 6, e18001. doi:10.1371/journal.pone.0018001

Higgins, J.P.T., Green, S. (Sally E., Cochrane Collaboration., Wiley InterScience (Online service), 2008. Cochrane handbook for systematic reviews of interventions. Wiley-Blackwell.

Jamison, C., Scogin, F., 1995. The outcome of cognitive bibliotherapy with depressed adults. J. Consult. Clin. Psychol. 63, 644–50.

Jorm, A.F., Christensen, H., Griffiths, K.M., Rodgers, B., 2002. Effectiveness of complementary and self-help treatments for depression. Med. J. Aust. 176 Suppl, S84-96.

Kantor, E.D., Rehm, C.D., Haas, J.S., Chan, A.T., Giovannucci, E.L., 2015. Trends in Prescription Drug Use Among Adults in the United States From 1999-2012. JAMA 314, 1818. doi:10.1001/jama.2015.13766

Kavanagh, D.J., Proctor, D.M., 2011. The role of assisted self-help in services for alcohol-related disorders. Addict. Behav. 36, 624–629. doi:10.1016/j.addbeh.2010.11.012

Lewinsohn, P.M., 1986. Control your depression. Prentice-Hall.

Mains, J.A., Scogin, F.R., 2003. The effectiveness of self-administered treatments: A practice-friendly review of the research. J. Clin. Psychol. 59, 237–246. doi:10.1002/jclp.10145

McKendree-Smith, N.L., Floyd, M., Scogin, F.R., 2003. Self-administered treatments for depression: A review. J. Clin. Psychol. 59, 275–288. doi:10.1002/jclp.10129

McNaughton, J.L., 2009. Brief interventions for depression in primary care: a systematic review. Can. Fam. Physician 55, 789–96.

Mead, N., MacDonald, W., Bower, P., Lovell, K., Richards, D., Roberts, C., Bucknall, A., 2005. The clinical effectiveness of guided self-help versus waiting-list control in the management of anxiety and depression: a randomized controlled trial. Psychol. Med. 35, 1633–1643. doi:10.1017/S003329170500560X

Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., PRISMA Group, 2009. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. Ann. Intern. Med. 151, 264–9, W64.

Moldovan, R., Cobeanu, O., David, D., 2013a. Cognitive Bibliotherapy for Mild Depressive

Symptomatology: Randomized Clinical Trial of Efficacy and Mechanisms of Change. Clin. Psychol. Psychother. 20, 482–493. doi:10.1002/cpp.1814

Moldovan, R., Cobeanu, O., David, D., 2013b. Cognitive Bibliotherapy for Mild Depressive Symptomatology: Randomized Clinical Trial of Efficacy and Mechanisms of Change. Clin. Psychol. Psychother. 20, 482–493. doi:10.1002/cpp.1814

Nordgren, L.B., Hedman, E., Etienne, J., Bodin, J., Kadowaki, Å., Eriksson, S., Lindkvist, E., Andersson, G., Carlbring, P., 2014. Effectiveness and cost-effectiveness of individually tailored Internet-delivered cognitive behavior therapy for anxiety disorders in a primary care population: A randomized controlled trial. Behav. Res. Ther. 59, 1–11. doi:10.1016/j.brat.2014.05.007

Rohde, P., Stice, E., Shaw, H., Gau, J.M., 2015. Effectiveness trial of an indicated cognitive-behavioral group adolescent depression prevention program versus bibliotherapy and brochure control at 1- and 2-year follow-up. J. Consult. Clin. Psychol. 83, 736–47. doi:10.1037/ccp0000022

Ryan, R., Hill, S., Prictor, M., McKenzie, J., 2013. Cochrane Consumers & Communication Review Group Study Quality Guide Guide For Review Authors On Assessing Study Quality.

Scogin, F., Jamison, C., Davis, N., 1990. Two-year follow-up of bibliotherapy for depression in older adults. J. Consult. Clin. Psychol. 58, 665–7.

Smith, N.M., Floyd, M.R., Scogin, F., Jamison, C.S., 1997. Three-year follow-up of bibliotherapy for depression. J. Consult. Clin. Psychol. 65, 324–7.

Songprakun, W., McCann, T. V, 2015. Using bibliotherapy to assist people to recover from depression in Thailand: Relationship between resilience, depression and psychological distress. Int. J. Nurs. Pract. 21, 716–724. doi:10.1111/ijn.12250

Stice, E., Burton, E., Kate Bearman, S., Rohde, P., 2007. Randomized trial of a brief depression prevention program: An elusive search for a psychosocial placebo control condition. Behav. Res. Ther. 45, 863–876. doi:10.1016/j.brat.2006.08.008

Stice, E., Rohde, P., Gau, J.M., Wade, E., 2010a. Efficacy trial of a brief cognitive–behavioral depression prevention program for high-risk adolescents: Effects at 1- and 2-year follow-up. J. Consult. Clin. Psychol. 78, 856–867. doi:10.1037/a0020544

Stice, E., Rohde, P., Gau, J.M., Wade, E., 2010b. Efficacy trial of a brief cognitive–behavioral depression prevention program for high-risk adolescents: Effects at 1- and 2-year follow-up. J. Consult. Clin. Psychol. 78, 856–867. doi:10.1037/a0020544

Velehorschi, C., Bleau, P., Vermani, M., Furtado, M., Klassen, L.J., 2014. Understanding the role of adjunctive nonpharmacological therapies in management of the multiple pathways to depression. Psychiatry Res. 220 Suppl 1, S34-44. doi:10.1016/S0165-1781(14)70004-6

WHO | Investing in mental health, 2013. . WHO.

Table 1: Cochrane Risk of Bias evaluation results

	Scogin et al. 1990	***Jamison et al. 1995***	***Smith et al. 1997***	***Floyd et al. 2004***	***Mead et al. 2005***	***Floyd et al. 2006***	***Stice et al. 2007***	***Stice et al. 2010***	***Moldovan et al. 2013***	***Rohde et al. 2015***
Random sequence generation	Low	Low	Low	Low	Low	Low	High	High	Low	High
Allocation concealment	Low	Low	Low	Low	Low	Low	High	Low	Low	Low
Blinding of participants and personnel	High	High	High	High	High	High	High	High	High	High
Blinding of outcome assessment	Unclear	Unclear	Unclear	Low	Unclear	High	Unclear	Low	High	Low
Incomplete outcome data	Unclear	Unclear	Unclear	Low	Unclear	Unclear	High	Unclear	Low	Low
Selective reporting	Unclear	Unclear	Unclear	Low	Low	Low	Low	Low	Low	Low

Table 2. General adult population. Characteristics of the RCTs regarding adults. FU (follow up), HRSD (Hamilton rating scale for depression), GDS (Geriatric Depression Scale), BDI (Back Depression Inventory), SCL-70 (Symptom checklist-70), ATQ (Automatic Toughts Questionnaire), DAS-A (Dysfunctional Attitude Scale-Form), BSI (Brief Symptom Inventory), CBT (Cognitive Bibliotherapy Test), CTS (Cognitive Therapy Scale), HASD (Hospital Anxiety and Depression scale), SAS (Social adjustment Scale), GABS (General Attitudes and Beliefs Scale), K-SADS (Schedule for Affective Disorders and Schizofrenia for School-Age Children), MDD (Major depressive disorder), BB (behavioral bibliotherapy), CB (cognitive bibliotherapy), IP (individual psychotherapy), IT (immediate-treatment), DT (delayed treatment), NT (no treatment), WLC group (Waiting list control group), GSH intervention (Guided self-help intervention), AP (assistant psychologist)

Author	FU period	Participants	Mean Age	Setting	Country	Measures	Procedure	Results
Scogin et al. 1990	2 years	67 older adults recruited from the community, eligible if HRSD score>10. 44 participants completed all three assessments. Participants in the treatment study (Scogin 1989), who had completed the 6-month FU, were eligible to participate in the 2-year FU --> 30 participants (14 of the 44 subjects did not participate)	67.2 ± 6.9 years old	The participants were recruited from the community	USA	HRSD, GDS	1) Participants were randomly assigned to: BB (a 241-page self-help book "Control your depression"), CB (a 398-page self-help book "Feeling Good") or DT (control group, assigned either the cognitive or behavioral book 1 month after their initial interview). All subjects were telephoned weekly; they were assessed at pretreatment, posttreatment 1 month later and at a 6-month FU. 2) Participants in the 2-	1) No significant differences between the BB and CB groups, with both groups showing significant improvement in depression scores compared with the DT condition. Treatment gains were maintained at a 6-month FU. 2) 2-year FU assessments: the BB and CB were combined in these analysis because of the lack of differences in outcome in prior analysis. HRSD --> no significant effect for time (posttreatment depression levels were not significantly changed); GDS -->

							years FU study were given a clinical interview for depression by telephone (using HRSD) and were mailed a self-report depression measure to fill out and return or were administered the self-report measure over the telephone (using GDS).	significant time effect (participants reported a decrease in depression levels from the posttreatment assessment to the 2-year FU.
Jamison et al. 1995	3 months	80 individuals, eligible for participation if: a) >10 on 21-item version HRSD, b)>10 21-item BDI, c) met DSMIII criteria for a mild or moderate major depressive episode. 8 participants (10%) dropped out	40.0 years old	Individuals responded to various media announcements concerning the study.	USA	HRSD, BDI, SCL-70, ATQ, DAS-A, compliance (number of pages they read weekly), participation (number of schedules completed in the booklet accompanying the book), comprehension (examination on the	Participants were randomly assigned to CB (they were requested to read "Feeling Good" within 4 weeks and were called by a research assistant once per week) or DT CB (they were placed on a waiting list for 4 weeks). The treatment group was assessed three times: before treatment (T1), immediately following treatment (T2), 3 month following treatment (T3).	1) Experimental group differed significantly from T1 to T2 on the HRSD, BDI, SCL-70, ATO, DAS (in contrast, the control group did not differ significantly from T1 to T2); 2) there were no significant differences between T2 and T3 assessments for each of the five variables, suggesting that the treatment gains were maintained); 3) determining the % of participants who met DSMIII criteria for a major depressive episode at the various times of assessment, all participants were

						information of the book)		required to meet criteria at T1, 70% no longer met criteria at T2, 75% did not meet criteria at T3.
Smith et al. 1997	3 years	1) 72 participants of Jaminson study (1995) had completed all three assessments; they were eligible if: >10 on the HRSD, >10 21-item BDI, met the criteria of the DSMIII for a mild or moderate major depressive episode. 2) 50 participants were eligible for inclusion in the 3-year FU (22 did not participate in the FU).	41.6±10.0 years old	Phone call	USA	Individuals who agreed to participate in the 3-year FU were interview over the phone. HRSD and BDI were given.	1)They were randomly assigned to a) CB (Feeling Good to read within a 4week time frame and with phone calls weekly): they were assessed at initial interview, immediately after and 3 months after treatment or b) DT CB: they were assessed at initial interview, 1 month later immediately before starting treatment and immediately after treatment. 2) Subjects, participating in the 3-year FU, were interview over the phone. The treatment gains were assessed using data from pretreatment, posttreatment and the 3y FU.	1) Significant effect for time on BDI and HRSD (significant change in BDI and HRSD scores across times of assessment). From pretreatment to FU: significant decrease in HRSD and BDI score (no change from posttreatment to FU in HRSD and BDI). 2) 71% of participants did not meet criteria for major depression at FU (they determined diagnostic status by evaluating responses to questions on the HRSD and BDI).

Floyd et al. 2004	3 months	Inclusion criteria: >60y,no life-threatening illness, ability to read, no concurrent psychological or psychiatric treatment except antidepressant medication, absence of thought disorders, bipolar disorder, alcoholism or substance dependence or immediate suicide risk, diagnosis of DSM-IV of MDD or minor depression or dysthymia and >10 HRSD, MMSQ >8. 46 volunteers entered the study but 14 participants dropped out.	68 years old (From 60 to 80 years old)	Volunteers were enrolled from the community among who responded to newspaper artcle	USA	HRSD, GDS and BSI; compliance: number of pages read in Feeling Good (for bibliotherapy participants); percentage of assignments completed (for individual psychotherapy condition); CBT, CTS.	The participants were randomly assigned to: 1) IT CB: to read Feeling Good and to complete all the homework exercises in the book within 1month (an investigator called weekly); the assessment schedule was T1 at pretretment, T1 midtreatment at two weeks, T2 posttreatment at 4weeks, T3 at three month FU, 2) IT IP 12 to 20 sessions of cognitive therapy (2 sessions each week for the first 4weeks and then weekly sessions for the remaining 8 to 12 weeks); the assessment schedule was T1 at pretretment, T2 at posttreatment 12weeks, T3 at 3month FU 24weeks. 3) DT: they returned in 4weeks for another pretreatment assessment and then would begin one of the two treatments.	1) From T1 to T2: a) IT IP was superior to DT on the HRSD, GDS, GSI; b) IT CB was superior to the DT on the HRSD and GDS 2) Pretreatment to posttreatment: IP participants improved more than CB participants (GSD and GSI, non significant for HRSD). 3) Posttreatment to 3month FU: continued improvement for HRSD in CB participants (IP participants showed no change). 4) Outcome at 12 to 16 weeks after the start of treatment: comparison of IP posttreatment data vs CB 3-month FU data indicated no significant differences on any of the variables. 5) End-point analysis: a) participants in both treatments improved from pretreatment to posttreatment on HRSD and GDS respectively for CB and for IP, b) there were no

								differences between posttreatment and FU for either of the treatments. 6) Clinically significant outcome were not different between the treatments. 7) CBT: IT CB was superior to IT IP and to DT at T2
Mead et al. 2005	3 months	Heterogeneous mix of patients with symptoms of depression and anxiety who are routinely referred from primary care for psychological therapy. Inclusion criteria: >18y, referred to the participating psychological therapy service with BDI >14 or HASD >11 --> n=114	Guided self-help group: 38.7 ± 10.7 years old Waiting list control group: 40.8 ± 11.7 years old	Psychological therapy services in the North West of the UK.	UK	All outcomes were measured at baseline and at 3 months. HADS, BDI, SAS, measures of the treatment process (patient reported use of the self-help manual, questionnaire concerning aspects of their relationship with their	1) WLC group involved care patients from primary-care professionals (general support, antidepressant medication, referral to community agencies). 2) GSH intervention involved 2 components: a) a written self-help manual designed for the trial (the self-help in anxiety and depression SHADE trial), b) one-to-one sessions with an AP. GSH sessions were planned to be brief with a maximum of 4 per patient lasting 15-30' each.	The effect size estimates on three outcomes at 3 months showed some benefits for GSH, but there were small according to current conventions and only the effect on the social functioning scale approached statistical significance.

						psychologists).		
Floyd et al. 2006	2 years	23 participants from Floyd, Scogin, McKendree-Smith, Floyd, and Rokke study (2004)	-	Phone Calls	USA	HRSD and GDS, the mood disorders questions from the Structured Clinical Interview for the DSM-IV and a FU questionnaire over the telephone.	The participants were randomly assigned to CB or cognitive psychotherapy	There was a significant improvement from the pretreatment assessment to 2-year FU on the HRSD. There were no significant differences between the CB or individual psychotherapy participants at 2-year FU on the GDS. There were significantly more recurrencies of depression during 2-year FU among CB group than in individual psychotherapy group.

Table 3. Adolescent and young adult population (attending high school and/or college). Characteristics of the RCTs regarding young people. FU (follow up), HRSD (Hamilton rating scale for depression), GDS (Geriatric Depression Scale), BDI (Back Depression Inventory), SCL-70 (Symptom checklist-70), ATQ (Automatic Toughts Questionnaire), DAS-A (Dysfunctional Attitude Scale-Form), BSI (Brief Symptom Inventory), CBT (Cognitive Bibliotherapy Test), CTS (Cognitive Therapy Scale), HASD (Hospital Anxiety and Depression scale), SAS (Social adjustment Scale), GABS (General Attitudes and Beliefs Scale), K-SADS (Schedule for Affective Disorders and Schizofrenia for School-Age Children), MDD (Major depressive disorder), BB (behavioral bibliotherapy), CB (cognitive bibliotherapy), IP (individual psychotherapy), IT (immediate-treatment), DT (delayed treatment), NT (no treatment), WLC group (Waiting list control group), GSH intervention (Guided self-help intervention), AP (assistant psychologist)

Author	FU period	Participants	Mean Age	Setting	Country	Measures	Procedure	Results
Stice et al. 2007	6 months	225 students from two high schools and one college from 15 to 22 y	18.4 ± 1.3 years old	Two high school and one college	USA	Participants completed a survey at pretest, posttest (1 month later), 1 month FU and 6-months FU that assessed depressive symptoms in the past week.	The participants were randomly assigned, within blocks created by age and school, to: 1) cognitive prevention program; 2) supportive-expressive group; 3) CB; 4) journaling; 5)WLC. Recruited using mass mailings and emails, handbills distributed after classes and posted fliers. Participants with evidence of clinically significant	Cognitive program showed significantly greater decreases from pretest to posttest and from pretest to 1-month FU, but not from pretest to 6-month FU. Participants in the supportive-expressive, expressive writing and journaling also showed significantly greater decreases in depressive symptoms than WLC group from pretest to posttest but

							depression were excluded and provided with treatment referrals.	these effects were no significant to 1-month and to 6-month FU. CB group was the only one showing a significant decrease from pretest to postest confirmed to FU.
Stice et al. 2010	2 years	341 at-risk youths from 14 to 19 yo, recruited at six schools. Exclusion criteria: major depression diagnosed with a depression screener (CES-D)	15.6 ± 1.2 years old	High School	USA	Sixteen items assessing major depression symptoms based on DSM-IV were adapted from the K-SADS, BDI, SAS.	Participants were recruited using mass mailinglist, emails, handbills. Participants were randomly assigned to: 1) group cognitive behaviour therapy (six weekly one hour sessions); 2) supportive-expressive; 3) CB or 4) educational control group. Participants completed a survey and diagnostic interview at pretest, posttest, 6-month, 1- and 2-year FU.	CB did not show significantly greater symptom reductions than brochure controls at either FU. Cognitive therapy showed significantly greater reductions in depressive symptoms than CB at the 1- and 2-year FU. Supportive expressive group showed significantly greater symptom reductions at 1- and 2-year FU than CB. Cognitive therapy showed greater reductions in BDI scores than CB at the 2-year FU. CB did not show significantly greater reductions in depressive symptoms than brochure controls at either FU.

Moldovan et al. 2013	3 months	96 participants were all first year psychology students. Inclusion criteria: 1) BDI between 10 and 16 and 2) not being in psychotherapy or on psychotropic medication.	Treatment:: 22.4 ± 2.7 Delayed treatment 21.9 ± 1.84 Placebo: 23.1 ± 2.1 No treatment 24.7 ± 2.1	College	Romania	They were examined using BDI-II, ATQ, DAS, GABS at pre-treatment, mid-treatment, post-treatment FU.	Participants were assigned to: 1) IT CB; 2) DT; 3) placebo or 4) NT. A randomization plan was generated by an independent researcher in order to randomly allocate participants to one of the four conditions. Weekly telephone calls were made to participants.	In the CB group: 1) Significant decrease in depressive symptoms for the three assessment times. 2) no significant differences in terms of depressive symptoms, suggesting that treatment gains were maintained. CB was also found to be superior to the DT and NT conditions in terms of symptoms and cognition
Rohde et al. 2015	2 years	378 high school students. They did not have a current diagnosis of major depressive disorder or acute suicidal ideation. either : CB group, CB or brochure control. Participants completed a survey and diagnostic interview at the pre,	15.5 ± 1.2 years old	High School	USA	K-SADS, SAS-Self Report for Youth, substance use.	Participants were randomly assigned to 1) Cognitive behavioural group prevention intervention (the 6 weekly 1-hour sessions); 2) CB (Feeling Good); 3) Brochure only control condition participants were given a brochure that describes major depressive disorder and recommends	1) Major depressive disorder onset over FU was significantly greater for partecipants in CB compared to cognitive intervention group; MDD risk did not differ for cognitive intervention group vs brochure control or for CB vs brochure control. 2) MDD or minor depression onset: same results (depressive disorder hazard

		post, and 6-, 12-, 18-, and 24-month FU.					treatment for depressed youth.	ratio over FU was 1,87 times greater in CB compared to cognitive intervention group; cognitive intervention group vs brochure control and CB and brochure control did not differ in incidence). 3) Cognitive intervention group did not differ from either CB or brochure control on social adjustment and substance use.