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Bibliotherapy for Sexual Dysfunctions: A Systematic Review and Meta-Analysis

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ABSTRACT

Aim: The objective of this study was to assess the efficacy of bibliotherapy for sexual dysfunctions, when compared with no treatment and compared with other interventions.

Methods: MEDLINE, EMBASE, and PsycINFO were searched from 1970 to January 2020. Selection criteria were randomized controlled trials evaluating assisted or unassisted bibliotherapy for all types of sexual dysfunctions compared with no treatment (wait list or placebo) or with other psychological interventions. Bibliotherapy is defined as psychological treatment using printed instruction to be used by the individual or couple suffering from sexual dysfunction. Primary outcome measures were male and female sexual functioning level and continuation/remission of sexual dysfunction. Secondary outcomes were sexual satisfaction and dropout rate. Sexual functioning and sexual satisfaction were self-reported by participants using validated questionnaires.

Results: Fifteen randomized controlled trials with a total of 1,113 participants (781 women; 332 men) met inclusion criteria. Compared with no treatment, unassisted bibliotherapy resulted in larger proportions of female participants reporting remission of sexual dysfunction, and sexual satisfaction was higher in treated participants, both female and male participants. Compared with no treatment, assisted bibliotherapy had significant positive effects on female sexual functioning; no effects on male sexual functioning were found. Results of unassisted and assisted bibliotherapy did not differ from those of other intervention types on any outcome. Throughout, no differences between study conditions were found regarding dropout rates. The certainty of the evidence for all outcomes was rated as very low.

Conclusion: We found indications of positive effects of bibliotherapy for sexual dysfunctions. Across studies, more significant effects were found for women than for men. However, owing to limitations in the study designs and imprecision of the findings, we were unable to draw firm conclusions about the use of bibliotherapy for sexual dysfunction. More high quality and larger trials are needed. Relevant outcome measures for future studies should be defined as well as unified grading systems to measure these endpoints. In addition, future studies should report on treatment acceptability and adherence. **van Lankveld JJDM, van de Wetering FT, Wylie, K et al. Bibliotherapy for Sexual Dysfunctions: A Systematic Review and Meta-Analysis. J Sex Med 2021;18:582−614.**

Key Words: Sexual Dysfunction; Bibliotherapy; Meta-Analysis; Treatment Effect; Sexual Functioning; Sexual Satisfaction; Dropout

Epidemiologic studies have revealed high prevalence rates of sexual dysfunctions in both women and men.[1−5] Sexual dysfunction is often associated with increased levels of psychological distress and sexual dissatisfaction.[6−8] Premature ejaculation is self-reported by 4−30% of men in older prevalence studies.[9] Lower prevalence rates are found when stopwatch timing is performed.[9] Estimates of hypoactive sexual desire disorder in men range from 15 to 25%.[9] Erectile dysfunction prevalence increases with age.[10] Erectile dysfunction is reported to affect 1−10% of men up to 40 years of age, 2−15% of men between 40 and 49 years of age, and 20−40% of men between 60 and 69 years of age.[9] Female sexual desire disorder and sexual arousal disorder were combined into female sexual interest/arousal disorder in the 2013 version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). In older epidemiologic investigations, however, hypoactive sexual desire disorder (low or absent sexual desire) is the most common complaint in

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women, with estimates varying widely between countries, ranging from 15 to 50%. Sexual pain disorder, including both dyspareunia and vaginismus (DSM-5: genitopelvic pain/penetration disorder), is also suggested to be highly prevalent, especially in women between the ages of 18 and 29 years of age, with estimates ranging from 1−2% in the United Kingdom and Australia to > 50% in Iran.[9] The estimates of the prevalence of orgasmic problems range from 11 to 37%. Prevalence rates vary substantially, depending − among others − on age, and whether or not problem-associated distress is considered.[6] In DSM-5,[11] a diagnosis of sexual dysfunction, regardless of type, cannot be made in the absence of distress.

The psychological treatment of sexual dysfunction has been dominated since its introduction in the 1970s by directed practice behavioral approaches. The "sensate focus" therapy designed by Masters and Johnson[12] gave great impetus to this development. In later years, cognitive approaches to the treatment of sexual dysfunctions were introduced.[13,14] More recently, mindfulness-based interventions to treat sexual dysfunctions have been introduced.[15−18] Although outcomes of psychological treatment have not been adequately studied for all types of different sexual dysfunctions, recent reviews and meta-analyses show that psychological interventions are efficacious treatments for sexual dysfunctions in women and men.[18−21] Outcomes investigated were various aspects of sexual functioning, including sexual desire, sexual arousal, orgasmic functioning, sexual pain, and sexual satisfaction. Although sexual satisfaction is sometimes considered as one of the aspects of sexual functioning, it is often treated as a separate, evaluative dimension of sexuality. We will also take this latter approach in the present study. The largest effects on symptom severity and sexual satisfaction in randomized controlled trials (RCTs) comparing cognitive-behavioral interventions with waiting list controls were found in women with low sexual desire and in women with orgasmic dysfunction.[19] However, the number of comparative studies was limited, and large variability in effect sizes was found across studies.[19]

Bibliotherapy refers to the treatment of mental and physical health problems in which written and printed material plays a crucial role.[22−26] The material typically presents an approach that is based on methods commonly used in therapist-administered sex therapy,[12,27,28] including − among others − the stop-start method for men with premature ejaculation, for example,[29,30] the program of sensate focus exercises for couples with various types of sexual dysfunctions,[31] and cognitive interventions.[32−34] In the initial phase of bibliotherapy for sexual dysfunctions, well-known self-help manuals in this domain were written by Barbach,[35] Heiman et al,[36] and Zeiss and Zeiss.[37] More recent manuals were published by Mintz[32,38] and van Lankveld.[33,34] Bibliotherapy is often applied within patient-directed formats with minimal or no therapist contact, (eg, the patient buys a self-help guide and directs herself through treatment). However, it has also been applied in a therapist-directed format in which the therapist provides a manual or handouts and then guides the patient through the information and as an adjuvant to therapist-administered treatment.[39−44] Since the advent of the Internet, sex therapy has also successfully been administered online using various formats of e-mail therapy,[45] fully Web-based interventions,[46,47] and blended applications in which online interventions were combined with direct therapist contact.[48,49] Nevertheless, bibliotherapy has continued to occupy a relevant position in the delivery of sex therapy,[19−21,50] although no data exist on the frequency of its current use in clinical practice.

In the meta-analysis of 40 studies of bibliotherapy for various mental health problems by Gould and Clum,[23] bibliotherapy for sexual dysfunctions had one of the largest mean effect size (ES = 1.86), compared with other target problems (eg, smoking, ES = 0.46; anxiety disorders, ES = 1.11; depression, ES = 0.74). The overall ES in this meta-analysis was 0.76. However, this positive finding for bibliotherapy for sexual dysfunction was based on a single study.[51] Bibliotherapy for sexual dysfunctions again showed the strongest effect (ES = 1.28) of all categories in the meta-analysis of bibliotherapy by Marrs.[24] This ES was based on 4 studies, all of which were published in high-ranking scientific journals. Marrs[24] arrived at an overall ES of 0.57 for all 70 studies included in the meta-analysis. In another meta-analysis comprising results of 12 independent studies, van Lankveld[26] found an unweighted effect size of 0.68 (95% CI: 0.23−1.14) measured after treatment. The effect size was 0.50 (95% CI 0.27−0.72) when the outcomes were weighted for sample size. However, the efficacy of bibliotherapy was not established for the majority of sexual dysfunctions at that time because almost all studies (87%) were related to orgasmic disorders.

Until this last meta-analysis, bibliotherapy for sexual dysfunctions was fully focused on the directed-practice approach of Masters and Johnson,[12] or modifications of that approach, in which the therapist in detail prescribes the exercises the patient or couple should perform (eg, stop-start, sensate focus exercises). Despite the strong rise of Internet-based therapies for sexual dysfunctions, bibliotherapy remained a relevant approach for people with sexual problems.[48,52] New bibliotherapy interventions for sexual dysfunctions have also appeared in print in the last decades.[32−34,38] In more recent RCTs, cognitive behavioral therapy for sexual dysfunctions was investigated in a bibliotherapy format.[53−57]

Selective attrition of participants in outcome research has been found to present a major threat to the internal and external validity of the findings in various fields of research, including smoking cessation[58] and substance use.[59] The risk of high dropout rates has also been suggested to be high in bibliotherapy applications, both for sexual dysfunction[60] and for other disorders, including eating disorders.[61] We will therefore investigate dropout in the present study.

The aim of this systematic review and meta-analysis is to provide a comprehensive review of all bibliotherapy approaches

for sexual dysfunctions and to update and expand the previously published evidence. In addition, we have followed a more contemporary meta-analytical approach, which now includes a more systematic evaluation of the certainty of the evidence, and also uses more sophisticated meta-analytical statistics. Research questions addressed in this manuscript concern the effects of assisted or unassisted bibliotherapy for sexual dysfunctions on sexual functioning, sexual satisfaction, and dropout, when compared with no treatment (wait list or placebo) or with other interventions.

METHOD

Participants

Studies considered eligible for inclusion were RCTs, both published and unpublished. Quasirandomized controlled trials and crossover trials were excluded. Participants were male and female individuals, aged 16 to 65 years, with a primary diagnosis of sexual dysfunction as per the International Classification of Diseases 11th edition[62] or DSM-5.[11] criteria or previous editions of these classification systems. The upper age limit was chosen to focus on sexual dysfunctions with predominant psychological causes, in view of the stronger involvement of biological factors in the sexual functioning of older individuals.[9,10] Sexual dysfunctions include male and female hypoactive sexual desire disorder, male erectile disorder, female sexual arousal disorder, female and male orgasmic disorder, male premature ejaculation, male and female dyspareunia, and female vaginismus. Sexual dysfunction that is attributable to pharmacotherapy adverse effects and to general medical conditions, as well as sexual dysfunction with comorbid mental disorders and with comorbid relationship difficulties, was included.

Bibliotherapy Interventions

The bibliotherapy interventions examined were (i) behavior therapy (eg, differential reinforcement of desired behavior, as in the treatment of female orgasmic disorder[36]; exposure to feared conditions, such as systematic desensitization for erectile disorder[14] and female vaginismus[63]) and (ii) cognitive behavioral treatment, for example, cognitive restructuring.[64] Studies providing bibliotherapy alone were included in the review but also when bibliotherapy was combined with audiovisual aids, including instruction videos. Studies providing bibliotherapy with limited (minimal) therapist contact (eg, through short telephone calls, through e-mail, or through a small number of direct contacts with a therapist; altogether totaling a maximum of 2 hours per treated participant) were included. Studies providing totally self-administered bibliotherapy (with no therapist support at all) were included, although contact may be required for assessment purposes.

Comparator interventions were (i) no treatment, placebo, or waiting list (we will further refer to this as "no treatment") and (ii) other interventions, including therapist-delivered sex therapy involving more intensive therapist support, such as sensate focus therapy[12] or cognitive behavioral sex therapy, for example[64]

Types of Outcome Measures

The primary outcome measures in this review were (i) male sexual functioning (sexual desire, erectile functioning, ejaculatory latency) and (ii) female sexual functioning (sexual desire, sexual arousal/lubrication, orgasm, sexual pain). These outcomes could be reported as level of sexual functioning, sexual symptom level, and as remission of sexual dysfunction as per well-established diagnostic criteria, for example, DSM-IV.[65] Sexual functioning and symptom level are measured using a range of rating scales, for example, self-rating scales of duration of male penile erection (erectile disorder), attainment of orgasm or ejaculation (orgasmic disorder), latency time to ejaculation (premature ejaculation), and successful or painless intercourse (in case of sexual pain disorder). Frequently used outcome measures included the Sexual Interaction Inventory,[66] the Sexual History Form,[67] the Derogatis Sexual Functioning Inventory,[68] the Golombok Rust Inventory of Sexual Satisfaction,[69] and the Female Sexual Function Index.[70] Sexual functioning and sexual symptom levels could be presented as continuous (means and SD) or dichotomous outcomes (recovery/non-recovery). For dichotomous outcomes, improvement was defined in accordance with the criteria used in each study. Target outcome variables were measured using patient-, partner-, or clinician-rated scales. Secondary outcomes were (i) sexual satisfaction and (ii) dropout from trials after randomization.

For each outcome in included studies, articles were scrutinized to identify the scales used and whether alterations had been made to these scales. Established scales that had undergone minor modifications were included in the review when an appropriate rationale and description of modifications was provided by trial authors. Timing of outcome assessment after intervention was considered "short term" when the period between post-treatment and follow-up assessment took 3 to 6 months and "long term" when it took between 6 and 12 months.

Search Strategy

The studies included in this article were identified by means of (i) searches in MEDLINE, EMBASE, and PsycINFO from 1970 to September 2020. Search fields were title and abstract. The following search terms were used: bibliotherapy, self-care, self-help, self-change, self-directed, self-help techniques, sexual dysfunctions, sexual disturbances, sexual problems, sexual difficulties, sexual disorders, orgasm*, ejaculat*, impotence, minimal guidance, minimal contact, written, manual*, therap*, interven*, treatment*, and instruct*; (ii) hand searching of the following journals: *Archives of Sexual Behavior* (1971–2020), *The Journal of Sex and Marital Therapy* (1974–2020), *The Journal of Sex Research* (1965–2020), *Sexual and Relationship Therapy* (1986–2020), and *Sexual Dysfunction* (1998); (iii) hand searching of the reference lists of relevant articles; and (iv) a prospective trial register (clinicaltrials.gov) was searched using key words ([sexual dysfunction OR sexual disorder] AND [bibliotherapy OR self-help OR minimal therapy]). The first author on all included studies and experts in the field

were contacted for information regarding published and unpublished trials.

Selection Process and Eligibility

2 authors (JvL, FW) independently assessed all titles and abstracts of studies identified by the electronic search strategies to see if studies were likely to be relevant. Selected articles were obtained and assessed independently by 2 of the review authors (JvL, KW). In case of doubt or disagreement, the full article was obtained for inspection.

Risk of Bias and Imprecision Assessment

3 authors (JvL, KW, FW) independently assessed risk of bias for each study using the criteria outlined in the Cochrane Handbook for Systematic Reviews of Interventions.[71] We resolved any disagreements by discussion or by involving another author (RS). We assessed the risk of bias as per the following domains: (i) random sequence generation, (ii) allocation concealment, (iii) blinding of participants and personnel, (vi) blinding of outcome assessment, (v) incomplete outcome data, (vi) selective outcome reporting, and (vii) other bias. We judged each potential source of bias as high, low, or unclear. We considered blinding separately for different outcomes where necessary. When considering the certainty of the evidence for treatment effects, we took the risk of bias into account for the studies that contributed to that outcome.

We used the 5 GRADE considerations (risk of bias, consistency of effect, imprecision, indirectness and publication bias) to assess the certainty of a body of evidence as it relates to the studies that contribute data for the prespecified outcomes. We used the methods and recommendations described in Section 8.5 and Chapter 12 of the Cochrane Handbook for Systematic Reviews of Interventions,[71] using GRADEpro software (GRADEpro GDT). We justified all decisions to downgrade the quality of studies using footnotes and make comments to aid the reader's understanding of the review where necessary.

We used risk ratios in case of dichotomous outcomes when relevant, that is, in studies investigating effects of bibliotherapy on orgasmic ability, ability to allow vaginal intercourse, or remission of the diagnosis.

Data Analysis

Data were extracted independently by 2 authors (JvL, KW). Any disagreements between the 2 review authors were resolved through discussion with the other review authors.

The main planned comparisons were (i) bibliotherapy vs no treatment (wait list, placebo) and (ii) bibliotherapy vs other interventions, with separate analyses for unassisted and assisted bibliotherapy.

We applied random-effects models for all meta-analyses with 95% CI. For continuous outcomes, when studies used the same outcome measure for a comparison, we pooled mean differences.

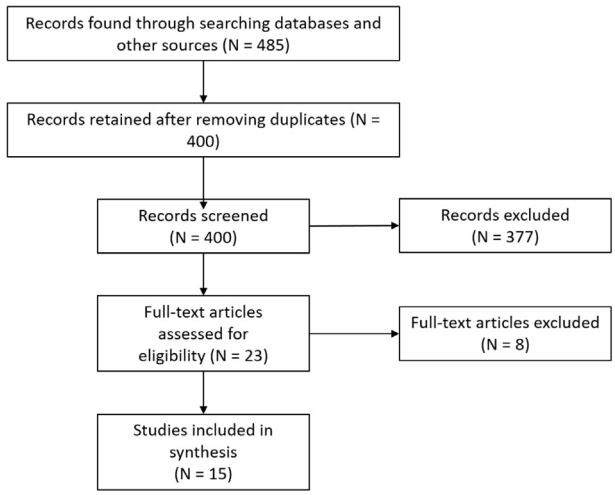

Figure 1. Study flow diagram.

Where different measures were used to assess the same outcome for a comparison, we pooled standardized mean differences (SMDs). Forest plots were created to visually present the effects. If studies with multiple treatment groups were found for the same comparison, then we halved the control group. We did not impute missing outcome data for any outcomes. We created "Summary of findings" tables using the following outcomes: sexual functioning level or sexual symptom level as measured using validated questionnaires, remission of sexual dysfunction, questionnaire-based sexual satisfaction, questionnaire-based quality of life, and postrandomization dropout rate from the trial.

Statistical heterogeneity was tested using the natural approximate chi-squared test, which provides evidence of variation in effect estimates beyond that of chance. Because the chi-squared test has low power to assess heterogeneity in studies including a small number of participants or trials, the P value was planned to be conservatively set at 0.1. Heterogeneity was planned to be tested using the I^2 statistic, which calculates the percentage of variability due to heterogeneity rather than chance. We interpreted the I^2 statistics in relation to the size of the included studies. We used the following interpretation as a rough guide: 0−40%, might not be important; 30−60%, may represent moderate heterogeneity; 50−90%, may represent substantial heterogeneity; and 75−100%, considerable heterogeneity. We planned subgroup analyses for different age groups, but owing to the absence of studies reporting age effects, we were not able to do so. We planned to produce and visually inspect funnel plots when more than 10 studies are available to test for publication bias, but we were not able to do so. To test the robustness of decisions made in the review process, sensitivity analysis were planned by including studies that scored a low risk of bias for (i) allocation concealment and (ii) incomplete outcome data.

RESULTS

The searches identified 485 references. Figure 1 presents the flow diagram of the search process, initial results, eligible records,

Table 1. Characteristics of included studies

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
1	Balzer (2012)[76]	Sample size: N = 55 Diagnosis: Women with low sexual desire Method of diagnosis: No use of diagnostic criteria Age: mean age 42.64 y (range 29 to 57 y) Gender: 100% women Location: United States Co-morbidities: not reported.	(1) **Experimental arm** Duration: 6 wk Treatment protocol: i) a bibliotherapy condition in which participants read A Tired Woman's Guide to Passionate Sex (Mintz, 2009), ii) a second bibliotherapy condition in which participants read another popular press self-help book entitled Reclaiming Your Sexual Self: How You Can Bring Desire Back into Your Life (Hall, 2004) Therapist/Face-to-Face Contact: No (2) **Comparator arm** Duration: 6 wk Treatment protocol: wait-list control group Therapist/Face-to-Face Contact: No	Time points for Assessment: before and after treatment and 7-wk follow-up **Primary outcome:** Sexual symptom level: The Hurlbert Index of Sexual Desire (Apt & Hurlbert, 1992); Female Sexual Function Index (FSFI; Rosen et al, 2000) **Secondary outcome:** Not reported.	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy. 2 (?) Method of allocation not described. 3 (+) Blinding not possible owing to the characteristics of the interventions (bibliotherapy vs waiting list). 4 (+) Blinding not possible due to the characteristics of the interventions (bibliotherapy vs waiting list). 5 (+) All relevant outcomes were patient reported. As patients were unblinded (intervention was impossible to blind), the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (+) Excluded from final samples owing to incomplete outcome measures: MI group: n = 5; HI group n = 1; WLG n = 3 Post-test attrition rate for the combined intervention groups was 10.5%. Post-test attrition rates for the MI and HI groups were 23.5% and 0%, respectively. Post-test attrition rate for the WLC group was 6.7%. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
2	Dodge, Glasgow & O'Neill, (1982)[51]	Sample size: N = 13 Diagnosis: Women with orgasmic disorder Method of diagnosis: none Age: inclusion criteria: at least 18 y of age. Authors state that the	(1) **Experimental arm** Duration: 7 wk Treatment protocol: Minimal contact bibliotherapy (bibliotherapy alone, CBT) (A self-help manual was used (Heiman, LoPiccolo & LoPiccolo, 1976) + 3 half	Time points for assessment: 3 wk after treatment **Primary outcome:** Sexual symptom level: Sexual Arousal Inventory (Hoon, Hoon & Wincze, 1976)	1 (?) Insufficient information about the sequence generation process to permit judgment. 2 (?) Method of allocation not described. 3 (+) Blinding not possible due to

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
		average age of participant was late 20s. Age not further specified. Sex: 100% women Location: United States Comorbidities: Not reported	hour meeting with a therapist (students in clinical psychology). Sessions included discussion of progress and preview of new material to be read and and exercises to do). (2) **Comparator arm** Duration: 7 wk Treatment protocol: Delayed treatment (waiting list) (Information material on human sexuality (40 pages) was provided, not the self-help manual). Therapist/Face-to-Face Contact: No	Sexual Interaction Inventory (LoPiccolo & Steger, 1976) Heterosexual Behavior Inventory (Robinson & Annon, 1975) **Secondary outcome:** Not reported.	the characteristics of the interventions (minimal-contact manual condition vs delayed-treatment information). 4 (+) Blinding not possible owing to the characteristics of the interventions (minimal-contact manual condition vs delayed-treatment information). 5 (+) All outcomes were patient reported. As patients were unblinded (intervention was impossible to blind), the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (?) Not described, probably no missing outcome data. 7 (?) Study protocol not available. 8 (-) There were no significant differences between groups on any of several demographic variables. No indications of other bias.
3	Dow (1983)[31]	Sample size: N = 48 Diagnosis: Women (N = 26) and men (N = 22) with mixed sexual dysfunctions Method of diagnosis: None. Age: female (M = 28.63) (SD = 5.8); male (M = 36.7) (SD = 10.4) Sex: 54% women; 46% men. Location: United Kingdom Comorbidities: Not reported.	(1) **Experimental arm** Duration: 7 wk Treatment protocol: Minimal contact bibliotherapy (bibliotherapy alone, CBT) (A self-help manual was used (Heiman, LoPiccolo & LoPiccolo, 1976) + 3 half h meeting with a therapist (students in clinical psychology). Sessions included discussion of progress and preview of new material to be read and exercises to do). (2) **Comparator arm** Duration: 7 wk Treatment protocol: Delayed treatment (waiting list) (Information material on human sexuality (40 pages) was provided, not the self-help manual). Therapist/Face-to-Face Contact: No.	Time points for assessment: before and after treatment and 4-mo follow-up **Primary outcome:** Sexual symptom level: Sexual Interaction Inventory (LoPiccolo & Steger, 1974); Semantic Differential Measure of Sexual Attitudes (Whitehead & Mathews, 1977) **Secondary outcome:** Self-Ratings of Sexual Pleasure/Anxiety/Disgust (PAD) (regarding shared sexual activity)	1 (-) It concerns a randomized study. Participants were assigned using a pre-arranged random list. 2 (+) No concealment of allocation. 3 (+) The participants themselves were not blind to condition. 4 (?) Not described. 5 (-) Assessors were kept blind to condition. 6 (?) Dropouts within the first 5 wk were replaced. Attrition was reported in large detail as to circumstances and motivation of those dropped out.

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
					7 (?) Study protocol not available. 8 (+) Diagnostics are not clear enough for replication.
4	Hahn (1981)[72]	Sample size: N = 60 Diagnosis: Women who had never previously experienced orgasm by any stimulation (including masturbation), or had previously with self-stimulation, but were unable to do so currently. Method of Diagnosis: None. Age: M = 35.0 y (range = 21–61 y) Sex: 100% women Location: United States Comorbidities: unclear.	(1) **Experimental Arm** Duration: 5 wk Treatment protocol: Direct group Therapist/Face-to-Face Contact: Yes. (2) **Experimental arm** Duration: 5 wk Treatment protocol: Vicarious group Therapist/Face-to-Face Contact: yes. (3) **Experimental arm** Duration: 5 wk Treatment protocol: Vicarious variant group Therapist/Face-to-Face Contact: yes. (4) **Comparator arm** Duration: 5 wk Treatment protocol: Programmed manual group Therapist/Face-to-Face Contact: Yes.	Time points for assessment: before and after treatment. **Primary outcome:** Sexual symptom level: Sexual Experience Inventory (self-developed); Sexual Attitudes and Beliefs Scale (Fortmann & Mann, 1972); S-R Inventory of Stress (adapted from Spielberger, 1972 and Zuckerman, 1960); Jourard-Secord Body Image Scale (Secord & Jourard, 1953); Self-Esteem Scale (Rosenberg, 1965); Internal-External Scale (Rotter, 1966); Attitudes toward Women Scale (Spence & Helmreich, 1972); Assertion Inventory (Gambrill & Richey, 1975); Physiological Response Inventory (self-developed) **Secondary outcome:** Not reported.	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy. 2 (?) Method of allocation not described. 3 (+) Blinding impossible owing to the characteristics of the interventions. 4 (+) The same female therapist was present in all of the groups and therefore she could not be blind to which intervention a participant received. 5 (+) All outcomes were patient reported. Patients most likely not blinded owing to the characteristics of the interventions. 6 (?) Not described. 7 (?) Study protocol not available. However, all intended outcomes in method section were reported. 8 (-) No indications of other bias.
5	Heinrich (1976)[73]	Sample size: N = 44 Diagnosis: Women with primary orgasmic dysfunction Method of diagnosis: Clear inclusion criteria were used. Age: only reported for total group, M = 25 (SD = 5); range = 18 to 40 y Sex: 100% women Location: United States Comorbidities: None ("no other current significant medical or psychological disorders present" was set as an exclusion criteria).	(1) **Experimental arm** Duration: 5 wk Treatment protocol: Group therapy Therapist/Face-to-Face Contact: yes (2) **Experimental arm** Duration: 5 wk Treatment protocol: Bibliotherapy Therapist/Face-to-Face Contact: No (3) **Comparator arm** Duration: 5 wk Treatment protocol: Waiting list Therapist/Face-to-Face Contact: No	Time points for assessment: before and after treatment (at 5 wk) and 2-mo follow-up **Primary outcome:** Sexual symptom level: Sexual Interaction Inventory (LoPiccolo & Steger, 1974); Survey of Sexual Activity (self-developed); Internal-External Locus of Control Scale (Rotter, 1966); Orgasm Follow-up Questionnaire (self-developed); MMPI (Hathaway & McKinley, 1943) **Secondary outcome:** Sexual satisfaction: Locke-Wallace Marital Adjustment Test (Locke &	1 (+) Subjects were assigned to conditions serially, depending on the number of subjects available and the openings left in each treatment condition. … assumption that the point in time that a subject volunteered for the study was not a significant variable, and that by fulfilling the selection criteria all subjects were basically equivalent 2 (+) No concealment of allocation as subjects were assigned to

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
				Wallace, 1959); Body Cathexis Scale (Secord & Jourard, 1953); Rosenberg Self-Esteem Scale (Rosenberg, 1965)	conditions serially, depending on the number of subjects available and the openings left in each treatment condition. 3 (+) Blinding not possible owing to the characteristics of the interventions. 4 (+) Blinding not possible owing to the characteristics of the interventions. 5 (+) All outcomes were patient reported. Patients most likely not blinded owing to the characteristics of the interventions. 6 (?) Not described. 7 (?) Study protocol not available. However, it is clear that the published reports include all expected outcomes, including those that were prespecified in the method section. 8 (-) No indications of other bias.
6	McMullen & Rosen (1979)[75]	Sample size: N = 60 Diagnosis: Women who had never previously experienced orgasm by any means of stimulation. Method of diagnosis: Clear inclusion criteria Age: for total group, M = 29 (range 19–55) Sex: 100% women Location: United States Comorbidities: Not reported	(1) **Experimental arm** Duration: 6 wk Treatment protocol: Written instruction Therapist/Face-to-Face Contact: no (2) **Experimental arm** Duration: 6 wk Treatment protocol: Video modeling Therapist/Face-to-Face Contact: No (3) **Comparator arm** Duration: 8 wk Treatment protocol: Waiting list Therapist/Face-to-Face Contact: No	Time points for assessment: before and after treatment and 12-mo follow-up **Primary outcome:** Sexual symptom level: Self-reported orgasm on masturbation, self-reported orgasm on intercourse **Secondary outcome:** Not reported	1 (?) Insufficient information about the sequence generation process to permit judgment. 2 (?) Method of allocation not described. 3 (+) Blinding not possible due to the characteristics of the interventions. 4 (+) Blinding not possible due to the characteristics of the interventions.

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
					5 (+) All outcomes were patient reported. As patients were unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (+) Attrition was reported for the subjects in the original treatment groups, but not divided into experimental conditions, but into married/single. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
7	Mintz, Balzer et al (2012)[53]	Sample size: N = 45 Diagnosis: Women with low sexual desire. All were heterosexual and married. Method of diagnosis: No use of diagnostic criteria. Age: Total group: M = 40.18, (SD = 8.170) (range = 28 - 57). Sex: 100% women; Location: United States Comorbidities: Not reported.	(1) **Experimental arm** Duration: 6 wk. Treatment protocol: Completing baseline assessment, read the self-help book under study in 6 wk, and completed the measures a second time. Therapist/Face-to-Face Contact: No. (2) **Comparator arm** Duration: 6 wk. Treatment Protocol: No treatment. Therapist/Face-to-Face Contact: No.	Time points for assessment: before and after treatment and 7-wk follow-up **Primary outcome:** Sexual symptom level: Sexual desire (HISD and FSFI Desire subscale), sexual arousal (FSFI Arousal subscale), and overall sexual functioning (FSFI Total Score). **Secondary outcome:** Sexual satisfaction (FSFI Satisfaction subscale)	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy. 2 (?) Method of allocation not described. 3 (+) Not possible owing to the characteristics of the interventions. 4 (+) Not possible owing to the characteristics of the interventions. 5 (+) All outcomes were patient reported. As patients were unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (+) Questionnaire data were completed through internet access, with no missing data as a result. Only participants who completed both pretest and post-test measures were included in the final sample. 7 (?) Study protocol not available. 8 (-) No indications of other bias.

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
8	Palaniappan, Mintz & Heatherly (2016)[57]	Sample size: N = 47 Diagnosis: Women presenting with problems of low sexual desire. Method of diagnosis: self-report. Age: Female: M = 40.8 y Sex: 100% women Location: United States Comorbidities: Not reported.	(1) **Experimental Arm** Duration: 6 wk Treatment protocol: Bibliotherapy (Book: "A Tired Woman's Guide to Passionate Sex") Therapist/Face-to-Face Contact: No. (2) **Comparator arm** Duration: 6 wk Treatment protocol: Erotic fiction book (Book: "Passion: Erotic Romance for Women") Therapist/Face-to-Face Contact: No.	Time points for assessment: before and after treatment and 6-wk and 6-wk follow-up **Primary outcome:** Sexual symptom level: sexual functioning; Hurlbert Index of Sexual Desire (Apt & Hurlbert, 1992); Female Sexual Function Index (Rosen et al, 2000) **Secondary outcome:** Sexual satisfaction: Female Sexual Function Index (Rosen et al, 2000)	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy 2 (?) Method of allocation not described. 3 (-) Participants received one of 2 books. For comparison book vs book: low risk. 4 (+) Blinding not possible due to the characteristics of the interventions. 5 (-) All outcomes were patient reported. As patients were unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. For comparison book vs book: low risk. 6 (+) The author states that only data were analyzed of participants who followed through until post treatment assessment and whose complete post treatment data were obtained. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
9	Palaniappan et al (2018)[56]	Sample size: N = 45 Diagnosis: Women presenting problems of low sexual desire. Method of diagnosis: Self-report. Age: female: M = 39.8 y Sex: 100% women Location: United States Comorbidities: Not reported.	(1) **Experimental arm** Duration: 6 wk Treatment protocol: Bibliotherapy (Book: "A Tired Woman's Guide to Passionate Sex", with no therapeutic contact) Therapist/Face-to-Face Contact: No. (2) **Comparator arm** Duration: 6 wk Treatment Protocol: Placebo medication (Nutritional supplement; made of cellulose (Avicel), an inert substance) Therapist/Face-to-Face Contact: No.	Time points for assessment: before and after treatment and 6-wk and 6-wk follow-up **Primary outcome:** Sexual symptom level: Hurlbert Index of Sexual Desire (Apt & Hurlbert, 1992); Female Sexual Function Index (Rosen et al, 2000) **Secondary outcome:** Sexual satisfaction: Female Sexual Function Index (Rosen et al, 2000)	1 (-) Use of a random number generator is reported. 2 (?) Method of allocation not described. 3 (+) Participants received a book or placebo medication. For comparison book vs medication: high risk. 4 (+) Blinding not possible owing to the characteristics of the interventions. 5 (+) All outcomes were patient reported. As patients were

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
					unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. For comparison book vs medication: high risk. 6 (?) The author states that only data were analyzed of participants who followed through until post-treatment assessment and whose complete post-treatment data were obtained 7 (?) Study protocol not available. 8 (-) No indications of other bias.
10	Regev (2003)[74]	Sample size: N = 100 Heterosexual couples (N = 50 males; 50 females) Diagnosis: Presenting with problems of sexual desire, arousal, orgasm, and sexual pain. Method of diagnosis: clear inclusion criteria. Age: male: M = 46.7 ± (SD = 15.9); female: M = 44.0 ± (SD = 14.8) Sex: 50% women; 50% men. Location: United States Comorbidities: Not reported.	(1) **Experimental arm** Duration: 7 wk Treatment protocol: Bibliotherapy (Book: "The Naked Truth", with no therapeutic contact) Therapist/Face-to-Face Contact: No. (2) **Experimental arm** Duration: 7 wk Treatment protocol: Other informational self-help book (Book: "The Alchemy of Love and Lust," with no therapeutic contact) Therapist/Face-to-Face Contact: No. (3) **Comparator arm** Duration: 8 wk Treatment Protocol: Waiting list Therapist/Face-to-Face Contact: No.	Time points for Assessment: before and after treatment and 8-wk and 3-mo follow-up **Primary outcome:** Sexual symptom level: Sexual Interaction Inventory (LoPiccolo & Steger, 1974); Sexual History Form (Nowinski & LoPiccolo, 1979); Dyadic Adjustment Scale (Spanier, 1976); Process Measure (12-item rating scale) **Secondary outcome:** Satisfaction survey (self-developed)	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy 2 (?) Method of allocation not described. 3 (+) Participants received 1 of 2 books or were placed on a waiting list. For comparison, book vs book: low risk. For comparison ,book vs waiting list: high. 4 (+) Blinding not possible owing to the characteristics of the interventions. 5 (+) All outcomes were patient reported. As patients were unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. For comparison book vs book: low risk. Comparison book vs waiting list: high.

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
					6 (+) The author states that only data were analyzed of participants who followed through until post-treatment assessment and whose complete post-treatment data were obtained. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
11	Seidler-Feller (1980)[29]	Sample size: N = 16 Diagnosis: Heterosexual single males without steady sexual partners, which gave evidence of an established diagnosis of premature ejaculation and received no prior formal sex therapy. Method of Diagnosis: clear inclusion criteria Age: total group: M = 28.2 y (range 18–43) y Sex: 100% men. Location: United States Co-morbidities: Not reported	(1) **Experimental Arm** Duration: 8 wk Treatment protocol: Bibliotherapy Therapist/Face-to-Face Contact: Yes (2) **Comparator arm** Duration: 8 wk Treatment protocol: Group therapy Therapist/Face-to-Face Contact: Yes	Time points for assessment: before and after treatment and 2- and 6-mo follow-up **Primary outcome:** Sexual symptom level: Self-rated latency to ejaculation in intercourse, Self-rated latency to ejaculation in masturbation, Timed mean latency in minutes during "uncontrolled' masturbation, Self-reported degree of ejaculatory control before or after penile intromission. **Secondary outcome:** Not reported	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy 2 (?) Method of allocation not described. 3 (+) Not possible owing to the characteristics of the interventions. 4 (+)Not possible due to the characteristics of the interventions. 5 (+) All relevant outcomes were patient reported. As patients were unblinded (intervention was impossible to blind), the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (?) Not reported. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
12	Trudel & Proulx (1987)[77]	Sample size: N = 50 Heterosexual couples (N = 25 males; 25 females) Diagnosis: Inclusion criteria: (i) ejaculate < 5 minutes after penetration, (ii) the problem was of at least 6 mo duration, (iii) both partners agreed to treatment.	(1) **Experimental arm** Duration: 12 wk Treatment Protocol: No contact bibliotherapy (2) **Experimental Arm** Duration: 12 wk Treatment Protocol: phone contact bibliotherapy (3) **Comparator arm** Duration: 12 wk	Time points for Assessment: before and after treatment at 3 mo **Primary outcome:** Sexual symptom level: Test of latency of ejaculation (Minutes, continuous measure); Clinical sexology questionnaire; Sexual Interaction Inventory (LoPiccolo &	1 (?) Random assignment to groups is mentioned in the report, but not in sufficient detail to judge adequacy. 2 (?) Method of allocation not described. 3 (+) Not possible owing to the characteristics of the interventions.

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
		Method of diagnosis: Clear inclusion criteria were used. Age: for males, M = 32 (range = 18–56) y; for females, M = 29.3 (range = 18–52) y Sex: 100% men (25 males and their female partners) Location: Canada Comorbidities: Not reported	Treatment protocol: Therapist/Face-to-Face Contact: face-to-face therapy	Steger, 1974; Trudel & Dufort, 1984) **Secondary outcome:** Marital Adjustment Test (Locke & Wallace, 1959)	4 (+) Not possible owing to the characteristics of the interventions. 5 (+) All outcomes were patient reported. As patients were unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (+) More subjects dropped out in the no contact group (45.4%) as compared with the other 2 groups (14.2% and 33.3% – not further specified). Imbalance in numbers of dropouts across intervention groups and reasons not described. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
13	van Lankveld, Everaerd, & Grotjohann (2001)[54]	Sample size: N = 398 Diagnosis: Heterosexual couples with both partners seeking help for a sexual dysfunction of at least 1 partner. Dysfunctions met DSM-IV criteria, absence of major organic causes and medication effects. Method of Diagnosis: DSM-IV criteria Age: Bibliotherapy group: male M = 38 (SD = 10) y; female M = 35 (SD = 11) y Waiting list: male M = 41 (SD = 12); female M = 38 (SD = 12) Sex: 50% women; 50% men. Location: The Netherlands Comorbidities: Not reported.	(1) **Experimental arm** Duration: 10 wk. Treatment protocol: Ten wk of treatment with cognitive behavioral bibliotherapy and minimal therapist support by telephone followed by a 10-week follow-up period Therapist/Face-to-Face Contact: yes, minimal therapist support by telephone. (2) **Comparator arm** Duration: 10 wk. Treatment protocol: Waiting list Therapist/Face-to-Face Contact: no.	Timepoints for Assessment: pre- and post-treatment and 10 wk follow-up **Primary outcome:** Sexual symptom level: Intimate Bodily Contact Scales (Vennix, 1983); Self-reported change in sexual functioning last 4 wk, Self-reported distress resexual problem last 4 wk **Secondary outcome:** Dissatisfaction with general aspects of relationship, dissatisfaction with sexual relationship: Maudsley Marital Questionnaire (Arrindell et al, 1983); Golombok-Rust Inventory of Sexual Satisfaction (Golombok & Rust, 1986)	1 (-) Card drawing with block randomization (10 cards: 5 exp, 5 control condition). 2 (-) Assignment cards were blind and sealed. 3 (+) Participants and investigators were not blind to condition allocation. 4 (+) Participants and investigators were not blind to condition allocation. 5 (+) All outcomes were patient reported. As patients were unblinded, the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (-) Intent-to-treat analyses performed. Of 223 couples who were assigned to treatment and waiting list

(continued)

Table 1. Continued

	Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
					group, 24 dropped out after pretreatment assessment, of which 14 couples (11%) were from the treatment group, and 10 couples (10%) were from the control group. This difference was not significant. 7 (?) Study protocol not available. 8 (-) No indications of other bias.
14	van Lankveld, ter Kuile, de Groot, Melles, Nefs, & Zandbergen (2006)[55]	Sample size: N = 117 Diagnosis: Heterosexual woman, age 18 y or older, with a diagnosis of lifelong vaginismus Method of diagnosis: DSM - IV-TR Age: Group therapy: woman M = 28.1 (SD = 6); partner: M = 29.9 (SD = 6.4) Bibliotherapy: woman M = 2.6 (SD = 8.8); partner: M = 32.7 (SD = 10.6) Waiting list: woman M = 28.2 (SD = 5.8); partner: M = 30.6 (SD = 7.5) Sex: 100% women Location: The Netherlands Comorbidities: None.	(1) **Experimental arm** Duration: 13 wk. Treatment protocol: Cognitive behavioral group therapy Therapist/Face-to-Face Contact: yes. (2) **Experimental arm** Duration: 13 wk. Treatment protocol: Cognitive behavioral group therapy Therapist/Face-to-Face Contact: Yes. (3) **Comparator arm** Duration: 13 wk. Treatment protocol: Waiting list (waiting-list participants were randomly assigned after posttreatment assessment to either group therapy or bibliotherapy). Therapist/Face-to-Face Contact: No.	Time points for Assessment: before and after treatment and at 3- and 12-mo follow-up **Primary outcome:** Sexual symptom level: Self-reported successful intercourse, successful non-intercourse penetration behavior; Female Sexual Function Index (Rosen et al, 2000) **Secondary outcome:** Marital dissatisfaction and general life dissatisfaction: Maudsley Marital Questionnaire (Arrindell, Boelens, & Lambert, 1983); Male Sexual Dissatisfaction: Golombok Rust Inventory of Sexual Satisfaction (Rust & Golombok, 1986)	1 (-) Non-involved person read condition from a predetermined list with random sequence of the 3 study conditions. 2 (-) Predetermined list with random numbers which was blinded for treatment allocators. 3 (+) Blinding not possible owing to the characteristics of the interventions. 4 (+) Blinding not possible owing to the characteristics of the interventions. 5 (+) All outcomes were patient reported. As patients were unblinded (intervention was impossible to blind), the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (-) Intent-to-treat analyses were performed with missing data treated with last observation carried forward. 7 (?) Published study protocol not available. 8 (-) No indications of other bias.
15	Zeiss (1978)	Sample size: N = 20 Diagnosis: Heterosexual men with self-defined premature	(1) **Experimental arm** Duration: 12 wk	Time points for assessment: before and after treatment and	1 (?) Insufficient information about the sequence generation process to permit judgment.

(continued)

Table 1. Continued

Study	Participants	Experimental condition(s)	Outcomes	Bias*,†
	ejaculation difficulties. Method of diagnosis: Clear inclusion criteria. Age: No contact (bibliotherapy): male M = 30.8, female M = 29.8 Phone contact: male M = 33.2, M = 27.8 Standard therapist-administered treatment: male M = 28.5, female M = 28.8 Sex: 100% men. Location: United States Comorbidities: Not reported.	Treatment Protocol: Totally self-administered treatment. Therapist/Face-to-Face Contact: no. (2) **Experimental Arm** Duration: 12 wk Treatment Protocol: Self-administered treatment in conjunction with minimal therapist (telephone) contact. Therapist/Face-to-Face Contact: Yes, telephone contact. (3) **Comparator arm** Duration: 12 wk Treatment protocol: Standard therapist-administered treatment. Therapist/Face-to-Face Contact: Yes.	15–20 wk after start of treatment **Primary outcome:** Sexual symptom level: Self-reported ejaculatory control, Mean Sex Quality Composite Scores. **Secondary outcome:** Marital satisfaction: Locke & Wallace Marital Adjustment Test (1959)	2 (?) Method of allocation not described. 3 (+) Blinding not possible owing to the characteristics of the interventions. 4 (+) Blinding not possible owing to the characteristics of the interventions. 5 (+) Unclear whether assessors were blinded. All outcomes were patient reported. As patients were unblinded (intervention was impossible to blind), the outcomes or outcome measurements could possibly be influenced by this lack of blinding. 6 (?) Dropout problem was restricted to the self-administered condition. Of the 20 couples who began treatment, 2 (1 in each self-directed treatment condition) completed treatment and verbally reported success but failed to complete post-treatment assessment. Because there were no post-treatment data for these couples, they were excluded from all data analyses and further consideration. Data are reported on 18 client couples, 6 in each treatment condition. 7 (?) Published study protocol not available. 8 (+) 5 of 6 therapists not experienced and supervised by trained therapist.

*Sources of bias: 1. Random sequence generation (selection bias); 2. Allocation concealment (selection bias); 3. Blinding (performance bias and detection bias) Participants; 4. Blinding (performance bias and detection bias) Personnel; 5. Blinding (performance bias and detection bias) Outcome Assessors; 6. Incomplete outcome data (attrition bias); 7. Selective reporting (reporting bias); 8. Other bias.
†Level of risk of bias: (-) = Low risk; (?) Unclear risk; (+) = High risk.

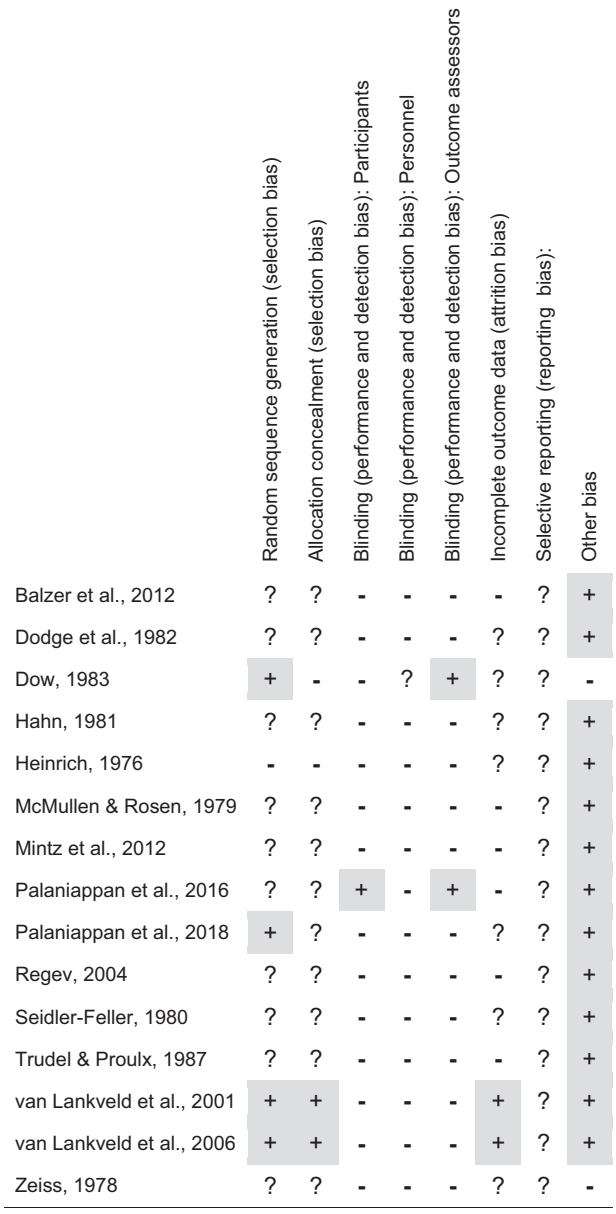

Figure 2. Risk of bias per study.

and study exclusions. After deduplication, 400 references remained. Of these, 23 citations appeared potentially relevant and the full-text articles were retrieved. Most studies were self-identified by the authors as constituting a bibliotherapy approach. However, some authors did not use the term bibliotherapy,[29,31,37,72,73,75] but from the description of the therapeutic approach in the introduction or method section, it was evident that the approach conformed to the inclusion criterion. 15 studies were eventually included, see Table 1 for their characteristics. 5 of these were unpublished PhD dissertations[29,31,72–74] that could be retrieved. No relevant registered trials were found after searching the prospective trial register clinicaltrials.gov.

Included Studies

Although no restrictions were made in terms of languages of original reports, all studies included were published in English. Duration of included trials ranged from 5 weeks[72,73] to 12 months.[55,75] Numbers of people randomized within individual studies varied from 13[51] to 398 participants.[54] Eleven studies were conducted in the United States,[29,30,51,53,56,57,72–76] 2 studies in the Netherlands,[54,55] 1 in the United Kingdom,[31] and 1 in Canada.[77]

The 15 trials evaluated 1,113 participants with different types of sexual dysfunctions. Some trials included single dysfunction types, including orgasmic disorder, 3 studies51,73,75, premature ejaculation, 3 studies29,30,77, low sexual desire, 2 studies56,57, vaginismus, 1 study.[55] Samples in other studies comprised different sexual dysfunction types, including problems with low sexual desire, sexual pain, erectile failure, and orgasmic difficulties, 6 studies.[31,53,54,72,74,76]

8 studies assessed some form of unassisted bibliotherapy versus no treatment.[53,56,57,73–77] Of these, 4 studies had more than one active treatment arm in addition to the control arm of the trial.[73,74,76,77] One study, in addition to bibliotherapy and the no-treatment group, also compared group therapy,[73] one included video modeling,[75] one included another self-help book placebo,[74] and one other study also included phone-contact bibliotherapy and face-to-face therapy in their comparison.[77]

3 studies compared different forms of unassisted bibliotherapy with other interventions.[30,73,77] The first study[73] contained 3 treatment arms and compared unassisted bibliotherapy with group therapy and no-treatment group. The second study[77] compared no-contact bibliotherapy with phone-contact bibliotherapy or to face-to-face therapy. The third study[30] compared totally self-administered treatment with self-administered treatment in conjunction with minimal therapist (telephone) contact or to standard therapist-administered treatment. One study compared different forms of unassisted bibliotherapy with each other ("Mintz intervention" vs "Hall intervention").[76] Five studies compared some form of assisted bibliotherapy with no treatment.[31,51,54,55,77] Of these, 3 studies had more than one active treatment arm in addition to the control arm of the trial. One study, in additiono assisted bibliotherapy, also compared cognitive behavioral group therapy to the no treatment group.[55] One study compared no-contact bibliotherapy, telephone-assisted bibliotherapy, face-to-face therapy, and no treatment.[77] One study compared assisted bibliotherapy, Masters and Johnson[31] sensate focus therapy, and waiting list.

5 studies compared different forms of assisted bibliotherapy with other interventions.[30,31,55,72,77] All 5 studies had more than one active treatment arm in addition to the control arm of the trial. 2 studies also compared no treatment in addition to assisted bibliotherapy and other active interventions.[31,55] One study compared bibliotherapy with minimal therapist support with 3 different other interventions (therapist-guided group sessions

Table 2. Summary of findings: Unassisted bibliotherapy vs no treatment

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Sexual functioning level (follow-up 5 to 12 wk; better indicated by higher values)								
6*	Serious†	Serious‡,§	No serious indirectness	Serious‖	60	67	Ejaculation latency time at 12 wk: MD 546.59, 95% CI 302.25 to 790.93 Female sexual functioning at 8 wk: MD 0.08, 95% CI -0.01 to 0.17 Male sexual functioning at 8 wk: MD -0.01, 95% CI -0.13 to 0.11 Sexual functioning FSFI total score at 6 wk: MD 8.90, 95% CI 4.83 to 12.97 Sexual desire subscale (HISD) at 6 wk (2 studies): MD 14.02, 95% CI 8.65 to 19.38 FSFI Sexual Desire subscale (2 studies): pooled MD 1.66, 95% CI 0.95 to 2.37 FSFI sexual arousal subscale at 6 wk (2 studies): MD 0.63, 95% CI -0.66 to 1.92 Sexual satisfaction subscale (FSFI) at 6 wk: MD 1.66, 95% CI 0.95 to 2.37 Mean frequency of orgasm during self-stimulation with partner present, at 5 wk: 1.62 vs 1 General pleasure in sexual activities (Part II; Survey of Sexual Activity) at 5 wk: 89 vs 89 Sexual pain main score (FSFI) at 6 wk (1 study, 2 groups): pooled MD -0.21, 95% CI (-1.14 to 0.62)	Very low

(continued)

Table 2. Continued

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Remission of sexual dysfunction (follow-up 6 to 8 wk)								
3[¶]	Serious[†]	Serious[‡]	No serious indirectness	Very serious[‖,**]	35	34	Self-reported orgasm on masturbation at 6–8 wk: RR 73.80, 95% CI 3.89 to 1,401.56 Self-reported orgasm on intercourse at 6–8 wk: RR 21.00, 95% CI 1.31, 335.74 Orgasmic at 2 mo through any activity: RR 1.49, 95% CI 0.64, 3.48 Orgasm mean score (FSFI) at 6 wk (1 study, 2 groups): pooled MD 0.40, 95% CI -0.59 to 1.39	Very low
Psychometrically validated measures of sexual (dys)function and sexual satisfaction (follow-up mean 8 wk; better indicated by higher values)								
1[††]	Serious[‡‡]	No serious inconsistency	No serious indirectness	Very serious[‖,§§]	20	20	Sexual satisfaction at 8 wk: MD -47.08, 95% CI -76.48 to -17.68	Very low
Quality of life (Follow-up mean 8 wk; Better indicated by higher values)								
1[‖‖]	Serious[‡‡]	No serious inconsistency[¶¶]	No serious indirectness	Very serious[§§,***]	20	20	Male relationship satisfaction: MD -6.25, 95% CI -17.23 to 4.73 Female relationship satisfaction: MD 8.11, 95% CI -5.89 to 22.11	Very low

(continued)

Table 2. Continued

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Dropout from trials after randomization (follow-up 6 to 8 wk)								
3[†††]	Serious[†]	Serious[§]	No serious indirectness	Serious[‖]	54	60	Dropouts at 7 wk: RR 2.50, 95% CI 1.22 to 5.11 Dropouts at 6 wk: RR 17.55, 95% CI 1.05 to 293.76 Dropouts at 2 mo: 0 vs 0	Very low

*Balzer 2012; Mintz 2012; Regev 2004; Trudel 1987; Palaniappan, 2016, 2017.
[†]All included studies high RoB.
[‡]Different outcome measurements used.
[§]Different types of sexual dysfunction studied.
[‖]OIS not reached.
[¶]Balzer 2012; Heinrich 1979; McMullen 1979.
**Wide CI (CI includes both benefit and harm).
[††]Regev 2004.
[‡‡]One study of high RoB included.
[§§]Wide CI.
[‖‖]Regev 2004.
[¶¶]Only 1 study included.
***CI includes both benefit and harm.
[†††]Heinrich 1976; Mintz 2012; Regev 2004.

Table 3. Summary of findings: Assisted bibliotherapy vs no treatment

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Sexual symptom level (follow-up 10 to 12 wk; better indicated by lower values)								
2*	Serious†	Serious‡,§	No serious indirectness	Serious‖	117	95	Ejaculation latency time 12 wk: MD 437.17, 95% CI 268.67 to 605.67 Male dissatisfaction with low sexual frequency (GRISS) at 10 wk: MD -0.60, 95% CI -1.07 to -0.13 Female dissatisfaction with low sexual frequency (GRISS) at 10 wk: MD -0.90, 95% CI -1.36 to -0.44 Male erectile dysfunction at 10 wk: MD -1.20, 95% CI -2.25 to -0.15 Male premature ejaculation: MD -0.30, 95% CI -1.24 to 0.64 Vaginismus: MD -2.50, 95% CI -3.94 to -1.06 Female anorgasmia: MD -0.60, 95% CI -1.86 to 0.66	Very low
Remission of sexual dysfunction (follow-up 10 to 13 wk)								
2¶	Serious†	Serious‡	No serious indirectness	Very serious‖,**	41	38	Successful intercourse at 13 wk: MD 14.23, 95% CI 0.84 to 240.46 Self-reported coital orgasmic ability at 10 wk: RR 3.75, 95% CI 0.27 to 52.64	Very low
Psychometrically validated measures of sexual (dys)function and sexual satisfaction (follow-up 12 to 16 wk; Better indicated by lower values)								
2††	Serious†	Serious‡,§	No serious indirectness	Very serious‖,**	50	60	Sexual Satisfaction (SMAR) at 16 wk: MD -120.20, 95% CI -241.12 to 0.72 Sexual satisfaction (FSFI) at 12 wk: MD -0.10, 95% CI -0.72 to 0.52	Very low
Quality of life (follow-up 12 to 16 wk; better indicated by lower values)								
2††	Serious†	Serious‡,§	No serious indirectness	Very serious‖,**	50	60	Marital dissatisfaction (MMQ) at 12 wk: MD -2.70, 95% CI −7.42 to 2.02 General life dissatisfaction at 12 wk: MD −0.80, 95% CI −2.54 to 0.94 Marital satisfaction (SMAR) at 16 wk: MD −86.36, 95% CI −149.08 to −23.64	Very low

(continued)

Table 3. Continued

Quality assessment					Number of participants		Effect	Quality
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)		
Dropout from trials after randomization (follow-up 10 to 13 wk)								
2[#]	Serious[†]	Serious[§]	No serious indirectness	Serious[‖]	149	124	Dropouts at 13 wk: RR 3.47, 95% CI 1.05 to 11.45 Dropouts at 10 wk: RR 1.11, 95% CI 0.52 to 2.38	Very low

*Trudel 1987; van Lankveld 2001.
†All included studies of high RoB.
‡Different measurements used.
§Different types of sexual dysfunction studied.
‖OIS not reached.
¶Dodge 1982; van Lankveld 2006.
**Very wide CI (CI included both benefit and harm).
††Dow 1983; van Lankveld 2006.
‡‡van Lankveld 2001; van Lankveld 2006.

[vicarious group] vs a different therapist-guided group [vicarious variant group] vs a programmed manual group).[72] Another study compared assisted bibliotherapy with no-contact bibliotherapy, face-to-face therapy, and no treatment,[77] and the last study also compared unassisted bibliotherapy in addition to assisted bibliotherapy and other interventions.[30]

One study compared 2 different forms of assisted bibliotherapy with each other.[29] The first group received a manual based on Zilbergeld[78] with exercise series, series of films, educational material, homework assignments, weekly 2-hour review in all-male group with male-female cotherapists, the second group received the same manual, presented in a 1-day (6-hour) seminar; weekly phone calls to check on and encourage progress.

2 studies compared different forms of unassisted bibliotherapy with assisted bibliotherapy.[30,77] Both studies had more than one active treatment arm in addition to the control arm of the trial. The first study also compared face-to-face therapy and no treatment in addition to the unassisted bibliotherapy and assisted bibliotherapy group.[77] The second study also assessed standard therapist-administered treatment in addition to the unassisted bibliotherapy and assisted bibliotherapy group.[30]

Full reports were retrieved for all included studies, including unpublished dissertations.[29,31,72–74] All included studies reported on sexual functioning outcomes, providing relevant primary endpoints for the current analysis. Secondary end points (sexual satisfaction and/or dropout rates) were not reported in 5 of the included studies.[29,51,72,75,76]

Risk of Bias in Included Studies

Risk of bias judgments are presented graphically in Figure 2. Details are tabulated in Table 1.

Allocation (Selection Bias)

4 studies of 15 studies were classified as having low risk of selection bias.[31,54,55,57] Of these, one study used card drawing with block randomization[54] and 3 studies used a list with random numbers which was blinded for treatment allocators.[31,55,57] One of 13 studies scored a high risk of selection bias as subject were assigned to conditions serially, depending on the number of subjects available and the openings left in each treatment condition.[73] The remaining 10 studies were judged as of unclear risk of selection bias, as random assignment to groups was not mentioned in sufficient detail to judge adequacy.

Blinding (Performance Bias and Detection Bias)

14 studies scored a high risk of performance and detection bias for both participants and personnel as the interventions were impossible to blind. As all outcomes were patient reported, also a high risk of performance bias for the outcome assessors was scored for these studies. One study[57] reported blinding of allocation to condition for participants and outcome assessors.

Table 4. Summary of findings: Unassisted bibliotherapy vs other interventions

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Sexual symptom level (follow-up 5 to 12 wk; Better indicated by lower values)								
2*	Serious†	Serious‡,§	No serious indirectness	Very serious‖,¶	41	31	Test of latency of ejaculation at 12 wk, mean (SD): MD 16.04, 95% CI −252.51 to 284.5 Male sexual functioning at 8 wk: MD −0.01, 95% CI −0.19 to 0.17 Female sexual functioning at 8 wk: MD 0.09, 95% CI −0.03 to 0.21	Very Low
Remission of sexual dysfunction (follow-up 6 to 20 wk)								
3**	Serious††	Serious‡,§	No serious indirectness	Very serious‖,‡‡	41	41	Remission of sexual dysfunction at 15–20: RR 0.08, 95% CI 0.01 to 1.12 Orgasmic at 2-mo follow-up through any stimulation: RR 0.55, 95% CI 0.34 to 0.88 Self-reported orgasm on masturbation at 6–8 wk: RR 1.18, 95% CI 0.71 to 1.97 Self-reported orgasm on intercourse at 6–8 wk: RR 1.67, 95% CI 0.75, 3.71	Very Low
Psychometrically validated measures of sexual (dys)function and sexual satisfaction (follow-up mean 8 wk; better indicated by lower values)								
2§§	Serious†	Serious‡,§	No serious indirectness	Very serious‖,¶	26	16	Sexual satisfaction: Interaction Inventory at 8 wk: MD 16.85, 95% CI −1.09 to 34.79 Sexual Interaction Inventory at 12 wk: MD 25.58, 95% CI −7.06 to 58.22	Very Low
Quality of life (Follow-up mean 8 wk)								
1‖‖	Serious†	No serious inconsistency	No serious indirectness	Very serious‖,¶	20	10	Male relationship satisfaction: MD −21.10, 95% CI −37.33 to −4.87 Female relationship satisfaction: MD -12.20, 95% CI -28.21 to 3.81	Very Low

(continued)

Table 4. Continued

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Dropout from trials after randomization (follow-up 5 to 12 wk)								
3[¶¶]	Serious[†]	Serious[§]	No serious indirect-ness	Very serious[‖,‡‡]	41	31	Dropouts at 12 wk: RR 1.50, 95% CI 0.38 to 6.00 Dropouts at 8 wk: RR 1.25, 95% CI 0.71 to 2.20 Dropouts at 5 wk: Not estimable 0 vs 0	Very Low

*Trudel 1987; Regev 2004.
[†]All included studies were of high RoB.
[‡]Different outcome measurements were used.
[§]Different types of sexual dysfunction were studied.
[‖]OIS not reached.
[¶]Wide CI.
**McMullen 1979; Heinrich 1976; Zeis 1978.
[††]No explanation was provided.
[‡‡]CI includes both benefit and harm.
[§§]Regev 2004; Trudel 1987.
[‖‖]Regev 2004.
[¶¶]Heinrich 1976; Regev 2004; Trudel 1987.

Table 5. Summary of findings: Assisted bibliotherapy vs other interventions

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Sexual symptom level (follow-up mean 12 wk; better indicated by higher values)								
1[*]	Serious[†]	No serious inconsistency	No serious indirectness	Very serious[‡,§]	6	6	Test of latency of ejaculation at 12 wk: MD −93.38 lower (−295.39 lower to 108.63 higher)	Very low
Remission of sexual dysfunction (follow-up 5 to 20 wk)								
4[‖]	Serious[¶]	Serious[**,††]	No serious indirectness	Serious[‡‡]	83	88	Goal attained at 16 wk: RR 0.73, 95% CI 0.43 to 1.25 Orgasm reached through self-stimulation at 5 wk: RR 0.93, 95% CI 0.73 to 1.18 Successful intercourse (PEQ) at 13 wk: RR 1.98, 95% CI 0.63 to 6.24 Remission of sexual dysfunction at 15–20 wk: RR 0.85, 95% CI 0.55 to 1.31	Very low
Psychometrically validated measures of sexual (dys)function and sexual satisfaction (Follow-up 5 to 16 wk; Better indicated by lower values)								
4[§§]	Serious[¶]	Serious[**,††]	No serious indirectness	Serious[‡‡]	83	88	Sexual nteraction Inventory (total score) at 12 wk: MD −19.08, 95% CI −44.55 to 6.39 Sexual satisfaction (SMAR) at 16 wk: MD 61.30, 95% CI −87.19 to 209.79 Stimulus-response inventory of stress (pre-post difference) at 5 wk: MD 4.54, 95% CI −12.51, 21.59 Rosenberg (1965) Self-esteem measure (pre-post difference) at 5 wk: MD 1.40, 95% CI −6.35, 9.15 Sexual satisfaction (FSFI) 12 wk: MD 0.10, 95% CI −0.57, 0.77	Very low

(continued)

Table 5. Continued

Quality assessment					Number of participants			
No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Unassisted bibliotherapy (N)	No treatment (N)	Effect	Quality
Quality of life (follow-up 12 to 16 wk; Better indicated by lower values)								
2[‖‖]	Serious[¶]	Serious[**,††]	No serious indirectness	Serious[‡‡]	62	67	Marital satisfaction (SMAR) at 16 wk: MD −13.60, 95% CI −85.53 to 58.33 Marital dissatisfaction (MMQ) at 12 wk: MD −2.90, 95% CI −6.83, 1.03 General life dissatisfaction (MMQ) at 12 wk: MD −1.00, 95% CI −2.94, 0.94	Very low
Dropout from trials after randomization (follow-up 5 to 13 wk)								
3[¶¶]	Serious[¶]	Serious[††]	No serious indirectness	Very serious[§,‡‡]	0/59 (0%)	0/64 (0%)	Dropouts at 5 wk: Not estimable Dropouts at 12 wk: RR 0.50, 95% CI 0.06 to 4.15 Dropouts at 13 wk: RR 1.24, 95% CI 0.60 to 2.60	Very low

*Trudel 1987.
†One included study of high RoB.
‡Wide CI.
§CI included both benefit and harm.
‖Dow 1983; Hahn 1981; van Lankveld 2006; Zeiss 1978.
¶All included studies were of high RoB.
**Different outcome measurements were used.
††Different types of sexual dysfunction were studied.
‡‡OIS not reached.
§§Dow 1983; Hahn 1981; Trudel 1987; van Lankveld 2006.
‖‖Dow 1983; van Lankveld 2006.
¶¶Hahn 1981; Trudel 1987; van Lankveld 2006.

Table 6. Estimated meta-analytical outcomes of assisted and unassisted bibliotherapy for sexual dysfunctions

Outcome Subgroup	N (Studies)	N (Participants)	Statistical method	Effect estimate
Bibliotherapy vs no treatment				
Female sexual functioning	8		SMD	Subtotals only
Unassisted bibliotherapy	5	171	SMD	0.41 [−0.27, 1.08]
Assisted bibliotherapy	3	291	SMD	0.41 [0.18, 0.65]**
Female sexual functioning (remission)	4		RR	Subtotals only
Unassisted bibliotherapy	1	40	RR	21.00 [1.31, 335.74]*
Assisted bibliotherapy	3	108	RR	2.82 [0.66, 12.01]
Male sexual functioning	4		SMD	Subtotals only
Unassisted bibliotherapy	2	29	SMD	0.88 [−1.22, 2.99]
Assisted bibliotherapy	3	226	SMD	0.62 [−0.04, 1.29]
Sexual satisfaction	8		SMD	Subtotals only
Unassisted bibliotherapy	5	171	SMD	0.72 [0.08, 1.36]*
Assisted bibliotherapy	3	397	SMD	−0.11 [−0.54, 0.33]
Drop out from study	9		RR(N-E)	Subtotals only
Unassisted bibliotherapy	7	282	RR(N-E)	0.87 [−0.68, 1.12]
Assisted bibliotherapy	2	273	RR(N-E)	0.89 [−0.70, 1.13]
Bibliotherapy vs other interventions				
Female sexual functioning	3		SMD	Subtotals only
Unassisted bibliotherapy	0	0	SMD	Not estimable
Assisted bibliotherapy	3	114	SMD	0.16 [−0.21, 0.53]
Female sexual functioning (remission)	3		RR	Subtotals only
Unassisted bibliotherapy	0	0	RR	Not estimable
Assisted bibliotherapy	3	141	RR	0.93 [−0.51, 1.70]
Male sexual functioning	2		SMD	Subtotals only
Unassisted bibliotherapy	1	9	SMD	0.05 [−1.33, 1.44]
Assisted bibliotherapy	2	27	SMD	0.02 [−0.79, 0.83]
Male sexual functioning (remission)	2		RR	Subtotals only
Unassisted bibliotherapy	1	9	RR	0.08 [−0.01, 1.21]
Assisted bibliotherapy	2	25	RR	0.88 [−0.61, 1.25]
Sexual Satisfaction	3		SMD	Subtotals only
Unassisted bibliotherapy	1	9	SMD	0.73 [−0.73, 2.18]
Assisted bibliotherapy	3	93	SMD	−0.09 [−0.51, 0.32]
Drop out from study	6		RR(N-E)	Subtotals only
Unassisted bibliotherapy	3	69	RR(N-E)	0.85 [−0.46, 1.59]
Assisted bibliotherapy	4	136	RR(N-E)	0.99 [−0.90, 1.10]

RR = risk ratio (Mantel-Haenszel, Random, 95% CI); RR(N-E) = Risk Ratio (non-event) (M-H, Random, 95% CI); SMD = standard mean difference (IV, Random, 95% CI).
*$P \leq .05$; **$P \leq .001$.

Incomplete Outcome Data (Attrition Bias)

7 studies[29–31,51,56,72,73] did not include or report withdrawals or dropouts in their analyses and were therefore rated as unclear risk of bias. Only 2 studies[54,55] scored a low risk of attrition bias as intention-to-treat analysis were performed. The remaining studies were judged as of high risk of attrition bias owing to high dropout rates, no reasons for dropouts provided or the dropouts were not balanced between the study groups.

Selective Reporting (Reporting Bias)

In all studies, it was unclear whether there had been selective reporting of data because original study protocols were not published.

Other Potential Sources of Bias

2 studies[30,31] showed indications of other bias as 5 of 6 therapists were not experienced and supervised by a trained therapist in one study[30] and diagnostics were not clear enough for replication in the other study.[31] The remaining studies were judged as having low risk of other bias.

Effects of Interventions

Unassisted Bibliotherapy vs No Treatment

8 studies assessed some form of unassisted bibliotherapy vs no treatment.[53,56,57,73–77] Of these, 5 studies had more than one active treatment arm in addition to the control arm of the trial.

One study, in addition to bibliotherapy and the no-treatment group, also compared group therapy,[73] another compared video modeling,[75] another study compared bibliotherapy with another (placebo) self-help book,[74] one other study also included phone-contact bibliotherapy and face-to-face therapy in their comparison,[77] and the fifth study compared different forms of unassisted bibliotherapy in addition to the no-treatment group.[76] Refer to Tables 2–6 and Figure 3A and B for a summary of the findings.

Primary outcomes. Sexual functioning level. 6 studies assessed sexual functioning level outcomes.[53,56,57,74,76,77] Results regarding female sexual functioning of 5 of these studies could be pooled.[53,56,57,74,76] Of 2 studies, results regarding male sexual function level could be pooled.[74,77] The differences in favor of unassisted bibliotherapy regarding level of female sexual functioning (continuous measures) were not significant (SMD: 0.41; 95% CI: −0.27 to 1.08; 5 studies; $P = .23$). The differences in favor of unassisted bibliotherapy regarding level of male sexual functioning were not significant (SMD = 0.88, 95% CI: −1.22 to 2.99; 29 participants; 2 studies; $P = .41$).

Primary outcomes. Remission of sexual dysfunction. One study assessed remission of sexual dysfunction in women.[75] The differences in favor of unassisted bibliotherapy regarding remission of female sexual dysfunction were significant (risk ratio = 21.00, 95% CI: 1.31 to 335.74; 1 study; Z = 2.15; $P = .03$). No studies were included of remission of male sexual dysfunction.

Secondary outcomes. Sexual satisfaction. 5 studies assessed sexual satisfaction.[53,56,57,74,76] A significant difference was found favoring unassisted bibliotherapy (SMD: 0.72, 95% CI: 0.08 to 1.36, 171 participants; 5 studies; $P = .03$).

Secondary outcomes. Dropout from trials after randomization. 3 studies reported the number of dropouts per treatment group.[53,73,74] No differences were found (Mantel-Haenszel risk ratio = 0.87, 95% CI: −0.68 to 1.12, Z = 1.09, $P = .28$).

Assisted Bibliotherapy vs No Treatment

5 studies compared some form of assisted bibliotherapy with no treatment.[31,51,54,55,77] 3 studies had more than one active treatment arm in addition to the control arm of the trial. One study, in addition to assisted bibliotherapy and the no-treatment group, also compared cognitive behavioral group therapy,[55] one compared unassisted bibliotherapy and face-to-face therapy,[77] and one other study also included sensate focus therapy.[31]

Primary outcomes. Sexual functioning level. 3 studies assessed female sexual function level[31,54,55] that could be pooled. Significant differences in favor of bibliotherapy were found with regard to female sexual function level (SMD = 0.41, 95% CI: 0.18 to 0.65, Z = 3.46, $P = .0005$). Data of 3 studies were pooled with regard to male sexual function level[31,54,77] but did not reveal significant differences of assisted bibliotherapy compared with no treatment (SMD = 0.62, 95% CI: −0.04 to 1.29, Z = 1.83, $P = .07$).

Primary outcomes. Remission of sexual dysfunction. 3 studies assessed remission of female sexual dysfunction.[51,55,73] No significant differences were found. Studies reporting on remission of male sexual dysfunction were not retrieved.

Secondary outcomes. Sexual satisfaction. 3 studies assessed sexual satisfaction.[54,55,73] van Lankveld et al[54] separately reported male and female sexual satisfaction data. No significant differences were found.

Secondary outcomes. Dropout from trials after randomization. 2 studies[54,55] reported the number of dropouts per treatment group. No differences were found (Mantel-Haenszel risk ratio = 0.89, 95% CI: −0.70 to 1.13, Z = 1.09, $P = .28$).

Unassisted Bibliotherapy vs Other Interventions

2 studies compared different forms of unassisted bibliotherapy with other interventions.[30,77] Trudel and Proulx[77] compared no-contact bibliotherapy with phone-contact bibliotherapy and with face-to-face therapy. The second study[30] compared totally self-administered treatment with self-administered treatment in conjunction with minimal therapist (telephone) contact and with standard therapist-administered treatment.

Primary outcomes. Sexual functioning level. No studies were included that assessed female sexual function level. One study assessed male sexual function level.[77] No significant difference was found.

Primary outcomes. Remission of sexual dysfunction. One study assessed remission of sexual dysfunction.[30] No significant difference was found.

Secondary outcomes. Sexual satisfaction. 2 studies assessed sexual satisfaction,[74,77] and data were pooled. No significant differences were found.

Secondary outcomes. Dropout from trials after randomization. 3 studies[73,74,77] reported the number of dropouts per treatment group. No significant differences were found.

Assisted Bibliotherapy vs Other Interventions

7 studies compared different forms of assisted bibliotherapy with other interventions.[29–31,55,72,73,77]

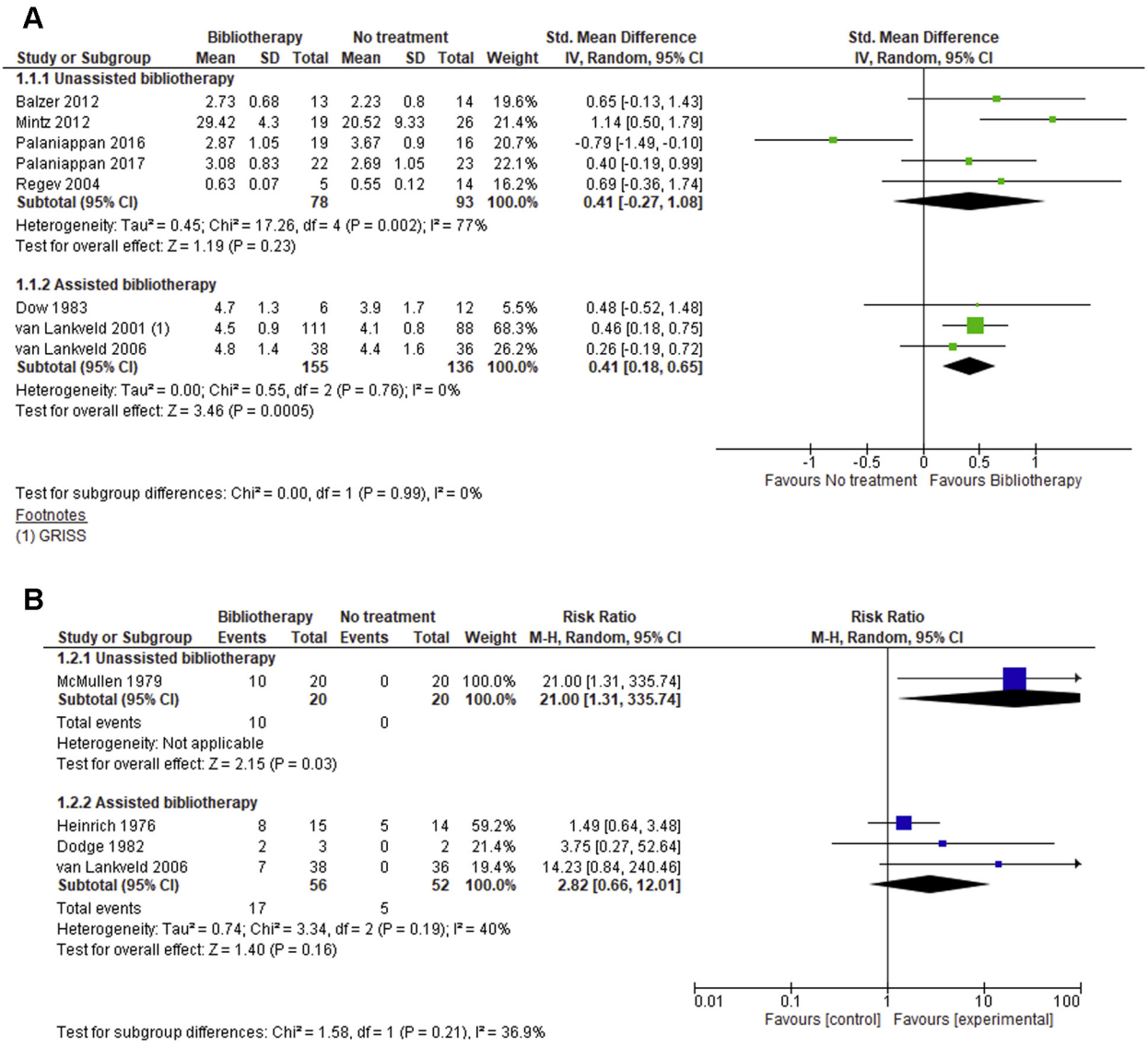

Figure 3. (A) Forest plot of effects on sexual functioning level of bibliotherapy vs no treatment. (B) Forest plot of effects on remission of sexual dysfunction of bibliotherapy vs no treatment. Figure 3 is available in color online at www.jsm.jsexmed.org.

Primary outcomes. Sexual functioning level. 3 studies[31,55,72] assessed female sexual function level. No significant differences were found. 2 studies[31,77] assessed male sexual function level. No significant differences were found.

Primary outcomes. Remission of sexual dysfunction. 3 studies assessed remission of female sexual dysfunction.[55,72,73] No significant differences were found. 2 studies assessed remission of male sexual dysfunction.[29,30] No significant differences were found.

Secondary outcomes. Sexual satisfaction. 3 studies assessed sexual satisfaction,[31,55,77] and their data were pooled. No significant differences were found.

Secondary outcomes. Dropout from trials after randomization. 4 studies[29,55,72,77] reported the number of dropouts per treatment group and found no significant differences.

Sensitivity Analyses

To test the robustness of decisions made in the review process, sensitivity analyses were performed by including only studies that scored a low risk of bias. In Table 7, the results of sensitivity analyses for the main comparisons in this review are reported for allocation concealment. For each effect the statistics are shown including (upper line) and excluding studies with high level of bias.

With regard to bias owing to non-concealment of treatment condition, the significant effect on female sexual function of

Table 7. Sensitivity analysis: concealment of allocation

Bibliotherapy Type	Female sexual function (continuous)	Female sexual function (dichotomous)	Male sexual function (continuous)	Male sexual function (dichotomous)	Sexual satisfaction	Dropout
Bibliotherapy vs no treatment						
Unassisted	Not possible*	Not possible*	Not possible*	No studies	Not possible*	Not possible*
Assisted	0.41 [0.18, 0.65] N = 3 0.41 [0.17, 0.65] N = 2	2.82 [0.66, 12.01] N = 3 14.23 [0.84, 240.46] N = 1	0.62 [−0.04, 1.29] N = 3 0.42 [0.14, 0.70] N = 1	No studies	−0.11 [−0.54, 0.33] N = 4 −0.34 [−0.57, −0.12] N = 1	Not possible†
Bibliotherapy vs other Interventions						
Unassisted	No studies	No studies	Not possible*	Not possible*	Not possible*	Not possible*
Assisted	0.16 [−0.21, 0.53] N = 3 0.00 [−0.48, 0.48] N = 1	0.93 [0.51, 1.70] N = 3 1.98 [0.63, 6.24] N = 1	Not possible*	Not possible*	−0.09 [−0.51, 0.32] N = 3 0.08 [−0.43, 0.59] N = 1	0.99 [0.90, 1.10] N = 3 0.93 [0.71, 1.20] N = 1

*Sensitivity analysis was not possible because all included studies had high risk of bias.
†Sensitivity analysis was not possible because all included studies had low risk of bias.

assisted bibliotherapy vs no treatment was maintained after exclusion of one high-bias study (SMD = 0.41, 95% CI: 0.17 to 0.65). For other outcomes, sensitivity analysis resulted in retaining the results of a single study. Sensitivity analysis was not possible for significant effects of unassisted bibliotherapy because all studies had a high risk of bias. With regard to bias because of incomplete reporting of outcome data, the significant effects on female sexual function of assisted bibliotherapy vs no treatment were identical to those of non-concealment of treatment condition.

DISCUSSION

In this review, we synthesized the available data from randomized trials assessing the effects of bibliotherapy for sexual dysfunctions compared with no treatment and compared with other interventions. 15 RCTs recruiting a total of 1,113 participants were included. The summary of findings (Tables 2–6) for each comparison examined shows that the certainty of the evidence for all (primary) outcomes was low or very low, mainly because of imprecision and study limitations. With regard to the interpretation of observed effects, we wish to note that significant positive effects can be irrelevant at the clinical level, especially when they are found in large study samples, and that non-significant effects can — nevertheless — be clinically relevant.[79]

Compared with no treatment, unassisted bibliotherapy was found to result in a larger proportion of female participants reporting remission of sexual dysfunction and to have significant positive effects on sexual satisfaction of treated women and men. Compared with no treatment, assisted bibliotherapy was found to have significant positive effects on female sexual functioning; no differences were found with regard to sexual satisfaction. No significant effects of both assisted and unassisted bibliotherapy were found on male sexual functioning or on remission of male sexual dysfunction. Comparisons of unassisted and assisted bibliotherapy with other interventions did not reveal significant differences. Across all comparisons, dropout rates of assisted and unassisted bibliotherapy were not different from those in untreated groups or groups treated with other interventions. These findings imply that applying bibliotherapy for sexual dysfunctions seems warranted: it shows superior performance compared with waiting list and no treatment, and its effects on the selected outcome variables were not different from other delivery types of sex therapy, mostly face-to-face, that were investigated in the included comparative studies. Caution, however, is required owing to the low certainty of the evidence. Moreover, the small number of included studies precludes drawing conclusions about the effectiveness of bibliotherapy for different types of sexual dysfunction.

To test the robustness of decisions made in the review process, sensitivity analysis were performed by repeating the analyses including only studies that scored a low risk of bias for allocation concealment and for incomplete outcome data. With regard to

bias owing to non-concealment of treatment condition and to incomplete reporting of outcome data, the significant effect on female sexual function of assisted bibliotherapy vs no treatment was maintained after exclusion of 1 high-bias study. Sensitivity analysis was not possible for significant effects of unassisted bibliotherapy, because all studies had a high risk of bias.

Quality of the Evidence

Overall, this review summarizes limited evidence for the effect of bibliotherapy for sexual dysfunctions. All RCTs were judged as of high risk of bias at 2 or more domains (Figure 3). Tables 2–5 show that the certainty of the evidence for all comparisons and outcomes was low or very low, mainly because of imprecision and study limitations. Most included studies had small sample sizes. Only 3 of 15 studies included 100[74] or more than 100 participants[54,55] and 6 of 13 contained less than 40 participants.[29,31,51,53,73,77]

We are confident that we have identified all relevant studies in the field, as we carried out extensive searches in relevant databases (which included published studies and conference proceedings) as well as searching reference lists of included studies. In addition, a prospective trial register was searched to identify potentially relevant unpublished studies. Of the studies that were retrieved not all necessary data could be obtained, even on contacting the authors. Some of the studies were published more than 2 decades ago, and the authors were not able to recover the relevant data. Overall, our attempts to obtain further data on the included studies did not allow us to report clear judgments for all included studies with regard to the risk of bias assessments. An undetermined risk of bias may have been introduced by the sample selection in various studies, referring to the substantial level of self-selection bias in sex research in general.[80,81]

The results fit well into the context of other evidence, particularly with meta-analyses of studies on bibliotherapy for sexual dysfunctions,[26] and meta-analyses of bibliotherapy studies for broader range of mental disorders.[22–24,82]

Applicability of Evidence

The field of sexual dysfunction encompasses several different dysfunction types in women and men. With regard to this variety, the older publications were found to focus mainly on orgasm-related dysfunctions, respectively, on female anorgasmia and male premature ejaculation. More recent studies also addressed other dysfunction types, including female and male hypoactive sexual desire disorder, and vaginismus. Patients with male erectile dysfunction, female sexual arousal dysfunction, and dyspareunia have not been investigated in separate studies or were included in samples together with patients with other dysfunction types. This implies that bibliotherapy outcomes have been investigated across a broad range but not the full range of sexual dysfunctions. Moreover, bibliotherapy for some types of sexual dysfunctions, for example, vaginismus, has been investigated in only one study and await independent replication.

The literature on bibliotherapy has also revealed different formats of delivery of bibliotherapy with respect to the amount of guidance that is provided to patients. With regard to the latter, insufficient studies were identified to enable comparison. It was deemed relevant to compare patients using bibliotherapy with untreated patients and with patients receiving face-to-face treatment. The design of the included studies made both comparisons possible.

Although printed information carriers in the context of psychological health care are increasingly replaced with digital and Internet-based information, bibliotherapy may remain necessary and relevant. Reasons for this are that some patient groups may prefer to continue using paper-based information carriers for various reasons. Other users may have insufficient skills to navigate digital or Internet-based media. Still others may have no or limited access to digital media or to the Internet. The availability of digital and online information carriers may vary substantially between countries, regions, or between urban and rural environments.

Implications for Practice

Indications of positive effects of bibliotherapy for sexual dysfunctions were found. However, owing to limitations in the study designs and imprecision of the findings, we are unable to draw any firm conclusions about the use of bibliotherapy for sexual dysfunction. In addition, the present study remains silent with regard to the effectiveness of bibliotherapy for different types of sexual dysfunction. In most studies, sexual functioning was studied by means of continuous outcome measures. These could indicate whether or not sexual functioning of a person deteriorates. However, the included studies did not measure possible harms directly. None of the included RCTs reported on intervention acceptability and treatment adherence, although these characteristics might have a relevant impact on treatment outcome. More high-quality, larger trials are needed, also to compare assisted and unassisted bibliotherapy. In general, bibliotherapy may be employed for use in clinical practice for those types of sexual dysfunction for which its efficacy was demonstrated. The rapid development within different subfields of sexual health care, such as the availability and accessibility of pharmacotherapeutic treatments for male erectile dysfunction[83] and the development of Internet-based therapies for various sexual dysfunctions,[46,48,49] was not paralleled by new research comparing bibliotherapy with these new treatment modalities. However, bibliotherapy may be preferred by patients to either therapist-delivered sex therapy, pharmacotherapy, or online therapy and may be used within stepped-care programs of sexual health care.

Implications for Research

The evidence from the studies assessing bibliotherapy for sexual dysfunction included in this review is limited by the small sample sizes used in most studies and the small number of studies

included per comparison. More and larger trials would allow a more precise estimate of treatment effects of bibliotherapy, including the effects of bibliotherapy for different types of sexual dysfunction. In addition, some aspects of bibliotherapy need further investigation. For instance, an area of application of bibliotherapy that has not been investigated in controlled research is the use of bibliotherapy as an adjuvant to face-to-face treatment for sexual dysfunctions. The use of self-help books or pamphlets as adjuvant material is reported in several descriptions of the clinical practice in sexology.[84] In other clinical publications, the use of bibliotherapy in a stepped-care model is recommended.[85] The effect of bibliotherapy in consecutive phases of treatment could be investigated using crossover designs. As to the application of bibliotherapy in patient groups differing on other characteristics, including age, socioeconomic status, literacy, and computer literacy, the current findings do not provide any clarity. No direct comparisons between different patients groups were reported, nor did the included studies report which participant characteristics were predictive of positive results of bibliotherapy. It also remains unclear what reasons might differentially compel groups of patients to use or avoid this form of treatment. Relatedly, it is not clear why clinicians continue to provide bibliotherapy resources to their patients. These questions remain to be investigated in future research. Furthermore, there is a need to clearly define relevant outcome measures which future studies should take into account and to define unified grading systems by which these end points can be measured. In addition, future studies should report on the acceptability of the intervention and adherence to treatment requirements.

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STATEMENT OF AUTHORSHIP

Jacques J.D.M. van Lankveld: Conceptualization, Investigation, Resources, Writing - Original Draft, Writing - Review & Editing; Fleur T. van de Wetering: Formal Analysis; Methodology; Kevan Wylie: Investigation, Writing - Review & Editing; Rob J.P.M.Scholten: Methodology, Writing - Review & Editing.

REFERENCES

1. Burri A, Spector T. Recent and lifelong sexual dysfunction in a female UK population sample: prevalence and risk factors. **J Sex Med 2011;8:2420-2430.**
2. Kedde H, de Haas S. Problemen met het seksueel functioneren. In: Bakker F, Vanwesenbeeck I, eds. Seksuele Gezondheid in Nederland 2006. Delft: Eburon; 2006. p. 123-137.
3. Mitchell KR, Mercer CH, Ploubidis GB, et al. Sexual function in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). **Lancet 2013;382:1817-1829.**
4. Simons JS, Carey MP. Prevalence of sexual dysfunctions: Results from a decade of research. **Arch Sex Behav 2001;30:177-219.**
5. West SL, Vinikoor LC, Zolnoun D. A systematic review of the literature on female sexual dysfunction prevalence and predictors. **Ann Rev Sex Res 2004;15:40-172.**
6. Hendrickx L, Gijs L, Enzlin P. Prevalence rates of sexual difficulties and associated distress in heterosexual men and women: results from an Internet survey in Flanders. **J Sex Res 2014;51:1-12.**
7. Hendrickx L, Gijs L, Janssen E, et al. Predictors of sexual distress in women with desire and arousal difficulties: Distinguishing between personal, partner, and interpersonal distress. **J Sex Med 2016;13:1662-1675.**
8. Sánchez-Fuentes M, Santos-Iglesias P, Sierra JC. A systematic review of sexual satisfaction. **Int J Clin Health Psychol 2014;14:67-75.**
9. McCabe MP, Sharlip ID, Lewis R, et al. Incidence and prevalence of sexual dysfunction in women and men: A consensus statement from the Fourth International Consultation on Sexual Medicine 2015. **J Sex Med 2016;13:144-152.**
10. Feldman HA, Goldstein I, Hatzichristou DG, et al. Impotence and its medical and psychosocial correlates: results of the Massachusetts Male Aging Study. **J Urol 1994;151:54-61.**
11. Association AP. Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: Author; 2013.
12. Masters WH, Johnson VE. Human sexual inadequacy. Boston: Little, Brown; 1970.
13. Munjack DJ, Schlaks A, Sanchez VC, et al. Rational-emotive therapy in the treatment of erectile failure: An initial study. **J Sex Mar Ther 1984;10:170-175.**
14. Everaerd W, Dekker J. Treatment of male sexual dysfunction: sex therapy compared with systematic desensitization and rational emotive therapy. **Behav Res Ther 1985;23:13-25.**
15. Brotto LA, Basson R, Luria M. A mindfulness-based group psychoeducational intervention targeting sexual arousal disorder in women. **J Sex Med 2008;5:1646-1659.**
16. Brotto LA, Basson R, Smith KB, et al. Mindfulness-based group therapy for women with provoked vestibulodynia. **Mindfulness 2015;6:417-432.**
17. Brotto LA, Goldmeier D. Mindfulness interventions for treating sexual dysfunctions: the gentle science of finding focus in a multitask world. **J Sex Med 2015;12:1687-1689.**
18. Stephenson KR, Kerth J. Effects of mindfulness-based therapies for female sexual dysfunction: A meta-analytic review. **J Sex Res 2017;54:832-849.**
19. Fruhauf S, Gerger H, Schmidt HM, et al. Efficacy of psychological interventions for sexual dysfunction: A systematic review and meta-analysis. **Arch Sex Behav 2013;42:915-933.**
20. Berner M, Gunzler C. Efficacy of psychosocial interventions in men and women with sexual dysfunctions–a systematic

review of controlled clinical trials: Part 1-the efficacy of psychosocial interventions for male sexual dysfunction. **J Sex Med 2012;9:3089-3107.**

21. Gunzler C, Berner MM. Efficacy of psychosocial interventions in men and women with sexual dysfunctions–a systematic review of controlled clinical trials: Part 2–the efficacy of psychosocial interventions for female sexual dysfunction. **J Sex Med 2012;9:3108-3125.**
22. Glasgow RE, Rosen GM. Behavioral bibliotherapy: a review of self-help behavior therapy manuals. **Psychol Bull 1978; 85:1-23.**
23. Gould RA, Clum GA. A meta-analysis of self-help treatment approaches. **Clin Psychol Rev 1993;13:169-186.**
24. Marrs RW. A meta-analysis of bibliotherapy studies. **Am J Comm Psychol 1995;23:843-870.**
25. Rosen GM. Self-help treatment books and the commercialization of psychotherapy. **Am Psychol 1987;42:46-51.**
26. van Lankveld J. Bibliotherapy in the treatment of sexual dysfunctions: a meta-analysis. **J Cons Clin Psychol 1998; 66:702-708.**
27. Hawton K. Treatment of sexual dysfunctions by sex therapy and other approaches. **Br J Psychiatr 1995;167:307-314.**
28. Leiblum SR, Rosen RC. Principles and practice of sex therapy. 3d edition. New York: Guilford Press; 2000.
29. Seidler-Feller D. A comparison of group and self-directed treatment formats in the management of premature ejaculation in males without steady partners. Ohio State University; 1980.
30. Zeiss RA. Self-directed treatment for premature ejaculation. **J Cons Clin Psychol 1978;46:1234-1241.**
31. Dow MGT. A controlled comparative evaluation of conjoint counselling and self-help behavioural treatment for sexual dysfunction. Glasgow: University of Glasgow; 1983.
32. Mintz LB. A tired woman's guide to passionate sex: Reclaim your desire and reignite your relationship. Avon, MA: Adams Media; 2009.
33. van Lankveld J. Zelf je seksuele relatie verbeteren [How to improve your sexual relationship]. Cothen, NL: Servire; 1993.
34. van Lankveld J. Naar de 7e hemel: verbeter zelf je seksuele relatie [Going to seventh heaven: How to improve your sexual relationship]. Aramith: Haarlem; 2004.
35. Barbach LG. For yourself: The fulfillment of female sexuality. New York: Doubleday; 1974.
36. Heiman JR, LoPiccolo L, LoPiccolo J. Becoming orgasmic: A sexual growth program for women. Englewood Cliffs,NJ: Prentice Hall; 1976.
37. Zeiss RA, Zeiss AM. Prolong your pleasure. New York: Pocket Books; 1978.
38. Mintz LB. Becoming cliterate: Why orgasm equality matters–and how to get it. HarperCollins; 2017.
39. Dauw DC. Evaluating the effectiveness of the SECS' surrogate-assisted sex therapy model. **J Sex Res 1988;24:269-275.**
40. Gillan P, Golombok S, Becker P. NHS sex therapy groups for women. **Br J Sex Med 1980;7:44-47.**
41. Halvorsen JG, Metz ME. Sexual dysfunction, Part II: Diagnosis, management, and prognosis. **J Am Board Fam Pract 1992; 5:177-192.**
42. McCarthy B. Strategies and techniques for the treatment of inhibited sexual desire. **J Sex Mar Ther 1984;10:97-104.**
43. McCarthy B. Cognitive-behavioral strategies and techniques in the treatment of early ejaculation. In: Leiblum SR, Rosen RC, eds. Principles and practice of sex therapy: Update for the 1990s. New York: Guilford Press; 1989.
44. Price SC, Reynolds BS, Cohen BD, et al. Group treatment of erectile dysfunction for men without partners: a controlled evaluation. **Arch Sex Behav 1981;10:253-268.**
45. van Lankveld J, Leusink P, van Diest S, et al. Internet-based brief sex therapy for heterosexual men with sexual dysfunctions: A randomized controlled pilot trial. **J Sex Med 2009; 6:2224-2236.**
46. McCabe MP, Price E. Internet-based psychological and oral medical treatment compared to psychological treatment alone for ED. **J Sex Med 2008;5:2338-2346.**
47. Gurney K, Hobbs LJ, Adams NJ, et al. The Sextherapylondon interactive website for sexual difficulties: content, design and rationale. **Sex. Rel Ther 2020;35:210-226.**
48. van Lankveld J. Internet-based interventions for women's sexual dysfunction. **Curr Sex Health Rep 2016;8:136-143.**
49. Hummel SB, van Lankveld JJDM, Oldenburg HSA, et al. Efficacy of Internet-based cognitive behavioral therapy in improving sexual functioning of breast cancer survivors: Results of a randomized controlled trial. **J Clin Oncol 2017; 35:1328-1340.**
50. Hubin A, De Sutter P, Reynaert C. Bibliotherapy: An effective therapeutic tool for female sexual dysfunction? **Sexologies 2011;20:88-93.**
51. Dodge LJ, Glasgow RE, O'Neill HK. Bibliotherapy in the treatment of female orgasmic dysfunction. **J Cons Clin Psychol 1982;50:442-443.**
52. van Lankveld J. Self-help therapies for sexual dysfunction. **Ann Rev Sex Res 2009;46:143-155.**
53. Mintz LB, Balzer AM, Zhao X, et al. Bibliotherapy for low sexual desire: Evidence for effectiveness. **J Couns Psychol 2012;59:471-478.**
54. van Lankveld J, Everaerd W, Grotjohann Y. Cognitive-behavioral bibliotherapy for sexual dysfunctions in heterosexual couples: A randomized waiting-list controlled clinical trial in the Netherlands. **J Sex Res 2001;38:51-67.**
55. van Lankveld J, ter Kuile MM, de Groot HE, et al. Cognitive-behavioral therapy for women with lifelong vaginismus: A randomized waiting-list controlled trial of efficacy. **J Cons Clin Psychol 2006;74:168-178.**
56. Palaniappan M, Heatherly R, Mintz LB, et al. Skills vs Pills: Comparative effectiveness for low sexual desire in women. **J Sex Mar Ther 2018;44:1-15.**
57. Palaniappan M, Mintz LB, Heatherly R. Bibliotherapy interventions for female low sexual desire: Erotic fiction versus self-help. **Sex Rel Ther 2016;31:344-358.**

58. Biglan A, Severson H, Ary DV, et al. Do smoking prevention programs really work? Attrition and the internal and external validity of an evaluation of a refusal skills training program. **J Behav Med 1987;10:159-171.**
59. Snow DL, Tebes JK, Arthur MW. Panel attrition and external validity in adolescent substance use research. **J Cons Clin Psychol 1992;60:804-807.**
60. Hucker A, McCabe MP. Manualized treatment programs for FSD: Research challenges and recommendations. **J Sex Med 2012;9:350-360.**
61. Wagner G, Penelo E, Nobis G, et al. Predictors for good therapeutic outcome and drop-out in technology assisted guided self-help in the treatment of bulimia nervosa and bulimia like phenotype. **Eur Eat Dis Rev 2015;23:163-169.**
62. Organization WH. International Classification of Diseases 11th Revision for Mortality and Morbidity Statistics (ICD11-MMS), The global standard for diagnostic health information. Geneva: World Health Organization; 2018.
63. Shahar A, Jaffe Y. Behavior and cognitive therapy in the treatment of vaginismus: A case study. **Cogn Ther Res 1978; 2:57-60.**
64. Wincze JP, Carey MP. Sexual dysfunction: A guide for assessment and treatment. 2nd ed. New York, NY: Guilford Press; 2001.
65. Association AP. Diagnostic and statistical manual of mental disorders. 4th edition. Washington, DC: American Psychiatric Association; 1994.
66. LoPiccolo J, Steger JC. The sexual interaction inventory: a new instrument for assessment of sexual dysfunction. **Arch Sex Behav 1974;3:585-595.**
67. Nowinski JK, LoPiccolo J. Assessing sexual behavior in couples. **J Sex Mar Ther 1979;5:225-243.**
68. Derogatis LR, Melisaratos N. The DSFI: a multidimensional measure of sexual functioning. **J Sex Mar Ther 1979; 5:244-281.**
69. Rust J, Golombok S. The Golombok-Rust Inventory of Sexual Satisfaction (GRISS). **Br J Clin Psychol 1985;24:63-64.**
70. Rosen R, Brown C, Heiman J, et al. The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. **J Sex Mar Ther 2000;26:191-208.**
71. Higgins JPT, Altman DG, Sterne JAC. Assessing risk of bias in included studies. In: Higgins JPT, Churchill R, Chandler J, et al., eds. Cochrane Handbook for Systematic Reviews of Interventions Version 520; 2011 [updated June 2017]. [Available at: handbook.cochrane.org. Accessed January 25, 2021.
72. Hahn MJM. The vicarious treatment of primary sexual dysfunction. Psychology: Pennsylvania State University; 1981. p. 277.
73. Heinrich AG. The effect of group- and self-directed behavioral-educational treatment of primary orgasmic dysfunction in females treated without their partners. Boulder: University of Colorado; 1976.
74. Regev LG. Self-help in the treatment of sexual dysfunction: A randomized controlled trial. Reno: University of Nevada; 2003.
75. McMullen S, Rosen RC. Self-administered masturbation training in the treatment of primary orgasmic dysfunction. **J Cons Clin Psychol 1979;47:912-918.**
76. Balzer AM. Efficacy of bibliotherapy as a treatment for low sexual desire in women. Columbia, Missouri: University of Missouri–Columbia; 2012.
77. Trudel G, Proulx S. Treatment of premature ejaculation by bibliotherapy: An experimental study. **Sex Mar Ther 1987; 2:163-167.**
78. Zilbergeld B. A guide to sexual fulfillment. Boston/Toronto: Little Brown; 1978.
79. Schünemann HJ, Vist GE, Higgins JPT, et al. Interpreting results and drawing conclusions. In: Higgins JPT, Thomas J, Chandler J, et al., eds. Cochrane Handbook for Systematic Reviews of Interventions version 60. Cochrane; 2019. updated July 2019. Available at: handbook.cochrane.org. Accessed January 25, 2021.
80. Bogaert AF. Volunteer bias in human sexuality research: evidence for both sexuality and personality differences in males. **Arch Sex Behav 1996;25:125-140.**
81. Strassberg DS, Lowe K. Volunteer bias in sexuality research. **Arch Sex Behav 1995;24:369-382.**
82. Cuijpers P. Bibliotherapy in unipolar depression: a meta-analysis. **J Behav Ther Exp Psychiatr 1997;28:139-147.**
83. Moore RA, Derry S, McQuay HJ. Indirect comparison of interventions using published randomised trials: systematic review of PDE-5 inhibitors for erectile dysfunction. **BMC Urol 2005;5:18.**
84. McCarthy B, McDonald D. Assessment, treatment, and relapse prevention: male hypoactive sexual desire disorder. **J Sex Mar Ther 2009;35:58-67.**
85. Sewell MT. Sexual disorders. In: O'Donohue WT, Draper C, eds. Stepped care and e-health: Practical applications to behavioral disorders. New York, NY, US: Springer Science + Business Media; 2011. p. 247-261.