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Review

Assessing sexual problems in women at midlife using the short version of the female sexual function index

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ABSTRACT

Assessment of sexual function is a complex process, especially in women, which requires in any individual case: time, appropriate training and experience. The prevalence of female sexual dysfunction is quite variable depending on the studied population, assessment methods, comorbid conditions and treatments, and age. A large number of screening methods have been developed over the last decades which range from tedious, exhaustive and boring tools to very simple standardized questionnaires. The 19-item female sexual function index (FSFI-19) is among the most used and useful- instrument designed to assess female sexual function in all types of circumstances, sexual orientation and perform the comparison of transcultural factors. A short 6-item- version of the FSFI-19 has been developed to provide a quick general approach to the six original domains (one item per domain). Nevertheless, further studies are needed to demonstrate its validity in different clinical situations as it has been extensively demonstrated with the original tool.

Contents

1. Introduction

The importance of good female sexual function is well recognized. As women get older, there is a decline in reproductive function and sexual satisfaction and activity. Sexual problems in women are common, affecting 25–43% of them; lack of desire being the most prevalent. Female sexual dysfunction (FSD) increases three-fold during the climacteric, and is more evident between 62 and 65 years [1]. Perimenopausal women report lubrication problems, less sexual participation, orgasm problems, absence of sexual fantasies, less sexual gratification and decreased sexual interest and activity [2,3]. Estrogen deficiency increases the prevalence of sexual problems, including vaginal dryness, dyspareunia and vulvovaginal burning. In one study, vaginal discomfort in postmenopausal women aged 55–65 years caused them to avoid intimacy (58%), lose libido (64%), and present dyspareunia (64%). Those who used topical estrogens to treat their vaginal discomfort reported less dyspareunia (56%), more sexual satisfaction (41%), improved sexual life

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(29%) and their partners were looking forward to having sex (57%) [4].

There has been a long debate about the effect of hysterectomy on female sexual function. One study reported that sexual pleasure improves after vaginal hysterectomy or after subtotal or total abdominal hysterectomy; and the prevalence of bothersome symptoms were similar 6 months after surgery [5]. Male factors on the other hand may increase the risk of female sexual problems whereas the prior use of oral contraceptives reduces this risk [6]. Several studies indicate that symptoms such as decreased libido, fatigue, lack of sexual motivation, mood changes are related to decreased female androgens [7,8]. The free androgen index has been positively correlated in healthy mid-aged women with depression, anxiety, anger/aggressiveness and psychotism; whereas the sex hormone binding globulin was negatively correlated to depression and psychotism [9]. Nearly 40% of women with sexual disorders (i.e., desire, arousal, or orgasm) are correlated to depression [10]. The administration of estrogen plus androgen significantly improves libido and general well being [8,11].

A quarter of mid-aged women are sexually inactive in which medical problems, psychological aspects, socio-cultural influences and bad relationships with the partner may have a negative impact on sexual function [12]. The negative impact of low sexual desire on quality of life may correlate to low physical and emotional satisfaction and low general happiness [13–15].

An important obstacle to assessing female sexual problems in routine clinical practice is the availability of short easy to complete questionnaires. This document will examine issues related to the assessment of sexual function in female mid-life, the original 19 item female sexual function index (FSFI-19) and its shorter 6 item version (FSFI-6).

2. Issues related to sexual assessment

Diaries or event logs, structural interviews, guidance documents and specific questionnaires have been used to assess female sexual function. FSD is multifactorial and complex; exceeding individual status, health condition and social factors. A significant proportion of mid-aged women have urological symptoms, some degree of vulvovaginal atrophy and sclerosous changes that are associated with negative feelings about sexuality [16–19]. In addition, comorbidity, medications and physical conditions may influence sexual attitude and performance. Epidemiological research of FSD has faced several problems such as the difficulty of assessing information (i.e., long questionnaires), or methodological issues (i.e., sample type and size). Regarding the latter, data in many cases is drawn from clinical scenarios and not from the general population. On the other hand, although some menopause-related quality of life tools include items related to sexual function/dysfunction (required for the assessment of mid-aged women) [20,21]; these instruments do not approach all aspects of sexuality. These are some of the identified difficulties that assessing sexuality has to face during standard clinical care.

There is a need for simple and feasible instruments to aid the screening of sexual problems in a clinically crowded practice. It is important to bear in mind that the use of sexual inventories is driven by several purposes: epidemiological research, a general or specific approach to provide treatment or counseling, the evaluation of a particular known or new treatment. In this sense, many validated instruments have been designed: the 245-item Derogatis sexual function inventory, the 25-item Derogatis interview for sexual function, the 12-item female sexual distress scale, the 22-item brief sexual function index for women, the 19-item female sexual function index (FSFI-19), the 26-item sexual function questionnaire; or the 14-item female change in sexual function questionnaire.

There have been efforts to simplify the content of questionnaires, although the selection of questions or items is not easy. In some cases, a single question has been proposed [22] or the selection of a small number of items from a previously validated tool [14,23].

3. The FSFI-19 as a tool used to assess female sexual function

In 2000, an interdisciplinary consensus conference panel consisting of 19 experts in FSD selected from five countries was convened by the Sexual Function Health Council of the American Foundation for Urologic Disease [24]. A modified Delphi method was used to develop consensus definitions and classifications, and build on the existing framework of the International Classification of Diseases-10 and the diagnostic and statistical manual of mental disorders (DSM) IV of the American Psychiatric Association, which were limited to the consideration of psychiatric disorders. Hence, classifications were expanded to include psychogenic and organic causes of desire, arousal, orgasm and sexual pain disorders. An essential element of the new diagnostic system is the "personal distress" criterion. In particular, new definitions of sexual arousal and hypoactive sexual desire disorders were developed, and a new category of non-coital sexual pain disorder was added. In addition, a new subtyping system for clinical diagnosis was devised. Guidelines for clinical end points and outcomes were proposed, and important research goals and priorities were identified [24]. Taking all these aspects into consideration, Rosen et al. [25] developed the female sexual function index (FSFI), a test with psychometric properties, capable of assessing sexual function of the past 4 weeks. It is composed of 19 questions (FSFI-19) grouped in six domains or dimensions: desire (items 1 and 2), arousal (items 3–6), lubrication (items 7–10), orgasm (items 11–13), satisfaction (items 14–16), and pain (items 17–19) (Box 1). Each question can be scored in a Likert fashion from 0–5. Scores obtained in a particular domain are added and multiplied by a corresponding factor that homogenizes the influence of each dimension. The total FSFI-19 score is the sum of all scores obtained in each domain. Higher scores indicate better sexual function. Subsequently, Wiegel et al. [26] determined a cut-off value for the FSFI-19 for the definition of FSD (total FSFI-19 scores of 26.55 or less). Indeed, using this cut-off value it was found that 70.7% of women with sexual dysfunction and 88.1% of the sexually functional ones were correctly classified.

The original FSFI-19 has been validated in several languages, including Spanish. The FSFI-19 has been used to assess sexuality among pre- and post-menopausal women, among different ethnical populations, different medical conditions; all displaying good reliability values. Its utility has also been proven in a longitudinal cohort of pre-/postmenopausal British women among which the main predictors of changes in sexual functioning and satisfaction were desire and arousal [27].

Sexual function was assessed with the FSFI-19 in a large population of 7243 women of 19 cities of 11 Latin American countries. A 25.6% of them were sexually inactive, who were older, less educated, mostly postmenopausal and used less hormone therapy (HT). In this report, prevalence of FSD varied, and was related to female (bad lubrication) and male factors (sexual failure) [12]. Male sexual dysfunction varied from 10 to 45%. The results of this study are in correlation with other reports associating age, education, alcohol use and vaginal dryness to lower desire and satisfaction.

Using the FSFI-19 tool it was found that older and postmenopausal women from Ecuador and those with an older partner, with sexual dysfunction and lower education were at higher risk

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