

A Conceptual Approach to Understanding and Managing Men's Orgasmic Difficulties

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KEYWORDS

- Orgasmic disorders • Ejaculatory disorders • Premature ejaculation • Inhibited ejaculation
- Delayed ejaculation • Sex therapy • Pharmacologic • Ejaculatory latency

KEY POINTS

- Premature ejaculation (PE) and delayed/inhibited ejaculation (DE) may result from a mix of biological and psychogenic factors.
- Medical issues should be investigated when the problem has recently been acquired.
- Addressing ejaculatory latency may be the immediate concern, but communication between sexual partners is important to mutual sexual satisfaction.
- Treatment success for PE based on an integrated approach is high. Treatment success for DE based on psychobehavioral strategies is moderate.

INTRODUCTION

This review discusses 2 ejaculation disorders that represent disturbances in psychosexual responding, *premature ejaculation (PE)* and *delayed/inhibited ejaculation (DE)*. Both disorders are related to the timing/occurrence of ejaculation (ie, ejaculation latency [EL]) during partnered sex, and men with either condition can often be treated successfully and achieve (or regain) a satisfying sex life.

These 2 conditions are discussed separately, touching briefly on definition, prevalence, cause/risk, diagnosis, and treatment. Although a holistic approach is taken for each problem—considering biological, psychological, relationship, and cultural issues—various therapeutic tools may be more suited to or preferred by some patients and practitioners than others. However, *efficacy* and *patient satisfaction*—outcomes that are clearly intertwined—remain the primary concerns of treatment.

Ejaculation/Orgasm as Part of the Sexual Response Cycle in Men

Within the framework of the sexual response, orgasm (and ejaculation) in men is both a biological (reproductive) and psychological (reward) endpoint. Sexual interest and arousal are essential precursors to ejaculation and indicate the man's "readiness" to respond within a perceived sexual situation. This readiness depends on both internal (hormonally "primed" diencephalic brain structures) and external (appropriate/desirable partner and situation) cues. During the sexual activity, levels of arousal gradually increase, eventually culminating in the 2 phases of ejaculatory response. The first phase is emission, represented by urethral distension and bladder neck closure, and is associated with the man's subjective experience of "ejaculatory inevitability," the feeling that impending ejaculation cannot be stopped. The second phase is semen expulsion via striate/smooth muscle contractions in the groin region

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that give rise to the experience of orgasm, mediated through sensory fibers that course to the brain.¹ Although often perceived as one and the same, ejaculation and orgasm are 2 distinct events. Ejaculation is a peripherally mediated spinal neural response, whereas orgasm is a central “response to/perception of” the peripheral ejaculatory response. In this article the author refers primarily to ejaculation problems, recognizing that in most cases the issue involves distress about both ejaculation and orgasm.

Conceptualizing the Problem of Ejaculatory Disorders

The *problem* of ejaculatory disorders can be expressed simply: in response to penile stimulation, the time (latency) that it takes men to reach ejaculation varies, across different men (interindividually) and within the same man on different occasions (intraindividually). Interindividually means some men consistently reach ejaculation quickly, others take substantially more time, and still others require a long time, even finding it difficult to ejaculate at all (Fig 1). Intraindividually means latencies may vary across situations, partners, and episodes.

The sources for interindividual and intraindividual variation in ELs are different. Interindividual variation may result from various formative psychosexual experiences during critical stages of sexual development and/or from biological differences—probably genetic or epigenetic in origin—

in the neurophysiological substrates that mediate ejaculation.¹ Intraindividual variation is likely the result of contextual (psychobehavioral) factors such as levels of desire/arousal, the amount/type of stimulation, the specific type of sexual activity (intercourse, masturbation, and so forth), partner characteristics, cognitive-affective states (eg, anxiety), and other factors related to the situation, partner, or relationship.

Men with PE have very short ELs compared with other men, and they struggle to delay or control their ejaculation, as they perceive it as happening too quickly (see Fig. 1). Men who have DE have long latencies compared with other men, struggling to reach orgasm and sometimes giving up in frustration or when their partner is exhausted. For both disorders, men feel a lack of control over the timing of ejaculation (in either delaying or advancing it), and as a result they experience bother/distress, not only about their sense of inadequacy but also about how their condition affects their partner (Table 1).

DISCUSSION: PREMATURE EJACULATION **Defining Criteria, Premature Ejaculation Subtypes, and Prevalence**

Defining diagnostic criteria

Contemporary diagnostic criteria for PE have incorporated 3 elements: a short EL; the lack of ability to delay ejaculation (ie, ejaculating before wanting to); and negative consequences for the

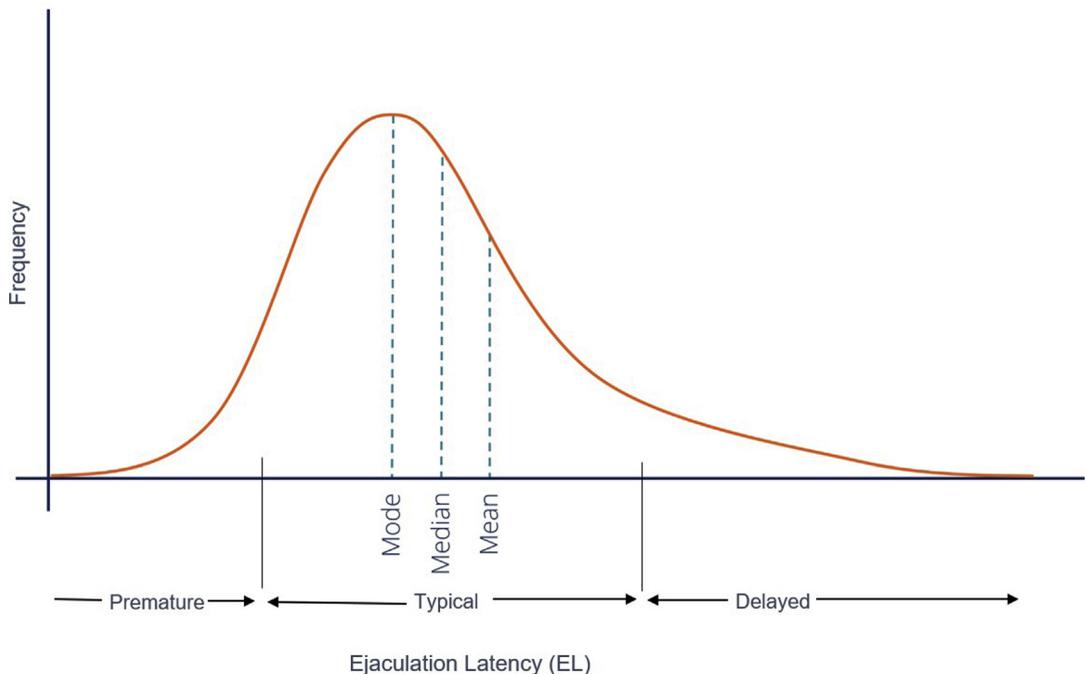


Fig. 1. Sample distribution of ejaculatory latencies, illustrating men with short, typical, and long latencies.

Table 1
Comparison and contrast of premature and delayed ejaculation

	Premature Ejaculation	Delayed Ejaculation
Ejaculatory Latency	Short, <1 or 2 min	Prolonged, >15–20 min, or giving up
Ejaculatory Control	Lack of ability to delay ejaculation	Lack of ability to hasten ejaculation
Bother/Distress	Related to self, partner, relationship	Related to self, partner, relationship
Subtypes	Lifelong, acquired, and subjective?	Lifelong and acquired

man, his partner, or the relationship.^{2–5} At this time, no broad consensus exists regarding operationalizing the first criterion, that is, how to define a “short ejaculatory latency.” The American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5) sets an EL threshold of 1 minute after vaginal penetration,² whereas the International Society of Sexual Medicine (ISSM) defines 2 types of PE (lifelong and acquired), with the distinguishing features being the time of onset within the man’s sex life and the EL following heterosexual penetration. The ISSM defines *lifelong* PE as occurring before or within about 1 minute of vaginal penetration and *acquired* PE as a “clinically significant and bothersome reduction in latency, often to about 3 minutes or less.”³ In contrast, the World Health Organization’s International Classification of Diseases 11th edition (ICD-11) identifies 3 forms of PE—lifelong, acquired, and subjective—but does not specify an EL for any of the subtypes.⁴ Finally, in a recent reexamination of the PE diagnostic criteria, the American Urologic Association (AUA) concluded that an EL up to 2 minutes is supported by recent evidence for men with *lifelong* PE.^{5–8} In addition, the AUA definition for *acquired* PE suggested that the typical EL should fall under about 2 to 3 minutes or alternatively, be reduced by about 50% relative to prior estimations.

So which, if any, EL criterion should be used? The goal of any diagnostic procedure is to reduce errors of inclusion and exclusion, that is, including men in the diagnosis who do not have the problem and excluding men from the diagnosis who do have the problem. A latency criterion is therefore relevant because it has the potential to reduce diagnostic errors. However, studies have demonstrated that (the lack of) ejaculatory control—rather than EL—plays the more central role in predicting PE status, lack of sexual satisfaction, and its associated distress/bother.^{9,10} Accordingly, EL might best be viewed as a characterization of PE “risk” rather than as a precise determinant of PE or non-PE status. Specifically, an EL of less than 2 minutes captures the idea that the man ejaculates “shortly after penetration,” and when

used in conjunction with the other 2 criteria for PE, poor ejaculatory control and bother/distress, diagnostic errors are likely to be minimized.^{5–8}

Lifelong versus acquired premature ejaculation

As noted earlier, ISSM, AUA, and ICD criteria for PE distinguish between 2 subtypes: lifelong and acquired. Lifelong PE has been present throughout the man’s sexual life and typically has no clear cause (see next section). Acquired PE occurs after some period of normal ELs and results from psychological/relationship or pathophysiological changes such as pelvic trauma, disease, or medication. Because data supporting a specific EL criterion for acquired PE are limited, thresholds have been set based on clinical expertise.^{2,3,5} However, it is worth noting that recent studies suggest that the current distinction between lifelong and acquired PE may not be as robust as once presumed.^{8,11,12}

Prevalence of premature ejaculation

The prevalence of *lifelong* PE in the general population of men has been estimated anywhere from 5% to 40%, depending on how PE is defined, who makes the judgment (practitioner vs patient), which populations are sampled, and whether the man seeks treatment. Estimating PE prevalence based on a single question about “ejaculating before desired” yields percentages as high as 30% to 40%,^{7,8,13} but an affirmative response to this query does not categorize the man as having PE, as the man may not fulfill other criteria regarding lack of ejaculatory control and bother/distress. The true prevalence of lifelong PE is undoubtedly much lower, and recent studies on community samples that include these other 2 criteria (control and bother/distress) place it closer to 4% to 10%.^{7,14} The prevalence of acquired PE has not been adequately documented at this time.

Risk Factors for and Cause of Premature Ejaculation

An integrated approach to PE encourages the practitioner to understand biological, psychological, and sociocultural factors associated with PE, particularly

insofar as they affect sexual function, sexual satisfaction, and the relationship.

Biological factors

Biological factors attempt to account for consistent interindividual variations in EL. These factors may be either *physiologic* or *pathophysiologic*. Physiologic factors are inherent to the system—part of the person's hardwired neurophysiology. Pathophysiological factors are disruptions of normal biological processes, such as disease, trauma (eg, injury or surgery), and medication.

For men with *lifelong PE*, no clear *pathophysiological* condition accounts for short ELs, although many have been suggested.¹⁵ On the other hand, *physiologic* explanations for lifelong PE assume that interindividual ejaculatory variability results from differences in the “hard wiring” of the reflexive components of ejaculation, presumably being genetic or epigenetic in origin. Thus far, however, no clear and robust anomalies in genotype, sensorimotor response, or neurotransmitter function have been identified in men with lifelong PE or in animal models of persistent rapid ejaculators. Thus, cause-effect relationships between biological factors and *lifelong PE* remain elusive.

In contrast, men who acquire PE later in life typically suffer from some sort of precipitating or sustaining pathophysiology. Examples include lower urinary tract symptoms, endocrine problems,^{3,15} and, although somewhat rare, use of medications/drugs. Relationship factors might also play a role, but to date, documentation for such effects tends to be “case study” or anecdotal material. Men with erectile dysfunction (ED) seem to be at greater risk for PE (or vice versa), although for such men, determination of which problem—PE or ED—is primary and which is secondary, is not often clear.

Psychological factors

The term “psychological,” particularly with respect to sexual dysfunction, has sometimes been misunderstood to refer to the “psychoanalytic” and “developmental/learning” approaches to sexual response, perhaps because these approaches have been associated with giants in the field—Sigmund Freud and later Masters and Johnson—who shaped much of the classic thinking about sexuality. Although these earlier interpretations have generally lost favor, to the extent that they suggested a psychosexual developmental process for PE, they remain underresearched even today.

Nevertheless, ample evidence from men's self-report suggests that their ELs are influenced by numerous contextual factors, including psychological (eg, level of emotional arousal), behavioral (eg, coital position), partner-related (eg, perceived

attractiveness), and/or situational (eg, new partner or unusual place).^{12,16,17} Given that men perceive such factors to affect their arousal and subsequent ELs, treatment strategies have sometimes targeted these factors as starting points for remediation. Unfortunately, well-designed studies investigating the role of psychobehavioral factors on PE are limited, a situation perhaps exacerbated by 3 decades of successful pharmacologic (selective serotonin reuptake inhibitors [SSRIs]) management of PE.

Interplay between biological and psychological factors

Biological and psychological causes do not necessarily represent mutually exclusive pathways, as it is not possible to extricate psychological processes from the biological substrates that underlie and/or mediate them.¹ Preprogrammed “hard-wired” biological systems that govern peripheral and spinal reflex processes may be differentiated from the programmable/reprogrammable “soft-wired” biological substrates that underlie psychological processes such as attention, thoughts, expectations, and feelings/anxieties that derive from past experiences and immediate context. It is not fruitful, however, to conceptualize psychological processes as somehow independent of basic biological functioning.

In summary, a man's EL *range* may be preset by biological factors, but psychological variables such as sexual desire, expectation, anxiety, attention, and arousal likely influence the intraindividual variation within that preset range. Furthermore, psychological and biological processes can exert reciprocating effects on one another: anxiety might impair sexual response, and sexual failure or impairment might lower self-confidence and increase anxiety, thereby intensifying the problem.^{18–20}

Relationship and cultural factors

It has oft been stated that PE is a couple's problem. The partner of a man with PE may share in the distress, self-doubt, and sexual dissatisfaction associated with the short-lived physical/sexual intimacy common to PE,^{21,22} all of which can stress the dyadic relationship. A partner having their own sexual issues (eg, sexual aversion) might also exacerbate the PE problem or interfere with treatment. In addition, culturally derived gender/sex role expectations may place further burden on the man with PE (and his partner) to follow specific sociosexual scripts that are counterproductive to ensuring mutual sexual satisfaction. Although neither relationship nor cultural factors usually account for the short ELs of PE, these factors may be highly relevant to how the couple conceptualizes

the impairment and their willingness to seek and use treatment.²¹

Treating Premature Ejaculation

Although its cause is not well understood, PE is considered a manageable problem. Although the immediate goal of most treatments is to increase the man's EL, a broader and often desirable goal is to help the couple attain a more satisfying sexual relationship.

Assessment/diagnosis

Diagnosing PE typically involves 2 steps: (1) ensuring that the man truly has PE, including a medical evaluation if pathophysiologic factors are suspected for a recently acquired condition; and (2) probing biological/medical, psychological, and relationship factors that are related to the problem and/or that might enhance or interfere with treatment outcomes. Regarding the first step, men sometimes complain of ejaculating before they wish, despite having a "normal" EL. So, the EL should be relatively short (less than 1–2 min) and not fall within or near the normal range of about 6 to 10 minutes postpenetration.^{8,23} In addition, the practitioner should verify that the rapid end to sexual activity results from an inability to delay ejaculation, not from loss of erection or some other reason (eg, fear of interruption). Regarding the second step, both lifelong and acquired PE should generate a brief discussion of relationship and psychological functioning that might include questions about the man's life experiences with PE, relationship quality with the partner, partner's sexual health and problems, and if relevant, cultural expectations.²¹ A diagnostic interview may be supplemented with standardized assessments (Table 2), given as a previsit or postvisit assignment to support the PE diagnosis and assess relationship functioning.

Treatment Options Overview

Several options are available for the treatment of PE: (1) pharmacologic approaches that temporarily decrease penile sensation and/or centrally inhibit the ejaculatory response (2) surgical approaches that permanently decrease sensory input to the penis; and (3) psychobehavioral approaches that have the multiple goals, including attenuating penile input, increasing awareness of sexual arousal cues and developing control over ejaculation, establishing a positive framework for change, and encouraging patient-partner interactions that enhance sexual satisfaction. Because these treatments have been extensively reviewed

elsewhere, the author provides only a broad overview that includes benefits and limitations of the various options (Table 3).

Pharmacologic options

Topical ointments, crèmes, gels, and sprays reduce sensory input to the penis, thus delaying/inhibiting ejaculatory response. Preparations that contain lidocaine or prilocaine or various proprietary preparations double the EL for most men with PE (eg, 2–5 min), increase the man's ejaculatory control, and improve the quality of sex life.²⁴ They offer an expedient and inexpensive way for increasing EL, but unless used with a condom, they may cause vaginal discomfort, hyposensitivity, or numbness.

Oral medications have varying effects on delaying ejaculation.^{5,25,26} Box 1 provides an open access link to drug doses and efficacy.²⁵ Several points are relevant to understanding their use in the treatment of PE.

Treatment regimens: oral medications may involve either daily dosing or "on-demand" use, that is, taking the drug several hours before anticipated sexual activity.

Neurotransmitter reuptake inhibitors (including SSRIs), known mostly for their antidepressant use, can effectively delay or inhibit ejaculation. Because neither clomipramine (a tricyclic antidepressant) nor any of the traditional SSRIs has received regulatory agency approval for PE, they must be prescribed "off-label."

Daily dosing of drugs that affect serotonergic activity, such as clomipramine, paroxetine, sertraline, fluoxetine, citalopram, and clomipramine, is effective in delaying ejaculation in most men, with paroxetine having the strongest effect (6- to 8-fold increase) (see Box 1). *On-demand use* of oral medications 2 to 5 hours before sexual activity imparts fewer side effects than daily dosing but is also associated with a lower efficacy. Dapoxetine, a drug developed specifically for on-demand treatment of PE (not available in the United States), is generally less effective than off-label paroxetine, delaying ejaculation by about 1 to 3 minutes.^{25,27}

Other pharmacologic options are available if the aforementioned reuptake inhibitors are ineffective. Tramadol, a centrally acting synthetic opioid analgesic and weak inhibitor of reuptake of gamma aminobutyric acid, norepinephrine, and serotonin, has shown moderate success in the treatment of PE.²⁸ In addition, α 1-adrenoceptor antagonists, widely used in the treatment of lower urinary tract symptoms, have shown some efficacy for PE (eg,²⁹). However, these drugs are less optimal due to their side effects and/or lower treatment efficacy.

Table 2
Examples of useful assessment instruments for premature ejaculation and relationship functioning

Medical/Psychological Assessments

Index of Premature Ejaculation (IPE)	10-item tool assessing control over ejaculation, satisfaction with sex life, and distress in men with PE. (Althof et al., 2006, pp. 474–475, copyrighted, special access.)
Premature Ejaculation Diagnostic Tool (PEDT)	5-item tool providing diagnostic relevance to PE. Reliable, easy, fast. (Jannini et al., 2013) http://www.baus.org.uk/Resources/BAUS/Documents/PDF%20Documents/Patient%20information/PEDT.pdf
Premature Ejaculation Prevalence & Attitudes (PEPA)	Assesses basic PE parameters in 5 questions, including whether PE is considered a problem by the man and/or his partner. (Patrick et al., 2005, p. 361)
Male Sexual Health Questionnaire (MSHQ)	25-item questionnaire measuring erection, ejaculation, and satisfaction with a focus on ejaculatory function. Greater cultural sensitivity compared with some tools. (Rosen et al., 2007)

Relational Assessments

Dyadic Adjustment Scale (DAS)	A self-report measure of relationship adjustment and both partner's perception of satisfaction. (Spanier, 1989) http://trief.org/wp-content/uploads/2010/09/DAS+1.pdf
Golombok Rust Inventory of Sexual Satisfaction (GRISS)	28-item questionnaire that assesses sexual satisfaction and dysfunction; may be used to track improvement over time as the result of medication or therapy. (Rust & Golombok, 1985) http://www.psychometrics.cam.ac.uk/productservices/psychometric-tests/GRISS
Self-Esteem and Relationship Questionnaire (SEAR)	Short questionnaire for measuring sexual relationship, confidence, and self-esteem. (Cappelleri et al., 2004) http://www.nature.com/ijir/journal/v16/n1/fig_tab/3901095t1.html

Data from Refs.^{50–56}

Table 3
Some advantages and disadvantages of various treatment options for premature ejaculation

Treatment	Advantages	Disadvantages
Pharmacologic		
Penile Topical	Robust empirical support Effective for most men Inexpensive for some options Fairly rapid effect Very targeted treatment Minimum side effects	Intrusive during sex activity Partner genital numbness during sex Required during every episode/encounter Manages, does not cure the problem Numbness may linger for a while
Oral Medications	Robust empirical support Good efficacy for most drugs Easy administration Inexpensive	Adverse effects (GI, insomnia, ED) Requires daily dosing for maximal effect On-demand requires about 2-h lead Needed for every episode/encounter Manages, does not cure the problem Not effective for some men
Surgical	Robust effect Very targeted treatment Effect is long-lasting	Potential ED, loss of penile sensation Not available in many regions of the world Expensive (generally not insured) Higher risk for complications
Psychobehavioral	No adverse effects Potential ongoing effect Can improve mutual satisfaction Address relationship fallout Increased sense of self-efficacy	Requires investment of time/effort Takes longer to achieve results Best when partner is involved Requires effort to incorporate techniques Results are less reliable/consistent May involve greater cost burden

Abbreviation: GI, gastrointestinal.

Treatment of PE and comorbid ED is an option for men having both problems (about one-third of men with PE). If one problem is primary over the other, that problem should be treated first. More commonly, no clear temporal order is discernible, so these men may benefit from both an SSRI and a proerectile drug such as a phosphodiesterase-5 inhibitor (PDE-5i). Because SSRIs can exacerbate an erectile problem, the addition of a PDE-5i helps the man maintain his erection and reduce performance anxiety, whereas the SSRI delays ejaculation.³⁰

Surgical approaches

Although considered a last resort for men nonresponsive to pharmacologic treatment, surgical procedures include selective dorsal neurectomy and glans penis augmentation using a hyaluronic acid gel.³¹ Both act by immediately and permanently reducing sensory input to the penis. Although these procedures have gained traction in Asian countries, due to possible irreversible side effects such as penile sensory loss and ED, most professional societies consider them “experimental” and do not recommend them for PE treatment.

Psychobehavioral treatment options

Psychobehavioral approaches typically combine behavioral, cognitive/affective, and relationship/

couple's strategies,²¹ integrated and tailored to meet the individual's or couple's needs. Any of these approaches may be combined with pharmacotherapy to optimize treatment outcomes.

Behavioral approaches date back more than half a century. Specific techniques vary but all are designed to help the man modulate levels of sexual arousal first by learning to recognize sensations associated with increasing arousal and imminent ejaculation. When these sensations are noted, men are instructed to cease penile stimulation until the sensation passes—at which point the process begins anew. The techniques are then transferred to penetrative sex with the help of the partner, where they may be supplemented with ancillary strategies that modulate the man with PE's arousal and/or enhance the partner's arousal to better synchronize sexual response.

These methods impart moderate benefits for most men with PE³² (see **Box 2** for an open access

Box 1

Quick reference link for pharmacologic efficacy in premature ejaculation treatment

Open access: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4108949/>

Box 2**Quick reference link for behavioral efficacy in premature ejaculation treatment**

Open access: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4599555/>

link to a summary of *behavioral* effects) unless they are suffering from anteportal ejaculation or very short ELs. Because these procedures are relatively straightforward, couples may learn them under the guidance of a nonspecialist, through tele-counseling, or even using bibliotherapy (eg,³³).

Cognitive approaches, unlike behavioral strategies, play no direct role in lengthening EL but rather address the patient's negative fallout from sexual impairment. These interventions—usually requiring a therapist knowledgeable about sexual issues—help instill a positive attitude and support the patient's motivation for change.^{18,21} Some cognitive techniques focus on identifying and countering self-defeating thoughts that may exacerbate the PE, whereas others assist men in using positive (“affirming”) thoughts and in developing awareness of negative feelings/anxieties during sexual interactions, which then can be rechanneled into positive feelings/actions.^{18,21}

Relationship approaches view PE as embedded in the couple's relationship and thus assume that PE may be better managed with the cooperation of the partner, not only in implementing behavioral techniques (described earlier) but also in addressing the broader impact of the PE on the couple's interactions (eg, guilt, blaming, avoidance, and so forth). They can also help the couple to better understand their respective experiences as related to the dysfunction and focus on enhancing communication, intimacy, and mutual satisfaction.^{21,34}

Taking a Multimodal Approach

Both clinical experience and data suggest that combining pharmacologic and psychobehavioral approaches to PE may result in better outcomes.^{35,36} Specifically, increasing EL by using a pharmacologic option may offer a renewed sense of self-efficacy for the man. At the same time, addressing sexual/relationship satisfaction may increase adherence to protocols, improve communication between partners, help the man learn techniques for controlling arousal and ejaculation, expand the sexual repertoire so both partners are satisfied, and develop positive cognitive-affective frameworks that emphasize mutual pleasuring and prepare for the possibility of relapse. The addition of psychobehavioral

strategies to supplement pharmacologic treatments increases ELs by an additional 1 to 3 minutes, with mutual sexual satisfaction, anxiety, and adherence to protocols also showing improvement.³²

DISCUSSION: DELAYED EJACULATION

Defining Criteria, Delayed Ejaculation Subtypes, and Prevalence

Defining diagnostic criteria

Although there are no consensus guidelines for diagnosing DE, several common threads run through various diagnostic criteria. DSM-5² defines DE as a marked delay or infrequency of ejaculation occurring in about 75% to 100% of partnered sexual activity, accompanied by a desire *not* to delay the ejaculation. DSM-5 further characterizes the condition as clinically distressing, includes relevant qualifiers such as “acquired” or “lifelong,” and “generalized” or “situational,” and indicates the practitioner should consider 5 other factors: partner; relationship; individual vulnerability (eg, history of abuse); psychiatric comorbidity (eg, depression) and stressors; cultural/religious influences; and medical factors. The ICD-11 defines “male delayed ejaculation” as the “inability to achieve ejaculation or an excessive or increased latency of ejaculation, despite adequate sexual stimulation and the desire to ejaculate.”⁴ The pattern of delayed ejaculation is associated with clinically significant distress. Finally, AUA, as DSM-V, distinguishes between lifelong and acquired DE,⁵ defining *lifelong* as the “consistent, bothersome inability to achieve ejaculation, or excessive latency of ejaculation, despite adequate sexual stimulation and the desire to ejaculate,” and *acquired* identically except including the phrase “or an increased latency of ejaculation.”

As with PE, the diagnostic criteria for DE suggest 3 conditions: (1) a prolonged EL or absent ejaculation; (2) the inability to ejaculate sooner despite the desire to do so; and (3) a condition that causes bother or distress. None of the definitions operationalizes a “prolonged EL,” although suggestions have been offered based on data indicating a *typical* EL between 6 and 10 minutes for most men (standard deviation [SD] = ± 4 min).^{8,23} Using 2 SDs greater than the mean as a criterion threshold for DE yields an EL around 18 to 20 minutes, which includes the highest 2.3% of the population. One recent study reported that men who express the “desire to ejaculate sooner during intercourse” typically had median ELs of 15 minutes, and when “an inability to ejaculate sooner” was added to this criterion, the

median EL increased to 20 minutes, similar to the value based on statistical parameters noted earlier.³⁷ However, one problem with using a temporal criterion such as 20 minutes is that some men never reach orgasm, terminating sexual activity due to frustration, exhaustion, loss of erection, and/or partner discomfort.

Lifelong versus acquired delayed ejaculation

Practitioners may distinguish between lifelong and acquired DE. Lifelong has been present throughout the man's sexual life and has no clear cause, whereas, paralleling PE, acquired DE occurs after some period of normal ELs and results from pathophysiologic, psychological, or relationship changes. As with PE, the lack of ability to have some control over the timing of ejaculation and the related distress probably play more important roles in diagnosing a man with either lifelong or acquired DE than any specific EL threshold.

Prevalence of delayed ejaculation

DE has not attracted the same level of pharma or media attention as ED or PE. Unlike PE and ED, no pharmaceutical companies have to date vigorously studied or pursued promising biomedical treatments for DE, and no medications have received regulatory agency approval for its treatment. Except perhaps for those men/couples concerned with procreation, most men whose sexual relationships are upended by their difficulty reaching ejaculation have remained hidden from view, receiving little or no attention from the popular or medical press, or even the research community. Given this lack of visibility, together with inconsistent criteria for defining DE, the lack of expedient biomedical treatment, and the assumption that diminished ejaculatory function is a natural consequence of aging, it is not surprising that relatively little is known about DE prevalence. Nevertheless, in the past, DE had been reported at fairly low rates in the literature, typically around 3% to 5% and thus had been considered uncommon. Several recent clinical and community samples have placed the incidence substantially higher, by some estimates closer to 10% to 15% of men.^{13,38,39} In one recent community sample the percentage of men indicating the "desire to ejaculate sooner" during partnered sex was around 7% to 8%, nearly identical to results from the National Health and Social Life Survey (NHSLs) in the United States.⁴⁰ When a second condition of "lacking the ability to ejaculate sooner" was added to the criterion, the prevalence dropped to about 3% to 4%, similar to the long-assumed prevalence for this dysfunction.³⁷

Risk Factors for and Cause of Delayed Ejaculation

DE may be caused by any number of factors, including an inherently higher threshold for reaching ejaculation, lack of adequate arousal, and/or lack of adequate stimulation.

Physiologic/pathophysiologic risk factors

Some men report *lifelong* difficulty reaching ejaculation. Just as men with lifelong PE, men with lifelong DE may well be biologically predisposed to having a higher threshold for orgasm—although evidence for any genetic or inherent biological abnormality is lacking. In some instances, a pathophysiologic condition may account for DE (thus acquired/secondary DE), as procedures or diseases that interfere with sympathetic or somatic innervation to the pelvic/genital region can affect ejaculatory function.^{39,41} In addition, most ejaculatory problems increase with aging, so men with an inherent (biological) predisposition toward longer ELs who have functioned adequately most of their lives may begin to experience difficulty as they age. This increase may be due in part to an overall age-related decrease in general health and stamina, making intercourse more physically challenging (Box 3). Prolonged EL may also be due to the increased prevalence of specific diseases

Box 3

How physically challenging is having sex and might this account for acquired delayed ejaculation?

For a man weighing 155 pounds, intercourse (top position) burns an estimated 120 to 150 calories assuming about 30 minutes of activity. Heart rate is around 110 to 120 bpm during orgasm.

For a man weighing 180 pounds, intercourse burns an estimated 140 to 170 calories assuming about 30 minutes of activity. Heart rate may increase by another 10% to 15%.

For a man weighing 200 pounds, intercourse burns an estimated 150 to 180 calories assuming about 30 minutes of activity. Heart rate may increase by 30% over the man weighing 155 pounds, perhaps as high as 130 to 140 bpm during orgasm.

How do the aforementioned parameters compare with other physical activities? Caloric use during sex is equivalent to about 30 minutes of leisure cycling, kayaking, or brisk pace walking. Heart rate during orgasm equates with the bpm for moderately intense exercise for a 50-year-old man.

and/or medications that inhibit ejaculatory response (Table 4 for such medications).^{38,39}

Psychological and relationship factors

DE might be conceptualized as a problem in the stimulus → arousal pathway. That is, DE may result from (1) a lack of adequate penile stimulation, (2) lack of subjective arousal to physical and psychological stimulation, and/or (3) active interference with the arousal process.⁵ Regarding the first possibility, partnered sex may not provide sufficient penile stimulation due to any number of factors, for example, an age-related decrease in penile sensitivity, or a particular masturbation style (pressure, speed, and so forth) that does not simulate partnered sex.⁴¹ Regarding the second possibility, the man may experience insufficient *subjective sexual arousal* despite adequate physical stimulation. For example, disparity in arousal may distinguish partnered sex from masturbation, the latter sometimes involving particular sexual fantasies and erotic materials and arousal “resources” that may not be available during partnered sex.⁴¹ Regarding the third possibility, specific thoughts and emotions during partnered sex may *actively inhibit* or *interfere with* the arousal process in men. For example, anxiety/fear

regarding adequate performance, pleasing the partner, hurting or defiling the partner, unwanted impregnation, or even semen loss (eg, Dhat syndrome, a pathologic fear that semen loss leads to loss of vitality) might inhibit arousal/ejaculation. Shame, embarrassment, and guilt surrounding the sexual act may also interfere with arousal.^{5,42} Although the putative role for such factors has been based primarily on clinical experience or case reports, they highlight the need for well-designed research investigating psychological and relationship involvement in the cause or maintenance of DE.

Treating Delayed Ejaculation

A holistic approach to the treatment of DE requires exploration of physiologic, psychological, and relationship issues that might affect the man’s sexual response. Although the immediate problem is that of decreasing the man’s EL, a broader goal may include helping the couple achieve procreation and/or a more sexually satisfying relationship.

Assessment and diagnosis

Diagnosing DE should include 2 steps: (1) ensuring that the man meets the diagnostic criteria for DE,

Table 4

Putative negative effects of various medications on erectile/arousal and ejaculatory function in men

Substance Type	Examples	Arousal and/or Erection	Orgasmic Function
Antihypertensives	α and β blockers, sympathetic inhibitors	X	X
Antidepressants	SSRIs, MAOIs, tricyclics	X	X
Antipsychotics	Phenothiazines, thioxanthenes	X	X
Antiepileptics	Gabapentin, topiramate etc.	X	X
Anxiolytics/tranquilizers	Benzodiazepines	X	
Hypnotics/sedatives	Barbiturates, alcohol	X	x
Muscle relaxants	GABA β receptor agonists	-	x
Cancer treatments	GRH agonists	X	-
Immunosuppressive	Sirolimus, everolimus	X	-
Antiandrogens	Finasteride, cyproterone acetate, etc.	X	x
Steroids	Prednisone	X	?
Analgesics	Opioids, methadone		x
Other	Antihistamines, pseudoephedrine, recreational	X	?

Abbreviations: GABA, gamma aminobutyric acid; GRH, gonadotrophin-releasing hormone.

From Rowland, David L., "Evaluation of Delayed Ejaculation" (2017). Psychology Faculty Publications. 64. https://scholar.valpo.edu/psych_fac_pub/64, with permission.

including a medical referral if pathophysiologic factors are suspected for a recently acquired condition⁵ and (2) addressing specific contexts that may shed light on the cause, relationship dynamics, and consequences of the DE. Regarding the first step, the practitioner should ensure that the EL is indeed prolonged and lies substantially beyond the normal EL range for men or, alternatively, that the man terminates intercourse out of frustration or exhaustion. In addition, the practitioner should assess whether the long EL is

specific to partnered sex. A brief medical history can eliminate or, alternatively, identify potential etiologies related to medication, illness, surgery, or trauma, particularly if the DE is recently acquired.⁵ Regarding the second step, brief psychological and relationship histories can help reveal individual or relationship idiosyncrasies that might explain recent changes in EL, especially if normal ejaculation had been possible previously.⁴² **Table 5** provides an outline of steps that might be followed in a DE evaluation; **Box 4** includes sample

Table 5
Possible steps in the evaluation of delayed ejaculation

Step	Goal	Information/Procedure Examples
Setting the tone	Establish openness and trust	Normalizing/destigmatizing the problem
Differential diagnosis	Rule out other sexual problems	Verify problem of inhibited ejaculation <ul style="list-style-type: none"> • Typical ejaculatory latency • Inability to affect ejaculatory latency • Significant distress
History and scope of the problem	Obtaining detailed parameters about development of the problem	Lifelong, acquired; onset, duration, situation, exacerbation, self-management, motivation for change
Medical history/examination	Pathophysiological cause	Physical examination, review of illnesses, surgeries, medications, injuries, drug use, and so forth, including general life stressors/transitions that are job-related, financial, family based, etc.
Psychosexual evaluation	Identify possible psychological and relationship predisposing factors	Current sexual practices and activities in contexts: <ul style="list-style-type: none"> • Predisposing religious and cultural issues, including sexual knowledge and beliefs • Masturbatory and coital activities including fantasy, use of erotic materials, and so forth. • Relationship parameters involving quality and intimacy, communication, partner attractiveness, and dysfunction
Summary of relevant factors to review with patient (and partner)	Gain patient acceptance of the problem, its cause, and encourage value/motivation for change	Verify and align clinical notes with patient and partner self-report and perceptions

From Rowland, David L., "Evaluation of Delayed Ejaculation" (2017). Psychology Faculty Publications. 64. https://scholar.valpo.edu/psych_fac_pub/64, with permission.

Box 4**Sample questions that might be asked of patients with suspected delayed ejaculation**

- Has the problem been lifelong? Recent? Developed over a period of time?
- Related to any other life events? Situation specific? Illnesses? Or more generalized?
- Can the man masturbate to orgasm?
- Has there been a noticeable increase in ejaculatory latency during masturbation?
- What are the current sexual practices, in terms of coital and masturbation frequency?
- Are there situations when the man is able to ejaculate with the partner (eg, masturbation, using erotic materials, specific fantasies, and so forth).

questions that could generate discussion and insight regarding the DE problem.

Overview of Treatment Options

Treatment options for DE are limited by the lack of accepted pharmacologic options. Treatment therefore relies more heavily on behavioral, cognitive, and relationship approaches.

Pharmacologic options

In contrast with PE, safe and effective medications that shorten the EL have remained elusive, and not for lack of testing, as many serotonergic, adrenergic, and dopaminergic agonists and antagonists have been tried.⁴³ Most such “experimental” drugs impart weak-to-moderate and/or inconsistent effects and many have undesirable side effects. Other agents such as testosterone have also been tested, but with minimal success (Box 5 provides a link to an open-access article listing such agents⁴³).

Psychobehavioral approaches

Psychobehavioral interventions for men with lifelong or acquired DE include a mix of behavioral, cognitive, and relational approaches and typically require a psychosexual specialist.²¹

Box 5**Quick reference link for experimental drug testing effects on delayed ejaculation**

<https://link.springer.com/article/10.1007/s11930-020-00287-z>

Behavioral approaches for DE were first pioneered in the 1970s⁴⁴ and have progressed substantially since then. Some men with DE report greater satisfaction from masturbation than intercourse, perhaps because they experience difficulty ejaculating during partnered sex and/or because they rely on sexual fantasies and/or erotic material to enhance their arousal during masturbation. For these men, the absence of their preferred sexual stimuli during partner sex may result in insufficient arousal to trigger ejaculation.^{38,42} One long-standing approach to such situations is that of “masturbatory retraining,” that is, adjusting masturbation practices so stimulation is better aligned with the experience of penetrative sex with the partner.^{42,44} Adjunctive strategies may involve suspending or altering masturbatory activity during treatment (eg, permitting masturbation only with the nonpreferred hand⁴²), so the man learns to redirect his arousal toward partner cues and stimulation and away from autosexual cues. The couple may also be encouraged to share fantasies, use various forms of erotica, and engage in mutual masturbation and/or body movements more consistent with what is known to trigger ejaculation. Although no large-scale studies have been conducted to support this particular approach, individual clinicians have reported positive outcomes.

Cognitive approaches can “normalize” or help reframe the problem and thus reduce negative feelings that might inhibit sexual arousal. For example, they might help the man reduce anxiety about the problem or counter misinformation and assumptions (eg, fear about the partner dissatisfaction or disapproval) and thus help him focus more on the erotic cues from the partner/situation.^{45,46}

Relationship approaches address the sexual dynamics embedded in the relationship, with strategies generally designed to enhance arousal and mitigate distress.⁴⁷ Specific approaches might include sharing sexual fantasies, having the partner assume behaviors that increase arousal, and expanding the couple’s sexual repertoire to ensure mutual satisfaction. Issues having the potential to interfere with the sexual satisfaction of both partners—associated with conception/procreation, anger/resentment, and relationship control and discord—can also be explored and addressed. With the partner fully engaged and taking “co-ownership” of the problem, outcomes are likely to be more satisfying for both partners, and potential negative feelings that might arise from the partner (eg, feeling unattractive or unrousing to the man with DE) can be managed.

Integrating Treatment Options

As noted previously, combining treatment approaches may result in better outcomes for any sexual problem, including DE. For example, addressing the long EL by finding ways to increase arousal and/or remove barriers to arousal *and* ensuring sexual satisfaction for both the man with DE and his partner are likely to generate better results. So, despite the lack of well-tested pharmacologic options, psychobehavioral options can (1) maximize penile sensory input; (2) use cognitive/affective strategies that enhance, or remove barriers to, arousal; and (3) encourage patient-partner interactions that ensure the mutual sexual satisfaction.

SUMMARY

A Multimodal Treatment Framework for Ejaculatory Disorders

An integrated treatment approach toward ejaculatory disorders—either PE or DE—could follow any number of paths, and practitioners will undoubtedly have their own preferences and methods. Although avoiding specific formulas, one approach might use a multisession program (perhaps 3–6 sessions) that draws from a modified PLISSIT model, a well-known model having 4 levels of intensity beginning with *Permission*, continuing with *Limited Information*, *Specific Suggestions*, and *Intensive Therapy*.⁴⁸ Although much of the progression through these sessions would focus on “content” (the information, skills, and techniques conveyed to the patient), within any treatment environment, the practitioner must also attend to “process” issues that ensure a strong working alliance with the patient/couple.^{21,47} Building such rapport is particularly important when sensitive sexual issues are involved and includes expressing empathy, genuineness, and positive regard; developing the patient's motivation to change and adherence to treatment protocols; and supporting a strong sense of self-efficacy for the patient and partner.^{47,49}

CLINICS CARE POINTS

Regarding Premature Ejaculation

- PE may be a lifelong condition that typically has no clear cause or pathophysiology.
- PE may be an acquired condition of recent pathophysiologic or relationship origin.
- PE is a very manageable condition.

- Patients/couples can select from a range of treatment options.
- Attention to psychological and relationship issues may improve treatment outcomes.

Regarding Delayed Ejaculation

- DE may be either lifelong or acquired; the former is poorly understood.
- Treatment options are limited as no approved pharmacologic options are available.
- Motivated patients or couples may realize significant benefit from behavioral, cognitive, and relationship strategies under the guidance of a specialist.
- These procedures help enhance arousal, remove barriers to arousal, and ensure mutual sexual satisfaction.

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The author has nothing to disclose.

REFERENCES

1. Rowland DL, Motofei IG. The aetiology of premature ejaculation and the mind-body problem: implications for practice. *Int J Clin Pract* 2007;61(1):77–82.
2. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th edition. Washington, DC: American Psychiatric Association; 2013.
3. Serefoglu EC, McMahon CG, Waldinger MD, et al. An evidence-based unified definition of lifelong and acquired premature ejaculation: report of the second international society for sexual medicine ad hoc committee for the definition of premature ejaculation. *Sex Med* 2014;2(2):41–59.
4. World Health Organization. ICD-11 for mortality and morbidity statistics 2020. Available at: <https://icd.who.int/browse11/>. Accessed January 3, 2021.
5. Disorders of Ejaculation: An AUA/SMSNA Guideline. American Urological Association. 2020. Available at: <https://www.auanet.org/guidelines/disorders-of-ejaculation>. Accessed January 3, 2021.
6. Janssen PKC, Waldinger MD. Men with subjective premature ejaculation have a similar lognormal IELT distribution as men in the general male population and differ mathematically from males with lifelong premature ejaculation after an IELT of 1.5 minutes (Part 2). *Int J Impot Res* 2019;31(5):341–7.
7. Rowland DL, Kolba TN. Understanding the effects of establishing various cutoff criteria in the definition of men with premature ejaculation. *J Sex Med* 2015; 12(5):1175–83.
8. Côté-Léger P, Rowland DL. Estimations of typical, ideal, premature ejaculation, and actual latencies

- by men and female sexual partners of men during partnered sex. *J Sex Med* 2020;17(8):1448–56.
9. Rowland DL, Patrick DL, Rothman M, et al. The psychological burden of premature ejaculation. *J Urol* 2007;177(3):1065–70.
 10. Patrick DA, Rowland DL, Rothman M. Interrelationship among measures of premature ejaculation: the central role of perceived control over ejaculation. *J Sex Med* 2007;4(3):780–8.
 11. Jern P, Gunst A, Sandqvist F, et al. Using ecological momentary assessment to investigate associations between ejaculatory latency and control in partnered and non-partnered sexual activities. *J Sex Res* 2011;48(4):316–24.
 12. Kempeneers P, Andrianne R, Cuddy M, et al. Sexual cognitions, trait anxiety, sexual anxiety, and distress in men with different subtypes of premature ejaculation and in their partners. *Sex Marital Ther* 2017;44(4):319–32.
 13. Lewis RW, Fugl-Meyer KS, Corona G, et al. Definitions/epidemiology/risk factors for sexual dysfunction. *J Sex Med* 2010;7(4 Pt 2):1598–607.
 14. Althof SE, McMahon CG, Waldinger MD, et al. An update of the international society of sexual medicine's guidelines for the diagnosis and treatment of premature ejaculation (PE). *Sex Med* 2014;2(2):60–90.
 15. Waldinger MD. The pathophysiology of lifelong premature ejaculation. *Trans Androl Urol* 2016;5(4):424–33.
 16. Althof SE, McMahon CG. Contemporary Management of Disorders of Male Orgasm and Ejaculation. *Urology* 2016;93:9–21.
 17. Rosen RC, McMahon CG, Niederberger C, et al. Correlates to the clinical diagnosis of premature ejaculation: results from a large observational study of men and their partners. *J Urol* 2007;177(3):1059–64.
 18. Althof SE. Psychosexual therapy for premature ejaculation. *Trans Androl Urol* 2016;5(4):475–81.
 19. Perelman M, McMahon C, Barada J. Evaluation and treatment of ejaculatory disorders. In: Lue TF, editor. *Atlas of male sexual dysfunction*. Philadelphia: Current Medicine LLC; 2004. p. 127–57.
 20. Rowland DL, Adamski BA, Neal CJ, et al. Self-efficacy as a relevant construct in understanding sexual response and dysfunction. *J Sex Marital Ther* 2015;41(1):60–71.
 21. Rowland D, Cooper S. Practical tips for sexual counseling and psychotherapy in premature ejaculation. *J Sex Med* 2011;8(4):342–52.
 22. Symonds T, Roblin D, Hart K, et al. How does premature ejaculation impact a man's life? *J Sex Marital Ther* 2003;29(5):361–70.
 23. Waldinger M, McIntosh J, Schweitzer DH. A five-nation survey to assess the distribution of the intravaginal ejaculation time among the general male population. *J Sex Med* 2009;6(10):2888–95.
 24. Dinsmore WW, Hackett G, Goldmeier D, et al. Topical eutectic mixture for premature ejaculation (TEMPE): a novel aerosol-delivery form of lidocaine-prilocaine for treating premature ejaculation. *BJU Int* 2007;99(2):369–75.
 25. Cayan S, Serefoğlu EC. Advances in treating premature ejaculation. *F1000 Prime Rep* 2014;6:55.
 26. McMahon CG, Jannini E, Waldinger M, et al. Standard operating procedures in the disorders of orgasm and ejaculation. *J Sex Med* 2013;10(1):204–29.
 27. Pryor JL, Althof SE, Steidle C, et al. Efficacy and tolerability of dapoxetine in treatment of premature ejaculation: an integrated analysis of two double-blind, randomised controlled trials. *Lancet* 2006;368(9539):929–37.
 28. Salem EA, Wilson SK, Bissada NK, et al. Tramadol HCL has promise in on-demand use to treat premature ejaculation. *J Sex Med* 2008;5(1):188–93.
 29. Basar MM, Yilmaz E, Ferhat M, et al. Terazosin in the treatment of premature ejaculation: a short-term follow-up. *Int Urol Nephrol* 2005;37(4):773–7.
 30. Chen J, Mabeesh NJ, Matzkin H, et al. Efficacy of sildenafil as adjuvant therapy to selective serotonin reuptake inhibitor in alleviating premature ejaculation. *Urology* 2003;61(1):197–200.
 31. Moon DG. Is there a place for surgical treatment of premature ejaculation? *Transl Androl Urol* 2016;5(4):502–7.
 32. Cooper K, Martyn-St James M, Kaltenthaler E, et al. Behavioral Therapies for Management of Premature Ejaculation: A Systematic Review. *Sex Med* 2015;3(3):174–88.
 33. Metz M, McCarthy B. Coping with premature ejaculation: how to overcome PE, please your partner, and have great sex. Oakland (CA): New Harbinger Publications; 2003.
 34. Rosen R, Althof S. Impact of premature ejaculation: The psychological, quality of life, and sexual relationship consequences. *J Sex Med* 2008;5(6):1296–307.
 35. Althof S. Treatment of premature ejaculation: psychotherapy, pharmacotherapy, and combined therapy. In: Binik YM, Hall KS, editors. *Principles and practice of sex therapy*. 4th edition. New York: Guilford Press; 2007. p. 212–40.
 36. Melnik T, Gliana S, Rodrigues OM Jr. Psychological intervention for premature ejaculation. *Nat Rev Urol* 2009;6(9):501–8.
 37. Rowland DL, Cote-Leger P. Moving Toward Empirically Based Standardization in the Diagnosis of Delayed Ejaculation. *J Sex Med* 2020;17(10):1896–902.
 38. Rowland DL. Evaluation of Delayed Ejaculation. In: IsHak WW, editor. *The Textbook of clinical sexual medicine*. Cham (Switzerland): Springer; 2017. p. 241–54.

39. Butcher MJ, Serefoglu EC. Treatment of Delayed Ejaculation. In: IsHak WW, editor. *The Textbook of clinical sexual medicine*. Cham (Switzerland): Springer; 2017. p. 255–69.
40. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. *JAMA* 1999;281(6):537–44.
41. Perelman M, Rowland DL. Retarded or inhibited ejaculation (male orgasmic disorder). In: Rowland DL, Incrocci L, editors. *Handbook of sexual and gender identity disorders*. New York: Wiley Press; 2008. p. 100–21.
42. Perelman M. Delayed ejaculation. In: Binik YM, Hall KS, editors. *Principles and practice of sex therapy*. 5th edition. New York: The Guilford Press; 2014. p. 138–55.
43. Piche K, Mann U, Patel P. Treatment of Delayed Ejaculation. *Curr Sex Health Rep* 2020;12:251–60.
44. Masters WH, Johnson VE. *Human sexual inadequacy*. Boston, MA, USA: Little, Brown & Co; 1970.
45. Apfelbaum B. Retarded ejaculation, a much-misunderstood syndrome. In: Lieblum SR, Rosen RC, editors. *Principles and practice of sex therapy*. 2nd edition. New York: The Guilford Press; 2000. p. 205–41.
46. Rowland DL, van Diest S, Incrocci L, et al. Psychosexual factors that differentiate men with inhibited ejaculation from men with no dysfunction or another sexual dysfunction. *J Sex Med* 2005;2(3):383–9.
47. Rowland DL, Cooper SE. Treating men's orgasmic difficulties. In: Peterson Z, editor. *The Wiley Handbook of sex therapy*. West Sussex (UK): John Wiley & Sons; 2017. p. 72–97.
48. Annon JS. The PLISSIT model: A proposed conceptual scheme for the behavioral treatment of sexual problems. *J Sex Educ Ther* 1976;2(1):1–15.
49. Busse RT, Kratochwill TR, Elliott SN. Influences of verbal interactions during behavioral consultations on treatment outcomes. *J Sch Psychol* 1999;37(2): 117–43.
50. Althof S, Rosen R, Symonds T, et al. Development and validation of a new questionnaire to assess sexual satisfaction, control and distress associated with premature ejaculation. *J Sex Med* 2006;3(3):465–75.
51. Jannini E, McMahon C, Waldinger M, editors. *Premature Ejaculation: from etiology to diagnosis and treatment*. Italy: Springer-Verlag; 2013. p. 383.
52. Patrick DL, Althof SE, Pryor JL, et al. Premature ejaculation: An observational study of men and their partners. *J Sex Med* 2005;2(3):358–67.
53. Rosen RC, Catania JA, Althof SE, et al. Development and validation of four-item version of Male Sexual Health Questionnaire to assess ejaculatory dysfunction. *Urology* 2007;69(5):805–9.
54. Spanier GB. *Dyadic adjustment scale manual*. North Tonawanda (NY): Multi-Health Systems; 1989.
55. Rust J, Golombok S. The golombok-rust inventory of sexual satisfaction (GRISS). *Br J Clin Psychol* 1985; 24(1):63–4.
56. Cappelleri JC, Althof SE, Siegel RL, et al. Development and validation of the self-esteem and relationship (SEAR) questionnaire in erectile dysfunction. *Int J Impot Res* 2004;16(1):30–8.