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

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ABSTRACT

Introduction. As yet, a summary of the research evidence concerning the efficacy of psychological treatment in female sexual dysfunction is lacking. Previous reviews were often nonsystematic or explored one specific sexual dysfunction.

Aim. Our systematic review provides an overview of the efficacy of psychosocial interventions in all female sexual dysfunction.

Main Outcome Measures. Main outcome measures included for example psychometrically validated scales, diary notes, interviews, and vulvar algesiometer. The efficacy of psychosocial interventions was measured for example by the frequency of and satisfaction with sexual activity and sexual functioning. Safety and acceptance were evaluated on the basis of adverse events and dropout rates.

Methods. The systematic literature search included electronic database search, handsearch, contact with experts, and an ancestry approach. Studies were included if the woman was given a formal diagnosis of a sexual dysfunction (International Statistical Classification of Diseases and Related Health Problems—ICD10/-9; Diagnostic and Statistical Manual of Mental Disorders-IV/-III-R) and when the intervention was psychosocial or psychotherapeutic. The control group included either another treatment or a waiting-list control group. The report of relevant outcomes was necessary for inclusion as well as the design of the study (randomized, controlled trials [RCTs] and controlled clinical trials). The assessment of methodological quality comprised aspects of randomization, blinding, incomplete outcome data, selective reporting, and allegiance.

Results. We identified 15 RCTs that investigated efficacy in female sexual dysfunction and two further studies that examined male and female sexual dysfunction together. Most trials explored sexual pain disorders. About half of all studies in women used either a concept derived from Masters and Johnson or a cognitive-behavioral treatment program. Both approaches showed significant improvements compared with a control group. Benefit was not always maintained over the (variable) follow-up period.

Conclusions. Traditional sexual therapeutic concepts proved to be efficacious in the treatment of female sexual dysfunction. A shortcoming was the rather low methodological quality of included studies. **Günzler C, and Berner MM. Efficacy of psychosocial interventions in men and women with sexual dysfunctions—A systematic review of controlled clinical trials. J Sex Med 2012;9:3108–3125.**

Key Words. Female Sexual Dysfunction; Systematic Review; Randomized; Controlled Trial; Psychotherapy; Psychosocial Intervention

Introduction

Prevalence rates for female sexual dysfunction vary largely in different epidemiological studies. Heiman suggested that 25–63% of women self-report at least one sexual problem, and Laumann et al. reported that 43% of surveyed women suffered from a sexual dysfunction [1,2]. Hayes et al. examined the prevalence of sexual dysfunctions that are associated with personal distress among women aged 20–70 years and found that hypoactive sexual desire disorder (HSDD), sexual arousal disorder, orgasmic disorder, and dyspareunia had prevalence rates of 16%, 7%, 8%, and 1%, respectively [3].

Sexual dysfunction may impair the whole life of affected persons [4]. The literature shows that women with sexual problems report lower quality of life and less satisfaction with partnership. Furthermore, a high risk of a female sexual dysfunction is related to a greater likelihood of depressive symptoms [5]. Leiblum et al. demonstrated that for many women, HSDD was associated with emotional and psychological distress as well as significantly lower sexual and partner satisfaction [6]. In a recent study, 50 women with HSDD and 100 healthy controls were compared [7]. Women with HSDD showed lower self-esteem, more anxiety, and feelings of guilt as well as a higher instability of mood than women without FSD. Kelly et al. investigated the communication patterns as an indicator of quality of partnership in couples in which the woman suffered from an orgasm dysfunction [8,9]. Couples in which the woman reported an orgasmic disorder showed less communication, especially concerning sexual topics but also more problematic communication patterns and reproaches compared with sexually functional couples. These cross-sectional studies do not allow drawing causal conclusions. This means, it is possible that female sexual dysfunction might lead to intrapersonal problems like higher depressive symptoms as well as to interpersonal problems like a problematic communication with the partner. The other direction is possible as well; this means that a problematic relationship or certain personality factors may lead to the development and maintenance of a sexual dysfunction. A circular perspective with several interactions might be more appropriate.

Approaches to the treatment of female sexual dysfunction have been developed in four areas: surgical treatment, pharmacological agents, hormonal treatment, and psychological treatment [10–12]. Surgical treatment was only investigated in women with provoked vestibulodynia, and pharmacological and hormonal agents were mainly investigated in women with either hypoactive sexual arousal disorder or HSDD. Psychological treatments are performed in women with every kind of sexual dysfunction. Aim of our systematic review is to give an overview about the efficacy of psychosocial interventions in men and women with a sexual dysfunction.

What follows is a short overview about the four treatment approaches, mentioned earlier, and relevant efficacy studies.

In women with provoked vestibulodynia, a type of sexual pain disorder, surgical treatment (vestibulectomy) was most frequently studied and achieved improvement in pain scores on examination [11,13]. This surgical operation consists of the excision of the posterior hymen and of the painful mucosa of the posterior and anterior vestibule, and is recommended after the failure of less invasive treatments.

Pharmacological agents for sexual pain disorders were investigated less frequently. Foster reported that many of the recommended pharmacotherapeutics are "off-label," and the number of randomized, controlled trials (RCTs) proving their efficacy is very limited [14]. Recently, Foster et al. published an RCT that has shown no difference in pain reduction between desipramine, topical lidocaine, and placebo [15]. In the treatment of sexual desire and arousal problems, sildenafil, a phosphodiesterase type 5 inhibitor (PDE5), and bupropion, a selective dopamine and noradrenalin reuptake inhibitor, were investigated most frequently. Trials that investigated the efficacy of sildenafil in women with a sexual dysfunction show heterogeneous results. While Caruso et al. found in a small study with 68 enrolled women that sildenafil significantly improved arousal, orgasm, and enjoyment compared with placebo in a large multisite RCT of Basson et al. (N = 781) and in a study of Kaplan et al. (N = 33), no significant differences between sildenafil and placebo with regard to sexual functioning were found [16–18]. Berman et al. reported that in women with a sexual arousal disorder without a concomitant HSDD, sildenafil was associated with a significantly greater improvement in sexual functioning compared with placebo [19]. However, no significant effects were shown for women with concomitant HSDD. Even in a highly selected sample of women with spinal cord injury, where the dysfunction is deficient genital vasocongestion rather than lack of subjec-