

Clinical Evaluation and Management Strategy for Sexual Dysfunction in Men and Women

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Summary of Committee. For the complete report please refer to *Sexual Medicine: Sexual Dysfunctions in Men and Women*, edited by T.F. Lue, R. Basson, R. Rosen, F. Giuliano, S. Khoury, F. Montorsi, Health Publications, Paris 2004.

ABSTRACT

Introduction. The optimal approach for identification and evaluation of the sexual problems in men and women in primary care or general medicine practice has not been consensed.

Aim. To provide recommendations/guidelines concerning state-of-the-art knowledge for clinical evaluation and management strategies in the evaluation and treatment of sexual dysfunction in men and women, emphasizing evidence-based medicine and a patient-centered framework.

Methods. An International Consultation in collaboration with the major urology and sexual medicine associations assembled over 200 multidisciplinary experts from 60 countries into 17 committees. Committee members established specific objectives and scopes for various male and female sexual medicine topics. The recommendations concerning state-of-the-art knowledge in the respective sexual medicine topic represent the opinion of experts from five continents developed in a process over a 2-year period. Concerning the Clinical Evaluation and Management Strategies Committee, there were 12 experts from five countries.

Main Outcome Measure. Expert opinion was based on grading of evidence-based medical literature, widespread internal committee discussion, public presentation and debate.

Results. Three concepts underlie sexual medicine management: (i) adoption of a patient-centered framework for evaluation and treatment; (ii) application of the principles of evidence-based medicine in diagnostic and treatment planning; and (iii) use of a unified management approach in men and women. When taken together, these three principles provide a balanced and integrated approach to sexual dysfunction management. Common algorithms for diagnosis and management of men and women with sexual dysfunction, brief sexual symptom checklists, basics in history and physical examination, indications for specialized referral and development of a follow-up strategy are presented.

Conclusions. More research is needed in understanding the role of evidence-based and patient-centered medicine in the clinical evaluation and management strategies of men and women with sexual dysfunction.

Key Words. Diagnosis; Management; Patient-Centered; Algorithm; Sexual Dysfunction; Erectile Dysfunction; Female Sexual Dysfunction

Essential Concepts in the Management of Sexual Problems

Sexual problems are highly prevalent in men and women [1–7], yet frequently under-recognized and under-diagnosed in clinical practice [8,9]. Even among clinicians who acknowledge the relevance of addressing sexual issues in their patients, there is a general lack of understanding of the optimal approach for sexual problem identification and evaluation [9].

Three essential concepts underlie the management of sexual problems generally in men and women:

1. *Adoption of a patient-centered framework for evaluation and treatment* Traditionally, the dominant model in medical practice has been the “disease-centered” approach, which generally assumes that disease is “fully accounted for by deviations from the norm of measurable biological variables,” as described by Engel [10]. Patient-centered care on the contrary is an approach that consciously adopts the patient’s perspective [11] and respects his or her ideas, feelings, expectations and values, as the physician tries to enter the patient’s world, to see the illness through the patient’s eyes [12–14]. Although research in this area is limited, several publications have stated the need for the adoption of a patient-centered care in sexual medicine [15–21].
2. Application of the principles of evidence-based medicine in diagnostic and treatment planning [22–24]. Strong consideration should be given to the evidence basis for diagnostic evaluation, in addition to treatment approaches for sexual dysfunction. Specific tests or procedures should not be recommended in the absence of specific data or adequate empirical evidence supporting their use. Both physicians and patients should be strongly encouraged to consider the available scientific evidence before choosing among specific treatment or diagnostic options.
3. Adoption of a common management approach for sexual dysfunction in both men and women. Men and women with sexual dysfunction should be treated based on common principles, actively participating in the decision-making process. A diagnostic algorithm is proposed which takes into account each patient’s needs and is based on problem identification, patients’ education, and shared decision-making process.

Management Algorithm for Sexual Dysfunction (SD) in Men and Women

The algorithm for sexual problem management in men and women is illustrated diagrammatically in Figure 1. The evaluation of sexual dysfunction problems in men and women includes

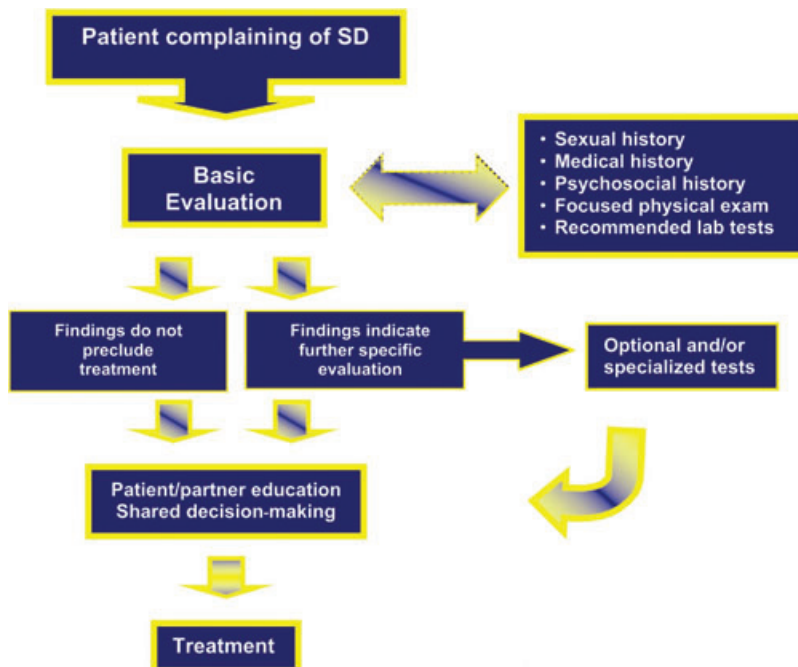


Figure 1 Diagnostic and management algorithm for sexual dysfunction (SD) in men and women.

patient–physician dialogue, history taking (sexual, medical and psychosocial), focused physical examination, and specific laboratory tests in most cases [25–28]. Specialist referrals may be considered at any time that the patient or treating physician feels is appropriate. Following the initial evaluation, all patients should be provided with a detailed review of findings and explanation of the nature and likely causes of their problem. If the initial findings do not preclude direct treatment for the sexual problem, patients should be informed as to the available treatment options and the likely benefits and disadvantages or risks of each option. Patients should always be encouraged to participate actively in the decision-making process.

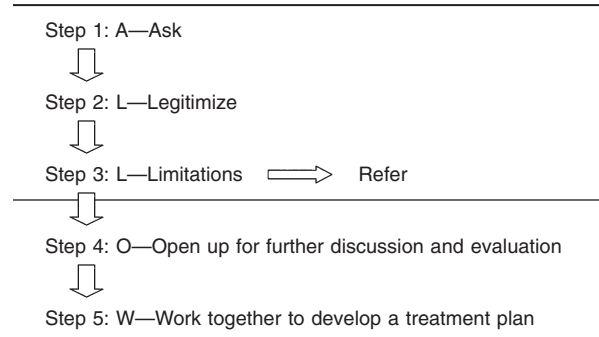
Available treatment options should be described based on evidence-based review of the literature and a shared decision-making process should guide the development of an individualized management plan. In cases where initial findings indicate a need for further evaluation, referral to a specialist or specialized testing should be considered. Careful attention should always be paid to the presence of significance comorbidities or underlying etiologies (e.g., cardiovascular disease, diabetes, depression). It should be noticed that some sexual dysfunction may become the reason to unmask previously undiagnosed medical conditions, even life-threatening in some cases [29,30].

Initial Evaluation of Sexual Problems

Initial assessment of a sexual problem should always include a detailed sexual, medical and psychosocial history [31]. Since the type and duration of the problem is not always apparent at the outset, and since individuals frequently present with one type of dysfunction (e.g., lack of erection, early ejaculation), but may have other sexual or interpersonal problems, a detailed sexual history should always be obtained. While brief checklists or questionnaires may be of value in the recognition and initial evaluation of a sexual problem [32–34], these should not substitute for a detailed sexual history. The examiner should always be attentive to both the intra- and interpersonal aspects of sexual dysfunction. Overall, the clinician should strive to maintain an attitude of comfort and flexibility throughout the evaluation process.

Primary care clinicians who identify sexual issues or complaints during the initial evaluation, but who feel uncomfortable in exploring the topic further, should refer such individuals—either to a specialist, if one is available, or to a colleague with aptitude or interest in managing sexual problems.

Table 1 “ALLOW” algorithm for managing sexual dysfunction: a sample management plan



(Source: Sadovsky R, Mulhall JP. The potential value of erectile dysfunction inquiry and management. *Int J Clin Practice* 2003;57:601–8.)

This flexibility of response to the patient’s sexual concern or problem is illustrated by the acronym, “ALLOW” (Table 1), which draws attention to the need for all clinicians to inquire about sexual activity, while recognizing the limitations and varied needs and interests of clinicians in specifically managing sexual problems.

The first stage in the assessment is represented by the letter “A”—“asking” the patient about sexual function and activity. The second step in the process is represented by the letter “L”—“legitimizing” the patient’s problem and acknowledging that sexual dysfunction is a relevant clinical issue. In contrast, if the patient perceives that his or her sexual problem is being ignored or dismissed, this can delay or discourage the patient from seeking further help. The third step is again represented by the letter “L”—“limitations” the clinician may bring to the evaluation of sexual problems. These can include lack of knowledge or personal discomfort with discussion of sexual matters. Based on this self-evaluation by the clinician, the next step is taken and the clinician has done it “ALL” for the patient. Step 4 involves “Opening up the discussion” and the potential referral to a colleague or sub-specialist to further investigate and manage the patient’s problem. The final stage in the process involves dialogue with the patient to identify an appropriate goal and mutually acceptable management plan.

The Brief Sexual Symptom Checklist (BSSC)

Sexual problem identification should be regarded as a routine and necessary aspect of medical care [26,27,31]. This principle is applied to all new patient visits, especially for individuals at risk, such as men or women above the age of 50, patients with chronic illnesses or medical conditions,

following major surgery or hospitalization, during major life changes (e.g., divorce, childbirth) as well as during return or follow-up visits for these patients. The depth and extent of sexual inquiry should be individualized, based on the clinical setting, patient characteristics, and type of visit. A single question (e.g., "Do you have questions or concerns about your sexual functioning?") may be sufficient in some circumstances, whereas a more detailed sexual history is indicated in others. Sexual inquiry is most often conducted by face-to-face interview with the patient, although paper-and-pencil questionnaires or computer-based methods may be of value. Each of these methods has distinct advantages and limitations. The style or manner in which sexual inquiry is conducted is most important. This should reflect a high level of sensitivity and regard for each individual's unique ethnic, cultural and personal background.

To facilitate initial identification of a sexual problem, a brief screening checklist has been developed specifically by this committee. This brief checklist consists of four simple questions (Appendix A and B). The brief symptom checklist is suitable for use in primary care settings and addresses the patient's level of satisfaction with sexual function (the major outcome measure in sexual health). Additionally, it assesses duration, the type/s of sexual problems experienced, as well as the willingness of the person to discuss the problem with a health care provider. Three of the four questions are common for men and women, while the fourth question (type of problem) is specific for men or women respectively.

Basics in History-Taking

The medical, sexual and psychosocial history are the most essential, and frequently the most revealing aspects of the assessment process. In obtaining a history with men or women with sexual problems, special attention should always be paid to personal, social or cultural sensitivities.

A comprehensive sexual history is essential in confirming the patient's diagnosis, as well as in the evaluation of the patient's overall sexual function. Basic principles for sexual history-taking are summarized in Table 2.

A detailed medical history should be obtained in all cases of sexual dysfunction. The major goals of medical history-taking are: (i) To evaluate the potential role of underlying or comorbid medical conditions; (ii) To differentiate between potential organic and psychogenic causes in the etiology of

Table 2 Basic principles for sexual history-taking

- Allow the patient to feel in control
- Provide explanations for answers
- Help the patient feel less abnormal (destigmatize)
- Provide encouragement and positive support
- Initiate the discussion of sensitive topics
- Defer sensitive questions
- Be aware of patient's cultural background
- Ensure confidentiality
- Avoid judgmentalism

(Source: Gregoire A. ABC of sexual health: assessing and managing male sexual problems. *BMJ* 1999;318:315-317.)

a patient's sexual problem; (iii) To assess the use of concomitant medications.

The etiology or causal factors for sexual dysfunction may or may not be apparent from the patient's history alone. Further investigation by means of a physical examination and selected laboratory testing may be of value in confirming or disconfirming specific etiologies or comorbidities. Potential etiologies for sexual dysfunction include a wide range of organic/medical factors, e.g., cardiovascular disease, hyperlipidemia, diabetes, hypogonadism and/or multiple psychological or interpersonal factors, e.g., anxiety, depression, relationship distress. It is important to note that, in many cases, organic and psychogenic factors may coexist, particularly in individuals or couples with long-standing or chronic sexual dysfunction [36-46]. In such cases, clinicians should assess the independent and interactive role of *both* organic and psychogenic factors, and these should be reviewed with the patient during the final stages of assessment.

Finally, a detailed psychosocial assessment is essential in every case of sexual dysfunction. Given the interpersonal context of sexual problems in men and women, the physician should carefully assess past and present partner relationships. Sexual dysfunction may affect the patient's self-

Table 3 Distinguishing psychologic from organic sexual dysfunction

Characteristic	Organic	Psychogenic
Age	Older	Younger
Onset	Gradual (except trauma or surgery)	Acute
Circumstances	Global	Situational
Symptom Course	Consistent or progressive	Intermittent
Desire	Normal	Decreased
Organic risks	Present	Absent, variable
Partner problem	Secondary	At onset
Anxiety and fear	Secondary	Primary

Modified from Hengeveld MW. Erectile disorder: A psychosociological review. In: Jonas U, Thon WF, Stief CG, editors. *Erectile dysfunction*. Berlin: Springer-Verlag; 1991:14-22.

esteem and coping ability, as well as his or her social relationships and occupational performance. These aspects should be assessed in each case. It is also important that the physician should not assume that every patient is involved in a monogamous, heterosexual relationship.

Physical Examination

The physical examination is an essential component of sexual dysfunction evaluation in every case [25–30,41,42,47]. In most cases, the physical examination will not identify the specific etiology or cause of sexual dysfunction; however, a focused examination should be performed on every patient with sexual problems. The physical examination should include a general screening for medical risk factors or comorbidities that are associated with sexual dysfunction, such as body habitus (secondary sexual characteristics), assessment of the cardiovascular, neurological and genital system, with particular focus on the genitalia and secondary sex characteristics. The physical examination is used to corroborate aspects of the medical history and may sometimes reveal unsuspected physical findings (e.g., decreased peripheral pulses, vaginal atrophy, atrophic testes, penile plaque). Every effort should be made to ensure the patient's privacy, confidentiality and personal comfort while conducting the physical examination.

Recommended Laboratory Testing

Recommended laboratory tests for men and women with sexual problems typically include fasting glucose, cholesterol, lipids and hormonal profile [25,26,41,42,48]. Additional laboratory tests (e.g., thyroid function) may be performed at the discretion of the physician, based on the medical history and clinician's judgment.

Specialist Consultation and Referral

With the advent of effective oral treatment for ED, primary care practitioners currently manage

Table 4 Key elements of the physical examination in sexual dysfunction

Complete genital exam
Secondary sexual characteristics (e.g., gynecomastia)
Body hair, fat distribution
BP, heart rate, peripheral pulses, edema
Vibratory sensation
Lower extremity strength and coordination

Table 5 Indications for specialized referral and/or diagnostics

• Patient request
• Treatment failure
• Primary ED (poorly sustained erections, lifelong)
• Anatomic penile deformities
◦ Peyronie's Disease
◦ Congenital: hypospadias, chordee
◦ Trauma
◦ Phimosis
◦ Short penis, buried penis
• Pelvic/perineal trauma
• Endocrinopathy
• Psychiatric or psychosexual disorder
• Relationship problems
• Complex vascular problems
• Complex neurologic problems

the majority of cases of male sexual dysfunction. This is largely true for women also, although the number of women seeking help from mental health or gynecologically-trained practitioners varies from one region or country to another. Only in a minority of patients is referral for specialized consultation or testing absolutely necessary (Table 5). Further diagnostic evaluation may be conducted at the patient's request, in case of lifelong or primary sexual dysfunction, in the presence of specific anatomic or endocrine factors, or in cases of complicated psychiatric or interpersonal problems. Additionally, specialized diagnostic assessment may be indicated following failure of initial therapy.

A broad array range of specialized diagnostic tests and procedures are available, particularly for assessing erectile dysfunction [25–27]. These tests may be used to separate organically-based from purely psychogenic cases (e.g., nocturnal penile tumescence and rigidity testing) or to tailor specific treatment options (e.g., surgery). In the majority of cases, however, the diagnostic evaluation has little impact on the selection therapeutic options. Diagnostic categorization is particularly indicated for those patients in whom a reversible form of sexual dysfunction is suspected.

Shared Decision-Making and Treatment Planning

Following completion of the initial diagnostic evaluation, patients (and partners where possible) should be given a detailed description of the available treatment options. These should include both medical and non-medical options, whenever indicated. Although certain options (e.g., PDE5 inhibitors for ED) may be preferred by the majority of men with ED, all patients should be

informed about the availability of other treatment options. Some patients may prefer “watchful waiting” or further consideration prior to selection of a specific treatment option. It is important for the clinician not to assume an authoritarian or patriarchal role in the selection (or rejection) of specific treatment options. The clinician should provide a supportive and empathic environment for shared decision-making [15–21].

Developing a Follow-up Strategy: “FAST”

Regardless of the treatment option chosen, follow-up is essential to ensure the best treatment outcome. Monitoring of adverse events, assessing satisfaction or outcome associated with a given treatment, determining whether the partner may also suffer from a sexual dysfunction, and assessing overall health and psychosocial function are important aspects of follow-up [49,50]. It is common, for example in older couples, that men with ED have partners suffering also from sexual difficulties, such as vaginal dryness, that may require intervention and may prevent the successful treatment of the patient’s condition. Consideration should also be given to whether an alteration in dose or treatment might be of value. Referrals for specialist care with a urologist, gynecologist, endocrinologist, psychosocial therapist, or other appropriate specialist are other important considerations in the follow-up visit, especially in difficult-to-treat populations, such as post radical prostatectomy ED.

In patients who do not respond to so-called first-line treatments (e.g., oral therapy), second-line and third-line treatment options should always be considered, since most of these treatments have demonstrated reasonable response and satisfaction rates in controlled studies.

The “FAST” acronym [51], proposed for ED patients, is a useful reminder of the key aspects of follow-up for sexual dysfunction generally (Table 6).

Specialized Evaluation in Erectile Dysfunction

The goal of specialized evaluation is to define the cause of ED. Generally in medicine a specific diagnosis is needed to formulate a treatment plan; in most cases of sexual dysfunction in men this can be done without extensive testing [15,16,27,28]. On the other hand, without diagnostic testing efficacy and satisfaction with treatments become a matter of chance [49,50]. Generally accepted indi-

Table 6 The “FAST” guideline for follow-up

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- > **Follow-up of patients.**
Sexual dysfunction should be managed in a similar way to other chronic medical or psychological conditions. Follow-up visits are essential to improve physician-patient communication, to address treatment issues or problems that may have occurred (e.g., treatment administration, efficacy, adverse effects, partner’s acceptance), to identify changes in sexual function status or new medical conditions, and to offer continuing education and support to patients and their partners.
 - > **Adjustment of dosing.**
Careful attention to prescribing instructions is necessary. Also, in patients who have more gradual or limited treatment response, such as those who are re-establishing sexual intimacy after a period of abstinence, repeated attempts or dosing may be necessary.
 - > **Sexual stimulation.**
Currently available medical treatment, such as PDE5 inhibitors, enhances the physiologic response; therefore, sexual stimulation is essential and needs to be given at appropriate times following dosing. It may be also necessary to consider educating the patient and partners on suitable methods of stimulation.
 - > **Titrating to the maximum tolerated dose.**
Titrating to the maximum tolerated dose is essential to achieving optimal efficacy and maximizing response rates to pharmacotherapy.
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(Source: Hatzichristou: DG. Int J Impot Res 2001;13(suppl 4):S32)

cations are: treatment failures, Peyronie’s disease, primary ED, history of pelvic/perineal trauma, cases requiring vascular or neurosurgical intervention, complicated endocrinopathy, complicated psychiatric disorder, complex relationship problems and medico-legal concerns.

Conclusions

The evidence-based approach to clinical medicine mandates that each patient has the right to be informed of his or her health status, as well as the evidence-based diagnostic and treatment options that are available, in order to participate actively in the decision-making process. Since it is evident that available treatments and diagnostic approaches for sexual dysfunction are increasing, the patient should be given every opportunity to choose among options, and to determine which fits best to his/her special needs. Therefore, patients’ and partners’ education should be considered as an essential component of management strategy. Patients’ needs vary in their preference for information and involvement in the decision-making process, and for this reason the approach should always be individualized. This is ultimately why “communication is the royal pathway” to

both evidence-based and patient-centered medicine, especially in sexual medicine. As physician-patient communication is one of the most critical aspects in management strategy, inclusion of human sexuality and sexual medicine courses in health sciences curriculum and CME programs is of outstanding value [52].

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Appendix A: Brief Sexual Symptom Checklist: Men's Version

Please answer the following questions about your overall sexual function in the past **3 months** or more.

1. Are you satisfied with your sexual function?

- Yes No

If No, please continue.

2. How long have you been dissatisfied with your sexual function?

3a. The problem(s) with your sexual function is: (mark one or more)

- 1 Problems with little or no interest in sex
 2 Problems with erection
 3 Problems ejaculating too early during sexual activity
 4 Problems taking too long, or not being able to ejaculate or have orgasm
 5 Problems with pain during sex
 6 Problems with penile curvature during erection
 7 Other:

3b. Which problem is most bothersome (circle) 1 2 3 4 5 6 7

4. Would you like to talk about it with your doctor?

- Yes No

Appendix B: Brief Sexual Symptom Checklist: Women's Version

Please answer the following questions about your overall sexual function in the past **3 months** or more.

1. Are you satisfied with your sexual function?

- Yes No

If No, please continue.

2. How long have you been dissatisfied with your sexual function?

3a. The problem(s) with your sexual function is: (mark one or more)

- 1 Problems with little or no interest in sex
 2 Problems with decreased genital sensation (feeling)
 3 Problems with decreased vaginal lubrication (dryness)
 4 Problems reaching orgasm
 5 Problems with pain during sex
 7 Other:

3b. Which problem is most bothersome (circle) 1 2 3 4 5 6 7

4. Would you like to talk about it with your doctor?

- Yes No