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Coping with Premature Ejaculation: An Online Survey in a Representative Sample of the German Male Population Aged 18 to 64 Years

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Abstract

Background: This study estimated combined prevalence of Lifelong and Acquired PE in German adult men and assessed potential risk factors and coping methods for PE.

Methods: In October 2012 this online survey of a representative sample of the German male population aged 18-64 years (n=2,459) used an active pre-existing and independent online panal.

Results: Prevalence of PE as a 'sexual dysfunction' according to the modified ISSM definition of was 3.3% (n=81), whereas the prevalence of PE as a 'sexual complaint' (i.e., men who estimated their time to ejaculation was occasionally very short, suffered to some extent from PE and had a lack of ejaculation control) was 14.5% (n=356). Men attributed PE predominantly to particularly high sexual arousal (75%) or a long time since the last sexual intercourse (53%), but less than one third of all men with PE (30%) considered PE a 'disease'. Potential self-reported risk factors showed significant differences (P<0.05) for overweight (21% vs 30%), depression (9% vs 14%) and erectile dysfunction (3% vs 15%) between men without and with PE.

Conclusions: All men perceived PE as a 'sexual difficulty' and suffered from a very short time to ejaculation and/or the inability to control that time.

Keywords: Germany; Prevalence; Premature Ejaculation; Definition; Risk Factors; Online Survey

Introducton

In the past, researchers have investigated the prevalence of PE, its potentially predisposing risk factors and its influence on a person's life in general. Since the first large-scale, systematic survey of sexual dysfunctions in 1998 [1], multiple studies have investigated various aspects of PE using a variety of PE definitions [2]. In the Premature Ejaculation Prevalence and Attitudes (PEPA) Survey, the overall prevalence of PE was 22.7% (20.3% in Germany) [3]. According to the 2013 European Association of Urology (EAU) guidelines on erectile dysfunction (ED) and PE [4], the diagnosis of PE should be based on medical and sexual history assessing intravaginal ejaculatory latency time (IELT), perceived control over time to ejaculation, distress and interpersonal difficulty related to the ejaculatory dysfunction. The guidelines further encourage clinical use of self-estimated IELT, which has been shown to correlate well with stopwatch-based IELT [5]. The International Society of Sexual Medicine (ISSM) definition of Lifelong PE [6] requires that ejaculation always or nearly always occurs before or within 1 minute of vaginal penetration. Three common constructs however underlie most definitions of PE: 1) a short ejaculatory latency, 2) a lack of perceived self-efficacy or control over the timing of ejaculation, and 3) distress and interpersonal difficulty related to the ejaculatory dysfunction [2]. To further understand PE in the adult male German population, we performed an anonymous online survey investigating the prevalence of PE in Germany, associated potential risk factors for PE and the methods that men use to cope with PE.

Patients and Methods

The study was performed in Germany in October 2012 as an online survey of 2,459 men aged 18-64 years. The sample was drawn from a pre-existing independent online panel (Research Now®) committed to the ethical code of the International Chamber of Commerce/World Association for market, social and opinion research (ICC/Esomar International, www.iccwbo.org). It guarantees its members anonymity and was representative of the German male population with respect to age and residence, which is mainly responsible for Internet access distribution in Germany rather than on socioeconomic status [7,8].

More than 25.000 male members of the panel were invited to take part in a scientific study on sexuality with a length of 5 to 25 minutes. No further details were mentioned in the invitation. The response rate was approximately 10%, which is typical for online panel research.

The survey consisted of 96 questions and was conducted in two phases. With the exception of estimating IELT in minutes on a step less slide controller, the answers were offered to the participant to choose from, whereas rarely open questions were used. In the first phase (37 questions), all men were asked about their sexual activity and sexuality

in general, their living conditions and partnership status, their role perception and their health status.

This was followed by epidemiological questions, questions based on the Premature Ejaculation Profile (PEP) [9] and questions on their own satisfaction and that of their partners with their time until ejaculation and their ability to control that time (20 questions).

Following phase 1, 356 men who responded that they subjectively suffer from a short time to ejaculation (Question 1 in Table 1) and/or have an inability to control ejaculation time were included in the second phase of the survey. In Phase 2 (79 questions) questions asked about respondents' backgrounds, their perceptions of PE, possible effects of PE on their relationships (e. g. faithfulness), their personality (e. g. self-confidence, conservative vs. modern attitudes, introvertedness, and potential to assume responsibility), and their fundamental attitudes toward health (e. g. use of over-the-counter vs prescription drugs and their adherence to doctor´s orders).

To estimate the prevalence of PE in the study sample, we slightly modified the ISSM definition of Lifelong PE to mimic clinical practice.

As the ISSM definition of Lifelong PE requires a numerical estimation of ejaculation of less than 1 minute, the inability to delay ejaculation on nearly all vaginal penetrations and negative personal consequences our slightly modified ISSM definition required the following: The man estimated that his time to ejaculation was always very short (Responses 1 and 2 to Question 1 in Table 1) and the man previously responded to be 'poorly satisfied' or 'not at all satisfied' with the time to ejaculation and suffered from that very short time (Responses 1 to 4 to Question 3 in Table 1) and/or he rated his ability to control the time to ejaculation as 'poor' or 'very poor' and suffered from his inability to control that time (Responses 1 to 3 to Question 4 in Table 1). Data were analyzed using SPSS Statistics 20 for Microsoft Windows (SPSS Inc., Chicago, Il, USA).

Answers to open questions were categorized. The categories were derived inductively during the analysis. Between-group comparisons were performed using t-tests for independent samples and Pearson's chi-square test. The Mann-Whitney U test was used for sample sizes n<30. The significance level was set at 5%.

Diagnostic criteria for PE		
Perception of time to ejaculation	**Satisfaction with time to ejaculation**	**Ability to control ejaculation and negative personal consequences**
When you have sexual intercourse with your partner, how would you describe the time between penetration and ejaculation? Please select the option, which best matches your experience?	How satisfied are you personally with the span of time between vaginal penetration and ejaculation while having sex with your partner?	You have responded to be 'poorly satisfied' or 'not at all satisfied' with the time to ejaculation. To what extent do you suffer from it?
(1) The time is always very short, nearly always ejaculation occurs shortly before or during penetration.	(1) Very much	Very much
(2) The time is always very short.	(2) Much	Much
(3) Sometimes, the time is very short, but it varies depending on the circumstances.	(3) To a certain extent	To a certain extent
(4) The time varies depending on the circumstances and the time (nearly) is never too short.	(4) A little bit	Hardly
(5) The time is always appropriately long.	(5) Not at all	Not at all
(6) Often, it takes very long until I ejaculate.		

Table 1: Diagnostic criteria for PE.

Results

Two thousand four hundred and fifty nine men aged 18-64 years completed the survey to variable extents and were included in this analysis.

31 nationalities were identified; however the groups were too small to be differentiated in our analysis. Men with and without PE did not differ in age, marital status, or sexual partnership (Table 2).

Age group [years]	**Men with PE**	**Men without PE**	**p-value**
	356 (14.5%)	2,103 (85.5%)	
Age (years, median, mean, SD, range)	40, 40.4, 12.6, 46	41, 40.4, 13.1, 46	0.997T
Age groups			
18-24 years (n, %)	52 (14.6%)	365 (17.4%)	0.222Chi

25-34 years (n, %)	72 (20.2%)	374 (17.8%)	0.265 Chi
35-44 years (n, %)	83 (23.3%)	497 (23.6%)	0.946 Chi
45-54 years (n, %)	82 (23.0%)	476 (22.6%)	0.891 Chi
55-64 years (n, %)	67 (18.8%)	391 (18.6%)	0.941 Chi
Marital status			
Married (n, %)	228 (64.0%)	1,183 (56.0%)	0.005 Chi
Not married (n, %)	128 (36.0%)	925 (44.0%)	
Sexual partnership			
Female partner (n, %)	265 (74.4%)	1,458 (69.3%)	0.053 Chi
Male partner (n, %)	11 (3.1%)	70 (3.3%)	1.00 Chi
Single (n, %)	80 (22.5%)	575 (27.3%)	0.060 Chi
Lifelong PE (n=315; n, %)	219 (70.2%)	-	
Estimated IELT (median, mean, SD, range)	4.75, 4.83, 2.82, 14.7	9.90, 9.31, 3.88, 15.0	0.000T

Table 2: Demographic and baseline parameters (n=2,459),IELT=intravaginal ejaculatory latency time; PE=premature ejaculation; Chi=Chi-square Test (Fisher's exact Test);T=T-Test for independent samples.

Using our modified ISSM definition of PE, 81 men (3.3%) of the total survey population were diagnosed with PE as a 'sexual dysfunction', with an estimated median IELT of 3 minutes. Because we were particularly interested in how men with PE dealt with the condition, we created an expanded category of men with PE as a 'sexual complaint' by including men who had responded to Question 1 with 'sometimes, the time is very short but it varies depending on the circumstances' (Response 3 in Table 2) and reported the same extent of suffering from PE. This expanded PE cohort consisted of 356 men (14.5%), and 18% (n=66) of these men suffered 'much' or 'very much' from their inability to control time to ejaculation.

Men with PE in this expanded cohort estimated their IELT at less than 5 minutes vs 9 minutes estimated by men without PE. About half of the men with PE reported experiencing anteportal ejaculation, and 15% of these men reported that this happened at least at every fifth attempt at sexual intercourse. The prevalence of PE remained at a similar level across men aged 18-64 years, whereas the prevalence of self-reported ED increased with age (Figure 1).

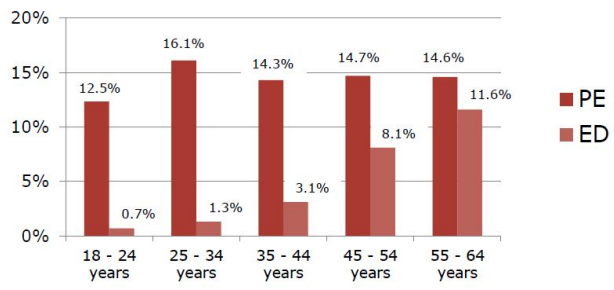

Figure1: Differentiation of PE and ED.

Men with PE attributed their disorder to particularly high sexual arousal (75%), a long time since the last sexual intercourse (53%), stress (27%) and other psychological disorders (26%) but only rarely to unhealthy lifestyle (e. g., alcohol consumption or recreational drugs) (10%).

Of the 276 men with PE who had a sexual partner, 61% were 'happy' or 'very happy' with their partnership.

Only 9% of the men with PE responded that their partners suffered from the early ejaculation but the men with PE themselves, felt unsatisfied by leaving their partners sexually unfulfilled. This was also true for single men regarding their former partners.

Less than one third of all men with PE (30%) considered PE a 'disease', although more than half of the men suffered from PE 'much' or 'very much'. Two thirds preferred to talk about PE with their partners but rarely (17%) searched for 'solutions' to their problem. Only 10% consulted a physician (family doctor or urologist) for advice and/or treatment.

They considered the physician's consultation to be a burden but at the same time usually expected the physician to prescribe a drug for PE treatment. About 20% searched for information on PE, mainly using Internet forums.

Men with PE adhered to their 'proven' methods to deal with PE, such as 'thinking about something else than sex during intercourse' (21%), 'pausing during intercourse' (13%), 'masturbation before intercourse' (7%) or 'frequent intercourse' (7%). Only 7% had tried any drug treatment for PE, predominantly a phosphodiesterase 5 inhibitor (PDEi).

Self-reported potential risk factors for PE showed significant differences (P<0.05) for overweight (21% vs 30%), depression (9% vs 14%) and ED (3% vs 15%) between men without PE (n=2,103) and men with PE (n=356; Table 3).

Risk factor	Men with PE	Men without PE	p-Values
	356 (14.5%)	2.103 (85.5%)	
No coexisting disease	42%	52%	0.001 Chi
Overweight	30%	21%	0.000 Chi
Obesity	22%	16%	0.007 Chi
Hypertension	23%	21%	0.001 Chi
Depression	14%	9%	0.005 Chi
Hyperlipidaemia	10%	8%	0.487 Chi
Migraine	5%	6%	0.543 Chi
Thyroid disorders	5%	5%	0.896 Chi
Erectile dysfunction	15%	3%	0.000 Chi
Burnout syndrome	5%	3%	0.521 Chi

Table 3: Prevalence of self-reported potential risk factors in men with or without PE: Chi=Chi-square Test (Fisher's exact Test); PE=premature ejaculation; Overweight = body mass index (BMI) ≥ 25 kg/m^2; obesity=BMI ≥ 30 kg/m^2 (BMI was calculated using self-reported height and body weight).

Discussion

Our study, which guaranteed anonymity to all participants, demonstrated a very high response rate from our pre-existing panel, which was representative of the German male population with respect to age and residence. This may be attributed to the small financial incentive (up to 2 €, approx. 2.76 US $) provided for completing the questionnaire, which took approximately 25 minutes to complete. The authors do not believe that this incentive level would cause a bias due to a high rate of 'easy raters'who completed the survey just to receive the reward. Telephone and Internet surveys, as well as mailed questionnaires, are frequently used to assess different sexual attitudes and behaviors and the prevalence of various sexual conditions [3,10,11]. More recently, internet-based surveys are commonly used for epidemiological investigations as they are convenient for the responder and have rapid deployment and return times compared to other traditional methods. Respondents remain anonymous and answer questions without an interviewer present and might result in respondents being more willing to share personal information. The prevalence of PE strongly depends on the definition used. In our investigation, the prevalence of PE as a 'sexual dysfunction' according to a slightly modified ISSM definition was 3.3%, whereas the prevalence of PE as a 'sexual complaint' was 14.5%, which is in line with results previously published [3]. In our survey, we used a self-estimated IELT. Stopwatch-based IELT varies considerably in the general male population and does not capture a man's subjective experience with his IELT [12]. Men with a very short IELT may not suffer from their condition, while others with a much longer IELT can be unhappy with their performance [12]. We didn´t distinguish between men in stable partnerships vs. men without a regular partner as long as men were sexually active since we wanted a 'real life' representation of the study population. The Global Online Sexuality Survey (GOSS) did not find irregular coitus to pose a risk for PE [13]. In our survey, 63% of men with PE had talked about this problem with their partner. This might be one reason why only 9% of the men with PE responded that their partners suffered from their partner´s early ejaculation. As published earlier [14], men with PE may misperceive whether and how much their partners suffer from PE. This stresses the importance of a multidimensional assessment of PE, which is not only important for the diagnosis but should also be considered for PE treatments. The concept that some men with PE should be regarded as suffering from a 'sexual complaint' rather than a 'sexual dysfunction' was first described by Waldinger [15]. Christensen et al. [16] distinguished PE as a 'sexual difficulty' (experiencing PE within the past year at any frequency) from PE as clinically relevant 'sexual dysfunction' (experiencing PE frequently and perceiving it as a problem). The prevalence of PE as 'sexual dysfunction' and 'sexual difficulty' was 7% and 54%, respectively. The latter high prevalence may be attributed to starting at the lowest frequency of 'rarely' experiencing PE. Moreover, PE as 'sexual difficulty' might include other forms of PE. In addition to the previously defined Lifelong and Acquired PE forms [17], Waldinger defined two less severe forms of PE, i.e., natural variable PE and premature-like ejaculatory dysfunction, which are considered normal variations of sexual performance [17]. According to the GOSS survey conducted in English-speaking male web surfers in the USA, the prevalence of PE as per ISSM definition was 6.3% [18]. The prevalence of men subjectively reporting PE on a consistent basis ('always' or 'mostly') was 14.4% [18]. Overall, our results are similar to the results of other surveys in the Western world when the same or at least very similar definition of PE is used. In our total survey population, the prevalence of PE remained at a similar level across all five age groups, as reported in other surveys [3,16]. Only 7% of men with PE in our survey had tried any drug treatment, predominantly a PDEi. In the PEPA survey [3], 16% of the men with PE used recreational drugs to address their condition. Interestingly, the GOSS survey showed that 41.3% of recreational PDEi users were diagnosed with PE using the Premature Ejaculation Diagnostic Tool [19] suggesting a possible role of PDEi in delaying ejaculation. Use of antidepressants for delaying ejaculation was reported by about 5% of the subgroup of 603 men responding to this question in GOSS [18]. Tramadol is also known to help against PE [20], however none of the participant reported on using it. Although the self-reported psychosocial distress was perceived as high, the fraction of men with PE seeking professional information about PE was low similar to previous reports [21,22]. Only 10% consulted their family doctor and/or were referred to an urologist, similar to the 9% in the PEPA survey [3]. A variety of reasons may explain this low percentage, such as men do not have a family doctor, do not know that a physician can help and that medical treatment is available, feeling ashamed of talking about PE, do not consider PE a disease as was found in our survey, or expect little or no improvement as a result of seeking treatment [3]. Physicians should be encouraged to ask men about their sexuality and in particular about sexual dysfunctions or complaints, as proactive inquiry by a physician may be the most promising approach to engaging patients into a discussion about sexual difficulties [21-23]. We observed significant differences for coexisting overweight (21% vs 30%), depression (9% vs 14%) and ED (3% vs 15%) between men without PE and men with PE. To which extent these comorbidities play a role in Acquired PE patient's vs Lifelong PE, which is strongly thought to be a neurobiological disorder, is not clear. A higher prevalence of depression or personal distress and lower quality of life was also found in men with PE in previous studies [3,24-28]. Our study has some limitations. As in clinical practice, participants were asked to estimate their IELT. Self-report and self-estimation by the patient (and partner) of ejaculatory latency is, however accepted as a valid method for determining IELT and is

recommended by the ISSM's Guidelines for the Diagnosis and Treatment of Premature Ejaculation [2]. The perception of "normal" ejaculatory latency varies when assessed either by the patient or their partner [29], which might be responsible for a bias in our study. Nevertheless, the prevalence of PE in our study is similar to most other large studies. [3,10,11] All studies reported a high level of personal distress by men with PE and their female partners. In our study, we only surveyed men, so partner´s satisfaction was evaluated by indirect reporting by the male. These responses are prone to a certain degree of subjectivity and might not be reliable. However, using our method of an anonymous online questioning is the only way to address this problem. It would be interesting to address PE from the women's perspective as PE has a direct negative influence on women's sexual experience [3,30].

Conclusion

The evidence-based ISSM definition of Lifelong PE as a 'sexual dysfunction' has decreased the reported prevalence of PE. By using a more lenient definition can explain the higher prevalence rates reported earlier. In our survey, the prevalence of PE as a 'sexual complaint' was 14.5%. As all these men suffered from the very short time to ejaculation and/or the inability to control that time, we recommend counseling for these men and, depending on severity of the psychosocial distress, also treating these men medically for PE. Physicians should initiate conversation about sexuality difficulties with their patients. This would be especially helpful for men with PE, since very few men with PE seek medical attention despite the availability of effective treatments.

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