
Prevalence, Characteristics and Implications of Premature Ejaculation/Rapid Ejaculation

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Purpose: Premature ejaculation/rapid ejaculation is a common but incompletely understood male sexual dysfunction. The purposes of this review are to 1) raise awareness of the prevalence and characteristics of PE/RE, its impact on the male and his partner, and the lack of approved medications indicated for its treatment, 2) encourage dialogue about PE/RE between physicians and patients, and 3) stimulate the development of appropriate new therapies.

Materials and Methods: A MEDLINE search was performed to retrieve articles relating to PE/RE pathophysiology, etiology, impact, diagnosis and treatment. Sexual medicine journals not indexed in MEDLINE, sexual medicine texts and congress abstracts were also reviewed.

Results: No universally accepted definition, licensed treatment, validated screening instrument or diagnostic criteria have been established for PE/RE, and its pathophysiology and etiology are incompletely understood. Additional barriers are the reluctance of patients and physicians to talk about PE/RE and the lack of knowledge regarding available treatments. Current pharmacological treatments include off label uses of antidepressants, topical anesthetics or phosphodiesterase-5 inhibitors. All are associated with drawbacks that limit their efficacy. Psychological counseling and behavioral therapy have a valuable role, although resources for this modality are limited.

Conclusions: Prevalence rates of 20% to 30% and negative effects on the quality of life of men and their partners illustrate the need for improved, standardized methods of PE/RE diagnosis, assessment and treatment. Medications indicated specifically for PE/RE and effective on an as needed basis are required. Behavioral therapies should emphasize pleasure, arousal, control, confidence and satisfaction, and they may have the best success when coupled with pharmacological approaches.

Key Words: testis; ejaculation; sexual dysfunctions, psychological; behavioral medicine

Although PE/RE is the most common male sexual dysfunction, much remains to be learned about this vexing condition. There is no universally accepted definition, there are no validated screening instruments specific for this dysfunction, and the pathophysiology and etiology remain incompletely understood. The number of men presenting for treatment of PE/RE does not align with reported prevalence rates. Derived from the responses of men to survey questions regarding sexual symptoms or problems, the prevalence rates for PE/RE in men across a broad age range, eg 18 to 59, or 21 to 65 years or older, are approximately 20% to 30%.¹⁻⁶ Because the definition of PE/RE is not uniform across studies, a reported prevalence rate may be an overestimate if compared with various diagnostic criteria, or an underestimate if men are inhibited from responding openly to survey questions. Unfortunately there is no large-scale, population based study using agreed upon diagnostic criteria that examines the influence of patient age, ethnicity and culture on ejaculatory disorders.

The distress induced by PE/RE affects not only the male, but also his sexual partner, the relationship as a whole and other areas of his life.^{1,2,7} The stigma associated with having a sexual problem inhibits men from discussing it with their physician and partner.^{2,7,8} Embarrassment, lack of knowledge and a tendency to dismiss sexual problems as unimportant or not within the purview of medicine inhibit physicians from asking their patients if they have PE/RE symptoms.^{7,9} Further, men who desire treatment may not know which specialist to consult. Should they seek treatment from a urologist, primary care physician, psychiatrist or sex therapist? Additional reasons for not seeking treatment are selfishness, the belief that there is no treatment and a lack of motivation unless encouraged by their partner.² The lack of standardized, validated screening criteria is a barrier to diagnosis. These issues create a gap between symptoms and resolution. Men do not know to ask about their condition and others do not know whom to ask about their condition, while physicians and mental health clinicians do not routinely assess patients for symptoms of PE/RE despite its high prevalence.

Historically PE/RE was thought to be primarily psychological in etiology, although recent research has documented that the condition also has a physiological basis, involving primarily serotonergic but also dopaminergic and adrenergic neurotransmission.^{10,11} Psychological and cognitive aspects contribute but are difficult to characterize.^{12,13} There is

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likely a mixed etiology or spectrum of PE/RE etiologies, involving psychological and physiological influences (Appendix 1).^{11,13-15}

Men with PE/RE may not be aware of these physiological and psychological factors or that anything can be done to remedy them. In contrast to ED, no regulatory authority has approved a medication for PE/RE. This may also contribute to under treatment because men may assume that no prescription treatment is available and, therefore, they do not discuss it with their physician.⁷ In a survey of men 40 years or older 1% stated that they had received treatment for PE/RE, although 18% responded that they "always/almost always" or "usually" ejaculated prematurely, highlighting the problem of under treatment.¹⁶ A 2004 multicountry survey of more than 11,500 men in the United States, Italy and Germany found an overall PE/RE prevalence of 25% and less than 12% of the men who self-reported PE/RE had sought treatment.²

Pharmacological treatments in use but not approved by the United States FDA or EMEA for PE/RE include antidepressants, topical anesthetics and PDE-5 inhibitors. Psychological counseling and behavioral therapy are also used but they require time, money, commitment and the availability of a well trained sex therapist. Each of these approaches is associated with drawbacks that limit its usefulness. The AUA has published consensus guidelines for the pharmacological management of PE,³ which recognize that a universally accepted definition and improved, standardized methods of diagnosis, assessment and treatment are needed. Pharmacological treatments developed specifically for PE/RE, and better psychological and behavioral interventions along with algorithms for combined psychotherapy and pharmacotherapy are research goals. The aims of this article are to 1) raise awareness of the characteristics and prevalence of PE/RE, its impact on the male and his partner, and the lack of approved prescription medications indicated for its treatment, 2) encourage dialogue about the condition between physicians and patients, and 3) stimulate the development of new pharmacological, psychological and combined forms of therapy.

MATERIALS AND METHODS

A MEDLINE search from 1985 to the present was performed to retrieve articles relating to PE/RE pathophysiology, etiology, impact, diagnosis and treatment. Cross-references from retrieved articles as well as articles from sexual medicine journals not indexed in MEDLINE, sexual medicine textbooks and congress abstracts were also reviewed.

RESULTS

Definitions of PE. Numerous definitions of PE/RE exist (Appendix 2).^{3,14,17-20} Common concepts among them include aspects of ejaculatory latency time, control over ejaculation and satisfaction with sexual intercourse, while the DSM-IV-TR and AUA guideline definitions also include individual or interpersonal distress. PE/RE is often categorized into primary (lifelong) and secondary (acquired) forms. Primary PE/RE is specified when the history of ejaculatory disturbance is lifelong, while secondary PE/RE is specified in an individual who previously had the ability to control ejac-

ulation sufficiently but in whom the dysfunction later developed.¹⁷

PE/RE should not be confused with ED. They are different disorders. ED is defined as the inability to achieve or maintain erection sufficient for satisfactory sexual performance.²¹ PE/RE and ED can coexist but different pathological mechanisms underlie each disorder.^{3,11} A subset of men have PE/RE after the onset of ED. They recognize that erection is time limited and they adaptively learn to ejaculate prior to erectile softening. Thus, a detailed sexual history is necessary in men who present with ejaculatory complaints.

The most frequently used primary end point for PE/RE in clinical research is IELT, defined as the time from vaginal penetration to the start of intravaginal ejaculation.⁸ However, the use of IELT alone is not likely to be the best method of diagnosis or treatment evaluation since it does not consider individual perceptions of control over ejaculation, satisfaction with sexual intercourse and associated distress. Supporting this point, in a recent study in which 1,587 men were divided into PE/RE and nonPE/RE groups based on DSM-IV-TR criteria results showed considerable overlap in IELT between the groups.²² Furthermore, there is currently no uniform method of measuring IELT. Many studies have incorporated a stopwatch to measure IELT, while others relied on IELT estimated by the individual. Self-estimated IELT and IELT measured by a stopwatch may vary. Although further study in this area is needed, reports suggest that discrepancies may exist.^{8,11,23} In addition, there is lack of consensus on the IELT cutoff defining PE/RE due to the paucity of normative data. Some investigators suggest that it should be 1 minute based on the distribution of IELTs in PE/RE populations that they have studied,⁸ while others suggest 2 minutes based on a review and summary of published IELT data in men with PE/RE.¹¹ Despite these conflicting opinions it is acknowledged that IELT is less meaningful than the perception of control and satisfaction with sexual intercourse by a man.³ Finally, the frequency of sexual interactions in which IELT is below a specified cutoff is also a consideration, eg greater than 90%, greater than 75% or greater than 50% of the time, as is the period in question, eg the previous month, 6 months or year.

Control over ejaculation and satisfaction with sexual intercourse are important measures of PE/RE that are interrelated to some extent with IELT.²⁴⁻²⁸ Validated instruments to measure each are needed for use by individuals and partners as well as by researchers.²³ Ultimately the definition of PE/RE is subjective, based on individual perceptions of control over ejaculation, satisfaction with sexual intercourse and associated distress. For example, men with IELT greater than a specified cutoff may report low control over ejaculation and low satisfaction with sexual intercourse, and experience distress. Conversely men with IELT less than a specified cutoff may not report low control over ejaculation and/or low satisfaction with sexual intercourse, or experience distress.

Ultimately a brief series of screening questions or a short, validated questionnaire are necessary to help the clinician accurately diagnose PE/RE. It places too much burden on the physician and patient to require in a nonresearch setting IELT measurements or a dependence on the potential inaccuracies of self-reported IELT estimations.

Prevalence of PE/RE. In the NHSLs individuals were interviewed in person and yes/no questions were used to evaluate 1,243 men who were sexually active in the previous 12 months with regard to traditional male sexual dysfunctions, including PE/RE.⁵ Responses were used to determine a prevalence rate of 21%. More recently Rowland et al performed a survey of 1,239 men using an Internet based approach.¹ They limited the definition of PE/RE to ejaculation before the individual wished in greater than 50% of sexual intercourse attempts and further subdivided positive respondents according to their degree of associated distress. Overall prevalence was 32.5% with 16.3% of men indicating that their associated distress was “somewhat” or “very much” of a problem for them (designated the probable PE/RE group) and 16.2% indicating that it was “none” or “a little” of a problem for them (designated the possible PE/RE group). Results of studies that assessed the prevalence of PE/RE and ED in a single population support the view that PE/RE is more common than ED.^{4,5,29} The prevalence of ED in the NHSLs was 5%⁵ and Rosen cited an approximately 30% prevalence of PE/RE vs a 10% prevalence of ED.⁴ However, awareness of ED is greater due to its more precise definition, standard diagnostic criteria, and established and vigorously promoted medical therapy.

Culture and ethnicity. Results of an automated telephone self-interview survey of 1,320 men 40 years or older suggest that different racial/ethnic groups may define PE/RE differently and/or differ in the self-reported prevalence of PE/RE.¹⁶ The percent of white, black and Hispanic men who reported “always/almost always” or “usually” experiencing PE in the previous 3 months was 16%, 21% and 29%, respectively. The corresponding percent of men who “always/almost always” or “usually” ejaculated before penetration were 3%, 9% and 16%. Further investigation of ethnic cultural differences and influences is necessary.

Age. Although data on the prevalence of PE/RE according to age are limited, there is a widespread belief that the prevalence of PE/RE decreases with age and that of delayed ejaculation increases with age. However, in the NHSLs responses of men to the question regarding climaxing or ejaculating too rapidly did not differ across the age categories analyzed (ages 18 to 29, 30 to 39, 40 to 49 and 50 to 59 years).⁵ Carson et al found that 16% of men 40 to 49 years, 13% of men 50 to 59 years and 27% of men 60 years or older reported “always/almost always” or “usually” ejaculating prematurely in the previous 3 months.¹⁶ Data from the 2004 survey of more than 11,500 men in the United States, Germany and Italy showed that the prevalence of self-reported PE was constant across age groups ranging from 18 to 70 years.² These studies are limited because they did not follow men longitudinally to assess changes in IELT with age. Even with this limitation it appears that the belief that the prevalence of PE/RE decreases with age is not supported by current data and more study is needed. PE/RE appears to affect a broader age range of individuals than ED and the prevalence of PE/RE appears to be higher than that of ED in any given age bracket studied.

Thus, in addition to better prevalence figures, population based, well designed studies are needed to determine the impact of culture, ethnicity and age on ejaculatory disorders.

Psychosocial impact. PE/RE impacts individual and relationship QOL. Interviews with 28 men 25 to 70 years old with self-reported PE/RE illustrate this point.⁷ Subjects were asked what impact the condition had on their self-image, sex life, relationship with their partner and everyday life. A concern reported by the majority (68%) was a decrease in sexual self-confidence. Half of the single men or men not in relationships reported avoidance of relationships or reluctance to establish new relationships. Men in relationships reported distress at not satisfying their partner with some worrying that their partner was unfaithful to them because of PE/RE. Embarrassment with discussing the condition was the primary reason for not consulting a physician, as cited by 67% of respondents. Almost half of respondents thought no treatment existed (47%). Concerns about PE/RE were similar in men who diagnosed themselves as having severe PE (28%) and men who had moderate PE (68%). The judgment was made by the man and no guidelines for assessing severity were provided.

In the survey of Rowland et al those categorized as having probable PE/RE (16.3%) had significantly worse sexual functioning than men with no PE/RE dysfunction on measures of erectile functioning, satisfaction with sexual intercourse, satisfaction with their sexual relationship, ability to become sexually aroused and ability to relax during intercourse.¹ In another study comparing intimacy patterns and QOL in sexually functional and dysfunctional populations men with PE/RE scored lower on all aspects of intimacy (emotional, social, sexual, recreational and intellectual) and had lower QOL (lower satisfaction in all areas) than sexually functional men.³⁰

PE/RE also has a negative effect on the QOL of the partner. A recent study showed a relationship between PE/RE and lower partner sexual satisfaction in heterosexual couples.³¹ Partners are not just distressed because of the quality of the sexual performance of the man. They are also upset because the condition and the associated distress of the man often lead to a rapid and unwanted interruption of intimacy. Thus, in men in stable relationships the condition should be recognized as an issue of couples.²⁰ The prevalence of PE/RE and its impact on the individual and partner highlight the need for increased public and physician awareness of the psychosocial impact of this dysfunction and improved methods of diagnosis and treatment.

Current methods of PE/RE diagnosis. Physicians and mental health clinicians do not ask questions about ejaculatory disturbances as part of routine evaluations and patients typically must initiate the conversation about their condition with their doctor.^{2,7,9} This is problematic because patients are often too embarrassed to discuss their condition with physicians or are unaware of treatment options for PE/RE. This lack of inquiry by the clinician or discussion by the patient leads to under diagnosis and under treatment of the condition. In addition, there are currently no validated questionnaires that diagnose or assess PE/RE. Questionnaires in development include the 36-item Premature Ejaculation Questionnaire, the 10-item IPE, the 10-item Chinese IPE²³ and the 2-part question used by Rowland et al.¹ The IPE has been shown to have excellent psychometric properties in the domains of control, satisfaction and distress.³² The psychometric properties of the Chinese IPE were assessed in a study in 167 men with and 114 without PE/RE.³³

The results showed that 5 questions of this 10-question tool were significantly related to PE/RE. Those 5 questions addressed ejaculatory latency, difficulty in delaying ejaculation, patient sexual satisfaction, partner sexual satisfaction and feelings of anxiety or depression in sexual activity. They were highly predictive for PE/RE and the investigators proposed that scores were indicative of severity. As described, the 2-part question used by Rowland et al was also able to differentiate groups of men with symptoms of PE/RE from those without such symptoms.¹

In patients complaining of PE/RE symptoms the AUA guideline recommends a detailed sexual history that includes the frequency and duration of PE, relationship of PE to specific partners, occurrence with all or some attempts, degree of stimulus, nature and frequency of sexual activity, impact on sexual activity, types and quality of personal relationships and QOL, aggravating or alleviating factors and relationship of PE to drug use or abuse.³ Because a full sexual history may be difficult to incorporate into the timeframe of a typical office visit, the development of brief screening tools to assist in diagnosis and minimize patient and provider embarrassment is warranted. The AUA guideline states that "patient and partner satisfaction is the primary target outcome for the treatment of PE."³ Relationship satisfaction is also an important goal.²⁰

CURRENT METHODS OF PE/RE TREATMENT

Pharmacological treatments. To date there have been no pharmacological methods of PE/RE treatment available that have been approved by the FDA or EMEA. Instead, PE/RE is treated with the off label use of antidepressants, topical anesthetics and PDE-5 inhibitors. Only a few studies of the pharmacological treatment of PE/RE meet the highest level of evidence based medicine criterion.¹⁰ In addition, the methods used to define and evaluate the condition vary greatly among the small-scale trials that have been published. Significant drawbacks are associated with each of the available pharmacological approaches.

Antidepressants. SSRI antidepressants, eg fluoxetine, paroxetine and sertraline, are used for PE/RE based on the observation that delayed ejaculation is a side effect of therapy for depression³⁴⁻³⁶ and on evidence in animals of a role for serotonin in the ejaculatory response.³⁶ However, the pharmacokinetic profile of conventional antidepressants is optimized for the treatment of depression, which requires their continuous presence in the bloodstream to achieve the maximum effect. Most SSRIs must be discontinued gradually to avoid withdrawal symptoms. There is also controversy whether SSRIs increase impulsive actions and suicidal behavior.³⁷ In addition, they are associated with unwanted sexual side effects, in that they can depress libido and cause ED. Finally, individuals may be reluctant to receive an antidepressant to treat a condition other than depression and use it chronically. Ideally pharmacotherapy for PE/RE should be given as needed because sexual activity does not generally occur on a daily basis.

Studies to date have been small, often uncontrolled and often inconsistent in the methods used to define the condition and measure outcomes. As confirmed by the AUA guideline, these factors limit the evaluation of the evidence for a benefit of antidepressant use in men with PE/RE.³ Numer-

ous groups have investigated the efficacy of SSRIs given on a chronic daily schedule for PE/RE and a recent meta-analysis supports the superior effect of paroxetine vs other SSRIs on ejaculatory delay.³⁸ Few groups have investigated the effects of PRN dosing and most have done so after a period of chronic dosing and/or in combination with PDE-5 inhibitors. A comparison of 20 mg paroxetine PRN 3 to 4 hours prior to intercourse vs 20 mg paroxetine daily for 4 weeks, followed by PRN paroxetine in those who responded to daily paroxetine revealed that the schedule of daily dosing followed by PRN dosing was superior to the PRN only schedule ($p < 0.001$). However, sexual side effects (anejaculation, inhibited orgasm and decreased libido) were observed in the daily paroxetine group and the initial benefits that they experienced were not sustained with time in men with primary PE/RE (11 of 16 failures). In the PRN only group 15 of 19 men with primary PE/RE failed to respond.³⁹ A recently published theory asserted that PRN treatment of PE/RE with conventional SSRI antidepressants cannot be effective.⁴⁰ However, this speculation is based on research in animal models and it highlights the need for more robust studies in patients with PE/RE. Chronic weekly vs daily dosing was investigated with fluoxetine with the goal of increasing convenience.⁴¹ Although the 2 schedules had similar efficacy, the once daily schedule had an onset of effect of 4 weeks vs 6 weeks for the once weekly schedule. Common side effects with each were nausea, insomnia and headache.

Topical anesthetics. Topical anesthetics are available in cream, ointment or spray formulations and are used based on the theory that men with PE/RE are hypersensitive to penile stimulation. Drawbacks of topical anesthetics are that they can be messy, interfere with spontaneity and cause numbness in the man and his partner. They require condoms or the necessity of washing off the product before intercourse, which decreases spontaneity/naturalness and potentially decreases arousal. Another anesthetic product under study for PE/RE is SS cream, a combination of 9 Asian herbs thought to decrease penile hyperexcitability.⁴²

PDE-5 inhibitors. PDE-5 inhibitors used alone⁴³ or in combination with SSRIs have been reported to improve ejaculatory latency in men with PE/RE.^{44,45} Mean increases in IELT from baseline after 3 and 6 months of treatment were greater for paroxetine plus sildenafil vs paroxetine alone but combination therapy resulted in a higher incidence of headaches and flushing episodes. Another study showed that the combination of psychological counseling, behavioral therapy and paroxetine daily for 30 days, followed by paroxetine plus sildenafil 7 hours prior to intercourse decreased PE severity after 3 months and increased IELT in men dissatisfied with initial therapy with topical 5% lidocaine ointment.⁴⁴

Psychological counseling and/or behavioral therapy. Prior to the introduction of pharmacotherapy for PE/RE psychological counseling and behavioral therapies were the primary approaches used. They continue to be used but they require a clinician trained in sexual therapy techniques. In addition, ongoing partner cooperation and participation are critical to their success. Studies have shown that, while these methods achieve impressive initial success, long-term followup demonstrates significant relapse.^{46,47} Controversy exists as to whether methods designed to limit

arousal, such as stop-start or squeeze techniques, are more efficacious than methods that teach the man to focus on arousal and learn to control it.²⁰ Most clinicians use multimodal techniques that emphasize increasing pleasure and enhancing intimacy through relaxation and pacing in combination with traditional psychotherapy.

Self-treatment. On their own men have resorted to wearing multiple condoms, applying desensitization ointment to the penis, repeatedly masturbating prior to intercourse, not allowing their partner to stimulate them or distracting themselves by performing complex mathematical computations while making love. These tactics, however creative, curtail the pleasures of lovemaking and are unsuccessful for delaying ejaculatory latency.

Characteristics of an ideal treatment. The drawbacks of available treatment options point to characteristics of ideal pharmacological therapy developed specifically for PE/RE. Such therapy would be effective with PRN dosing without the need for a lead-in period of chronic dosing, have rapid onset of effect and efficacy with the first dose, not disrupt spontaneity, and have a lower incidence of side effects (eg nausea, insomnia and headache) and no sexual side effects. Finally, it would cure the condition, so that relapses would not occur after therapy cessation.

Compounds that target the serotonergic system are under development and/or are being evaluated in clinical trials for PE/RE. Such effective, short-acting, as needed medications that receive FDA and EMEA approval for this indication will dramatically alter the treatment landscape, just as PDE-5 inhibitors did for the treatment of ED. In the long run what might prove even more effective in helping to restore sexual confidence in men and enhance their learning of effective techniques to control ejaculation would be proven programs of pharmacotherapy combined with brief counseling or coaching.^{48,49}

CONCLUSIONS

The stigma associated with PE/RE, the problems surrounding its many definitions, incompletely documented prevalence by age, ethnicity and culture, incompletely understood pathophysiology and etiology, and the lack of standardized clinical end point measures, validated outcomes measurement instruments and FDA approved medications contribute to under diagnosis and under treatment. A universal definition of and diagnostic criteria for PE/RE are needed based on the characteristics and needs of the individuals with this condition, as opposed to criteria established only by physicians and researchers, such as IELT. Brief yet comprehensive, validated, reliable outcomes measurement tools that can be incorporated easily into office visits must be developed. Medications indicated specifically for PE/RE and, therefore, that have been evaluated in large-scale clinical trials in men with PE/RE are needed. Psychological and behavioral interventions can complement pharmacotherapy. They should emphasize pleasure, arousal, control and satisfaction instead of distraction, help restore sexual confidence and target the interpersonal and intrapsychic issues that precipitate or maintain the dysfunction. Ultimately availability of a spectrum of interventions may help patients and

clinicians determine which are most appropriate for their situation.

PE/RE is an under diagnosed condition, distinct from and more prevalent than ED. Similar to what has occurred in the last several years with ED, clinicians should encourage dialogue regarding PE/RE with their patients to minimize stigma and improve diagnosis, and should offer treatment to those interested in receiving it. Ultimately success is best measured not only by IELT, but rather by QOL parameters, including increased sexual confidence, sexual satisfaction, relationship satisfaction, increased intimacy and improved mood.

APPENDIX 1

Potential PE/RE Etiologies

Component	Etiology
Psychological	Anxiety
	Early sexual experience
	Frequency of sexual intercourse
	Ejaculatory control techniques
	Evolutionary
	Intrapsychic issues
Physiological	Interpersonal issues
	Penile hypersensitivity
	Hyperexcitable ejaculatory reflex
	Arousability
	Endocrinopathy
	Genetic predisposition
	Serotonin receptor dysfunction

Adapted from McMahon et al.¹⁴

APPENDIX 2

PE/RE Definitions

Source	Definition
DSM-IV-TR ¹⁷	Persistent or recurrent ejaculation with minimal sexual stimulation before, on or shortly after penetration and before the person wishes it. The condition must also cause marked distress or interpersonal difficulty and cannot be due exclusively to the direct effects of a substance.
International Statistical Classification of Disease, 10th Revision ¹⁸	For individuals who meet the general criteria for sexual dysfunction, the inability to control ejaculation sufficiently for both partners to enjoy sexual interaction, manifest as either the occurrence of ejaculation before or very soon after the beginning of intercourse (if a time limit is required, before or within 15 seconds) or the occurrence of ejaculation in the absence of sufficient erection to make intercourse possible. The problem is not the result of prolonged absence from sexual activity.
European Association of Urology. Guidelines on Disorders of Ejaculation ¹⁹	The inability to control ejaculation for a "sufficient" length of time before vaginal penetration. It does not involve any impairment of fertility, when intravaginal ejaculation occurs.
International Consultation on Urological Diseases ¹⁴	Persistent or recurrent ejaculation with minimal stimulation before, on, or shortly after penetration, and before the person wishes it, over which the sufferer has little or no voluntary control, which causes the sufferer and/or his partner bother or distress
AUA guideline on the pharmacologic management of premature ejaculation ³	Ejaculation that occurs sooner than desired, either before or shortly after penetration, causing distress to either one or both partners.
Book chapter: Understanding premature ejaculation ²⁰	The man does not have voluntary, conscious control, or the ability to choose in most encounters when to ejaculate.

Abbreviations and Acronyms

AUA	=	American Urological Association
DSM-IV-TR	=	Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision
ED	=	erectile dysfunction
EMEA	=	European Medicines Agency
FDA	=	Food and Drug Administration
IELT	=	intravaginal ejaculatory latency time
IPE	=	Index of Premature Ejaculation
NHSLS	=	National Health and Social Life Survey
PDE	=	phosphodiesterase
PE	=	premature ejaculation
PRN	=	as needed
QOL	=	quality of life
RE	=	rapid ejaculation
SSRI	=	selective serotonin reuptake inhibitor

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