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Prevalence of sexual problems in Portugal: Results of a population-based study using a stratified sample of men aged 18 to 70 years

Abstract

Despite the use of different methodologies, target populations, and clinical definitions of sexual problems, recent epidemiological studies have shown that the occurrence of sexual difficulties is a very common experience among men from the general population regardless of their age. The objective of this study was to present epidemiological data on the prevalence of sexual difficulties in a community sample of 650 sexually active Portuguese men, stratified by age, marital status, and educational level. Participants completed a self-reported questionnaire assessing sexual function in the previous four weeks (International Index of Erectile Function). Results showed that sexual difficulties were relatively common among this sample. Rapid ejaculation was the most frequently reported sexual difficulty (23.2%), followed by erectile difficulties (10.2%), orgasm problems (8.2%), and low desire (2.9%) in the previous four weeks. With the exception of rapid ejaculation, all categories showed age-specific prevalence rates, with sexual difficulties increasing gradually in men above the age of 45 years. Age was a significant predictor of all sexual difficulties except rapid ejaculation and lower educational levels were related to orgasm difficulties. Findings are consistent with the majority of epidemiological studies indicating a high prevalence of sexual difficulties among men in the general population and highlight the importance and the need to implement sexual health promotion programs in the target population.

Key words: Prevalence, epidemiology, sexual dysfunction, sexual problems, International Index of Erectile Function (IIEF), male sexual function, erectile dysfunction.

Introduction

As extensively demonstrated by a significant number of epidemiological studies worldwide, sexual difficulties are highly prevalent conditions among men from the general population (Christensen, Grønbaek, Osler, Pedersen, Graugaard, & Frisch, 2010; Feldman, Goldstein, Hatzichristou, Krane, & McKinlay, 1994; Fugl-Meyer & Sjögren Fugl-Meyer, 1999; Laumann et al., 2005; Laumann, Paik, & Rosen, 1999; Mercer et al., 2003; Richters, Grulich, de Visser, Smith, & Rissel, 2003). Sexual difficulties or sexual problems refer to a wide range of conditions affecting sexual response in such a way that prevents the individual or a couple from enjoying sexual activity. Clinical diagnosis of sexual dysfunction should, however, be reserved for situations where sexual problems are persistent and recurrent over time and not merely reflecting transitory or normal fluctuations in sexual function, and when they cause significant personal or interpersonal distress (*Diagnostic and Statistical Manual of Mental Disorders*; American Psychiatric Association, 2000).

Although discrepancies found in prevalence rates across studies may reflect cultural and ethnic differences among populations and variations in the terminology and use of validated instruments (Hayes, 2008), findings are suggestive of a high prevalence of sexual difficulties among men from the general population which may be negatively impacting their well-being and quality of life (Christensen et al., 2010; Fugl-Meyer & Sjögren Fugl-Meyer, 1999; Laumann et al., 1999, 2005; Lewis, Fugl-Meyer, Bosch, Fugl-Meyer, Laumann, Lizza, & Martin-Morales, 2004; Mercer et al., 2003; Richters et al., 2003; Wagner, Fugl-Meyer, & Fugl-Meyer, 2000).

In a review of a decade of epidemiological studies on sexual dysfunctions, Simons and Carey (2001) found prevalence estimates of 0-3% for both male orgasmic disorder and male hypoactive sexual desire in community samples. Erectile dysfunction and premature

ejaculation were the most frequent sexual dysfunctions experienced by men from the general population, estimated to be 0-5% and 4-5%, respectively.

Additionally, in a state-of-the-art review and guideline proposal for epidemiological studies on sexual dysfunctions, Lewis and colleagues (2004) verified that epidemiological findings suggested that 20% to 30% of adult men experienced at least one current manifest sexual dysfunction. Another well-established finding is the significant increase in the prevalence rates of sexual dysfunction among men as they age, particularly regarding erectile dysfunction. The prevalence of erectile dysfunction is estimated as relatively low below the age of 40 years (1-9%) increasing markedly from the age of 60 (20-40%), 70 and older (50-75%). As for rapid ejaculation and delayed orgasm, estimates of 9-31% and 1-8%, respectively, have been found. In this literature review, the prevalence of sexual desire disorder was almost negligible and appeared to be more frequent in men aged 60 or above (Lewis et al., 2004). Interestingly, recent studies have found low desire as the most prevalent complaint among men in the general population. In the Australian Study of Health and Relationships, Richters and colleagues (2003) found low desire as the most common sexual difficulty among the 8,517 men interviewed (24.9%). A similar finding was found in the National Survey of Sexual Attitudes and Lifestyles in Britain (Mercer et al., 2003) where 17.1% of men reported low desire during at least one month in the previous year. In both the Richters et al. and the Mercer et al. studies, rapid ejaculation was reported as the second most frequent sexual difficulty among men (23.8% and 11.7%, respectively) and erectile difficulties were experienced by 9.5% and 5.8%, respectively, of men for at least one month in the year prior to the interview. Trouble in reaching orgasm was reported by 6.3% of the Australian and 5.3% of the British men interviewed. Erectile difficulties and low desire were the most frequent sexual difficulties among men over the age of 40 (Richters et al., 2003).

Consistent with the above studies, the majority of epidemiological literature demonstrates that erectile dysfunction and rapid ejaculation constitute the most frequent sexual problems found among men in community samples. Socio-demographic factors such as age and education have also been found as important correlates of sexual problems. As men age, lack of sexual desire along with erectile and orgasmic difficulties become more prevalent due to a number of reasons (*e.g.*, physiological changes, medical factors) but education seems to have a protective effect for sexual difficulties (Feldman et al., 1994; Laumann et al., 1999, 2005).

Studies on the prevalence of sexual problems among Portuguese men have been relatively underrepresented in the literature and despite some data available, findings are still scarce and insufficient to draw conclusions about the actual prevalence of sexual problems in the general Portuguese population. Only one study designed to estimate the prevalence of erectile dysfunction in a community sample of Portuguese men has been published in the literature in recent years (Teles et al., 2008). Teles and coworkers (2008) recruited 3,548 Portuguese men aged 40 to 69 years in health care centers across Portugal who were assessed for both erectile function and the presence of risk factors for erectile dysfunction. Findings indicated prevalence rates of 48% for erectile problems in the sample. Severity indicators according to the International Index of Erectile Function scores (*IIEF*; Rosen, Riley, Wagner, Osterloh, Kirkpatrick, & Mishra, 1997) demonstrated that 35% of men reported only minor erectile complaints, 9% moderate erectile difficulties, and 4% severe levels of erectile dysfunction. Additionally, in line with similar studies, prevalence rates and erectile dysfunction severity were both found to increase with age (Teles et al., 2008).

These findings demonstrated that erectile dysfunction was also a concern and part of everyday life for a significant number of Portuguese men. However, the extent of men affected by overall sexual problems apart from erectile dysfunction has not been

systematically addressed and prevalence rates at different age groups have not yet been established. The current study was designed to address this topic and to estimate the prevalence and the main socio-demographic predictors of overall sexual difficulties in a community sample of sexually active Portuguese men. Prevalence rates and predictors of sexual problems were expected to accompany trends found in overall international epidemiological studies. To obtain reliable data on the incidence of overall sexual problems in the target population, a large sample of Portuguese men aged 18 to 70 years was collected using quota sampling in order to match socio-demographic characteristics of the Portuguese male population.

Method

Definition of sexual difficulties

The need for using consistent and universally acceptable definitions of sexual problems is not only a requirement but an imperative methodological condition in epidemiological studies. In the current study, a wide range of sexual function-related problems were measured in sexually active Portuguese men and frequency estimates were used as severity indicators of sexual difficulties. Erectile difficulties referred to the inability of getting or maintaining an erection during sexual interaction with a partner. Rapid ejaculation concerned situations where men ejaculated too quickly during sexual activity with a partner and before wishing it. In contrast, orgasm difficulties referred to situations where men had trouble in reaching orgasm during sexual activity with a partner and low sexual desire was assessed as the lack of interest in having sex.

Prevalence rates of the different sexual difficulties categories were estimated taking into consideration the frequency criteria proposed by Segraves (2010a, 2010b, 2010c) in his recent considerations for diagnostic criteria for sexual dysfunctions for the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. The frequency estimates

were therefore used as severity indicators of sexual difficulties. Participants who reported experiencing any sexual difficulties in 75% or more (*most times/much more than half the times* and *almost always/always*) of sexual occasions (*i.e.*, any situation involving sexual contact with a partner) were distinguished from those reporting the occurrence of sexual difficulties in at least 50% of sexual occasions (*sometimes/about half the times*). The former were considered to have moderate to severe sexual difficulty and the latter to experience mild and transitory sexual difficulties (*e.g.*, not interested in sex for the last weeks). Although the method used was not sufficient for assigning a clinical diagnosis of sexual dysfunction (*e.g.*, the duration criterion was not met), it constitutes an important indicator of the prevalence and severity of sexual difficulties in the general population (Lewis et al., 2004).

Participants

The current study involved the participation of 650 sexually active men from the general Portuguese population aged 18 to 70 years. Participants were selected using quota methods in order to match the Portuguese male population characteristics regarding age, marital status, and educational level. Using data on population distribution from the Portuguese National Statistics Institute (INE) in the last Census (2001), five levels of stratification for age (18 to 24, 25 to 34, 35 to 44, 45 to 54, and above 55 years), three for marital status (single, married/cohabiting, and divorced/widowed), and three for educational level (0 to 9, 10 to 12, and 13 or more years of education) were included. The majority of the participants reported heterosexual sexual orientation (98%) and eligible men (age between 18 and 70 years and sexually active with a partner for the last four weeks regardless of sexual orientation) were selected to fulfill the previously defined quotas. The demographic characteristics of the final sample are shown in Table 1.

INSERT TABLE 1 ABOUT HERE

Measures

Demographics Questionnaire

A demographic questionnaire was completed in order to collect information regarding participants' age, educational level, relationship status, sexual orientation, and medical history.

The International Index of Erectile Function (IIEF)

The IIEF (Rosen et al., 1997) is a brief, multidimensional, and self-administered questionnaire developed to assess several dimensions of male sexual functioning. The scale comprises 15 items assessing five central domains of male sexual function for the last four weeks: erectile function, orgasmic function, sexual desire, intercourse satisfaction, and overall satisfaction. Given the well demonstrated psychometric validity and reliability of the scale (Cronbach's *alpha* values of .73 and higher and test-retest from $r = .64$ to $r = .84$), the IIEF became a standard instrument for assessing male sexual function in both clinical and research settings worldwide (Cappelleri & Rosen, 2005; Rosen, Cappelleri, & Gendrano, 2002). The psychometric study of the Portuguese version of the IIEF has also demonstrated good internal consistency for the five subscales, with Cronbach's *alpha* values ranging from .72 to .86 (Quinta Gomes & Nobre, 2012). Test-retest reliability analysis in two consecutive administrations of the questionnaire with a 2-week interval supported the stability of subscales over time (ranging from $r = .69$ to $r = .90$), except for erectile function and sexual desire subscales ($r = 0.55$ and $r = 0.14$, respectively). Discriminant validity also confirmed the ability of the Portuguese version to differentiate men with erectile dysfunction from matched controls (Quinta Gomes & Nobre, 2012). Coefficient alpha for erectile function, orgasmic function, and sexual desire in the current study were respectively .91, .81, and .79.

Procedures

Participants were recruited between 2008 and 2010 by research students in different regions across Portugal (*e.g.*, educational institutions, cultural centers) in order to fulfill the quotas and using nonrandom methods. Participants were approached individually by researchers and invited to participate in a study about Men's Sexual Health. Two questionnaires were completed autonomously by participants after information regarding anonymity and confidentiality issues was provided and a consent form was signed. The questionnaires were delivered directly to the researchers or returned by mail using pre-stamped envelopes. The study was approved by the institutional review board of Trás-os-Montes e Alto Douro University and the percentage of participants that completed and returned the questionnaires was 76%. Participants were not paid for their participation.

Statistical Analysis

Participants' responses to specific questions of the IIEF (Rosen et al., 1997) were examined. Frequency analyses were computed for each sexual problem category (erectile difficulties, orgasm difficulties, and low sexual desire), assessed by the following questions, respectively: "*How often were you able to get an erection during sexual activity?*", "*When you had sexual stimulation or intercourse, how often did you ejaculate?*", and "*How often have you felt sexual desire?*". Rapid ejaculation frequency was assessed by an additional item in the questionnaire, "*During intercourse, how often did you ejaculate unintentionally before or shortly after penetration?*". Estimates of the prevalence of sexual difficulties were calculated by dividing the total number of self-reports for each category by the total number of respondents and 95% confidence intervals (CI) were estimated.

As mentioned earlier, participants who reported experiencing sexual difficulties *most times/much more than half the times* and *almost always/always* were considered to have moderate to severe sexual difficulties and those who reported additional sexual difficulties

sometimes/about half the times were considered to have transitory (mild) sexual difficulties (response to items 1, 9, and 11 of the IIEF were inversely scored).

It is important to emphasize that the statistical method used in this study was not intended to assign clinical diagnoses of sexual dysfunction to participants or replace the appropriate methodologies for that purpose (*e.g.*, clinical interviews, medical examination, and psychological assessments). Statistical methods serve the purpose of obtaining estimates for the occurrence of a given phenomenon in a specific population and in this study this assumption was followed while estimating the prevalence and severity of sexual difficulties in the general Portuguese population.

Binary logistic regression was performed to investigate possible socio-demographic predictors of sexual difficulties. Only participants reporting moderate to severe sexual difficulties were selected for this analysis. Logistic regression was performed for each sexual category, and adjusted odds ratios (ORs) and 95% CI were calculated for each independent variable in the model (age, length of current relationship, educational level, and marital status).

Results

Prevalence and severity of sexual difficulties

As illustrated by Table 2, a significant percentage of sexually active men in our sample presented difficulties in several areas of sexual functioning. Rapid ejaculation was the most common sexual problem reported by men in our sample, with 23% of men (95% CI, 19.7-26.4) indicating ejaculating rapidly in all sexual situations or in much more than half the situations involving sexual contact with a partner. Difficulties in controlling ejaculation in at least half of the sexual situations were reported by approximately 46% of men (95% CI, 41.4-49.1). Erectile problems were the second most frequent difficulty with 10% of men (95% CI, 7.9-12.7) reporting trouble in reaching or maintaining erections in all sexual events involving

sexual contact with a partner or in much more than half of those situations. About 21% of men in the sample (95% CI, 18.0-24.4) presented erection difficulties in at least half the situations of sexual intimacy with a partner. Difficulties in reaching orgasm in all sexual occasions or in much more than half the situations of sexual intimacy with a partner were reported by 8% of men (95% CI, 6.2-10.5) and approximately 18% (95% CI, 14.7-20.7) indicated having trouble reaching orgasm in at least of half of sexual situations. Finally, 3% of men (95% CI, 1.8-4.5) reported low sexual desire in much more than half of the time in the past four weeks and 17% (95% CI, 14.4-20.4) reported having low sexual desire in at least half of the time (see Table 2).

INSERT TABLE 2 ABOUT HERE

Age-specific prevalence of sexual difficulties

As shown in Figure 1, with the exception of rapid ejaculation for which prevalence remained relatively high in overall age groups, all categories showed age-specific prevalence with sexual difficulties increasing gradually in men above the age of 45 years. Moreover, ejaculating rapidly constituted the most prevalent sexual difficulty among younger men and erectile problems showed slightly higher prevalence in men above the age of 45.

The prevalence of erectile difficulties in men below 45 years was relatively low (1% to 6%), doubling in men aged 45 to 54 years (12%), and reaching the highest prevalence in men above 55 years (21%). When considering men experiencing erection difficulties in at least half the situations involving sexual contact with a partner, the prevalence rates found were significantly higher (7% to 12% in men aged 18 to 44 years and 23% to 39% in men above 45 years).

Difficulties in reaching orgasm were reported by 8% of men between 18 to 24 years and men between 45 to 54 years, showing the highest prevalence in men aged above 55 years (14%). The frequency of trouble reaching orgasm was frequently reported by men in at least half of the sexual situations (9% to 17% in men below the age of 55 years and 30% in men above 55 years).

Low sexual desire constituted a relatively rare sexual difficulty among men below the age of 55 (maximum 2% prevalence), increasing considerably in men aged above 55 years (7%). Nevertheless, a significant proportion of men in all ages reported low desire in at least half of the sexual occasions; 4% to 11% of men below 45 years, increasing to 17% in men between 45 to 54 years and, more remarkably, to 34% in men aged above 55 years.

Finally, ejaculating rapidly during sexual activity with a partner was the most frequently reported sexual problem among men. Prevalence rates of rapid ejaculation showed little variation with age. However, the highest prevalence was found among younger men (28% in men aged 25 to 34 years). Difficulties in controlling ejaculation in at least half of the sexual situations with a partner were reported by a large proportion of men (40% to 49%) in all age categories.

INSERT FIGURE 1 ABOUT HERE

Sexual difficulties comorbidity

Significant comorbidity among sexual problems was found in this sample. Erectile difficulties were the most frequent additional sexual complaint found among men and were present in 63.2% of men experiencing low sexual desire, in 45.3% of men reporting orgasm difficulties, and in 14.1% of men complaining of rapid ejaculation. Orgasm difficulty was the second most common additional sexual complaint and was found among 63.2% of men

presenting with low sexual desire and 36.4% with erectile difficulties. Erectile and orgasm difficulties were frequently reported by men experiencing low sexual desire (63.2% for each sexual problem). Rapid ejaculation was also present in 31.8% of men presenting erectile difficulties and about 21% of men with low sexual desire. Men with rapid ejaculation presented the lowest comorbidity rates of sexual problems (see Table 3).

INSERT TABLE 3 ABOUT HERE

Socio-demographic predictors of sexual difficulties

Binary logistic regression was performed to investigate the impact of socio-demographic variables on sexual functioning. The model contained four independent variables (age, length of current relationship, educational level, and marital status) and each category of sexual difficulty was used as dependent variables. As illustrated by Table 4, controlling for all other factors in the model, age was the strongest predictor of all sexual difficulties except for rapid ejaculation (erectile difficulties, OR = 1.07, 95% CI: 1.04-1.09; orgasm difficulties, OR = 1.05, 95% CI: 1.03-1.08; low sexual desire, OR = 1.07, 95% CI: 1.02-1.11). Educational level was also a significant predictor of orgasm difficulties with the less literate reporting significantly more orgasm difficulties compared to higher educated (0 to 9 years of school attendance, OR = 14.71, 95% CI: 1.94-111.37; 10 to 12 years of school attendance, OR = 10.35, 95% CI: 1.64-92.10).

INSERT TABLE 4 ABOUT HERE

Discussion

Sexual problems are highly prevalent conditions among men from the general population which can have negative repercussions on men's overall well-being and quality of life, and hamper a couples experience of a healthy and pleasurable sex life (Christensen et al., 2010; Fugl-Meyer & Sjögren Fugl-Meyer, 1999; Laumann et al., 1999; Mercer et al., 2003; Richters et al., 2003; Wagner et al., 2000). Epidemiological studies have been conducted worldwide to determine the prevalence rates of sexual problems in community samples but there is still little data on the presence and severity of sexual difficulties among Portuguese men. The present study was designed to provide an estimate of the current presence and severity of sexual difficulties in different age groups in men from the Portuguese population and to determine potential socio-demographic risk factors for sexual difficulties.

In line with the majority of the epidemiological studies, age-specific prevalence of sexual difficulties among men was demonstrated (Christensen et al., 2010; Feldman et al., 1994; Laumann et al., 1999, 2005; Lewis et al., 2004; Mercer et al., 2003; Richters et al., 2003; Teles et al., 2008). With the exception of rapid ejaculation, which constituted the most common sexual difficulty among young men, the majority of male sexual problems increased gradually above the age of 45, with erectile difficulties leading the estimates. The prevalence rates of erectile problems in our sample was 10% but when considering the experience of actual mild erectile difficulties, percentages increased significantly to more than the double (21%). Additionally, along with erectile difficulties, low sexual desire and difficulties in reaching orgasm also increased considerably as men aged, affecting 3% and 8%, respectively, of men in the sample (or 17% and 18% if considering low desire and difficulties reaching orgasm in at least half of the times in the last four weeks). In our study, age was also strongly predictive of all sexual difficulties except for rapid ejaculation, with older men being more affected by lack of desire, erectile, and orgasmic difficulties. Higher educational levels also predicted better orgasmic responses. As reported in previous studies (Feldman et al., 1994;

Laumann et al., 1999, 2005; Rosen, 2000), variations on erectile capability, sexual desire and orgasm over time may reflect physiological changes and medical comorbidities associated with the aging process in men (*e.g.*, diabetes mellitus, cardiovascular condition, use of medication) and may be amplified by the presence of relationship difficulties (conflicts or loss of physical attraction to the partner) affecting men's sex life (Rosen, 2000).

Previous findings have identified rapid ejaculation as the most frequent sexual complaint in men from the general population (Dunn, Croft, & Hackett, 1998; Lewis et al., 2004; Rosen, 2000; Ventegodt, 1998). Our findings are in line with the literature while indicating rapid ejaculation as the most frequent sexual condition among Portuguese men, regardless of age. Approximately 23% of men in our sample reported ejaculating rapidly during all sexual occasions with a partner and the prevalence rates doubled when considering men reporting ejaculatory difficulties in at least half of those sexual occasions (46%). The high prevalence rates observed in our sample for self-reported rapid ejaculation may well be overestimated. These may simply be reflecting men's high expectations about the ejaculatory latency time, or what is considered to be an adequate ejaculatory latency during intercourse for sexually satisfying a woman, instead of a clinical condition *per se*. This is consistent with the cognitive concept of dysfunctional sexual beliefs in the cognitive models proposed for sexual dysfunctions (Nobre, 2010) and also with empirical data on common erroneous sexual beliefs typically held by Portuguese men (Nobre & Pinto-Gouveia, 2006).

Sexual beliefs result from learning processes and life experiences and define the way people assign meaning to sexual events. There is a significant amount of data demonstrating the existence of a set of erroneous sexual beliefs underlying male and female sexual function in both sexually functional and dysfunctional men (Nobre & Pinto-Gouveia, 2006; Wincze & Barlow, 1997). Recent findings using Portuguese samples have shown that common erroneous sexual beliefs typically held by men refer to an excessive emphasis on sexual

performance and misconceptions about women's sexual satisfaction (e.g., “a real man must wait the necessary amount of time to sexually satisfy a woman”, “penile erection is essential for a woman's sexual satisfaction”) (Nobre & Pinto-Gouveia, 2006). Even though the presence of a specific sexual belief does not necessarily lead to the development of sexual dysfunction, it certainly adversely affects male sexual functioning and may work as an important vulnerability factor for sexual problems.

The high comorbidity among sexual problems found in this study is in line with previous studies (Corona et al., 2004; Lue et al., 2004). Erectile difficulties were the most frequent additional sexual complaints found in men experiencing low sexual desire and orgasm difficulties, and rapid ejaculation was present in almost one third of men complaining about erectile difficulties. The high comorbidity found among sexual difficulties suggests a certain degree of overlap between sexual difficulties and is consistent with recent studies proposing a different model for male sexual response in men experiencing sexual difficulties (Carvalho, Vieira, & Nobre, 2011).

In a study on latent structures of male sexual functioning conducted on 1,558 Portuguese men, Carvalho and colleagues (2011) demonstrated that a two-factor model comprising a general sexual function (a composite structure including sexual desire, erectile function, and orgasmic function), and an independent dimension of rapid ejaculation constituted a better solution to male sexual response in men experiencing sexual difficulties and an alternative to the traditional models of sexual response. The independence shown by rapid ejaculation in this study may reflect cultural influences associated with the need of ejaculatory control, as mentioned earlier. Taken altogether, these findings may work as important evidence for more refined conceptualizations of male sexual functioning, be of great interest for the upcoming editions of the *International Classification of Diseases* (World

Health Organization) and the *DSM* (APA), and offer new directions for assessment and intervention on male sexual problem (Carvalho et al., 2011).

Another interesting finding in this study concerns the significant number of generalized sexual complaints reported by men in their 20's, compared to other men under 50. This finding, however, was not totally unexpected. Early adulthood is a period characterized by sexual experimentation, often associated with the existence of multiple sexual partners with different preferences regarding sexual practices. This is also a time where young men are testing and developing their sexual and affective skills while having, simultaneously, several other academic and social anxiety-provoking demands. In such a demanding context, transient disturbance in sexual function is very likely to occur. In fact, the main issue is not if or why young men are experiencing transitory sexual difficulties (because they are expected to occur at some point), but how they are coping with them as they arise. Research has shown that sexually healthy young men are using recreational drugs (alcohol, cannabis, cocaine, ecstasy) specifically for sexual enhancement purposes, engaging in high-risk sexual behavior and seriously risk compromising their future sex lives (Castilla, Barrio, Belza, & Fuente, 1999; Donovan & McEwan, 1995; McElrath, 2005; Yang & Donatucci, 2006). Additionally, recreational use of phosphodiesterase type 5 (PDE5) inhibitors, often mixed with alcohol or other substances, has also become popular among young and sexually healthy men as a sexual enhancement aid (Korkes, Costa-Matos, Gasperini, Reginato, & Perez, 2008).

These concerning findings suggest that the early 20's, a period where important skills are acquired and consolidated, may be considered a high risk phase for develop sexual risk behaviors and for experiencing sexual problems. Findings should reinforce the importance of implementing intervention programs aimed at the prevention of sexual problems and risk behaviors along with the promotion of sexual health in younger populations. Sexual

education programs held in Portugal have evolved remarkably in recent years but are still mainly focused on contraception use and prevention of sexually transmitted infections. Although current programs have been proven of great value in raising youth awareness for such topics, we hope that they can be expanded in the future and address other equally important sexual health concerns (*e.g.*, sexual performance concerns, body concerns) that help young people developing an enjoyable but responsible sexuality. Moreover, the high prevalence of sexual difficulties found among men in the general population, regardless of age, suggests that programs aimed at promoting sexual health should be implemented in the general population and be accessible to all men.

Limitations of the present study should be acknowledged. In order to ensure sample power, a large and diverse community sample reproducing the strata of the Portuguese population was constituted. The high response observed rates provide considerable confidence in our findings but the constraints of not using random sampling methods are recognized (*e.g.*, bias sampling, threat to external validity). Another important issue concerns the fact that the initial sample was larger but a number of men were excluded from the study for not meeting the inclusion criterion of being sexually active with a partner for the last four weeks. We have no information about why men were not sexually active during this period. Among the possible explanations, we should consider the possibility of some of these men avoiding sexual activity with a partner as a strategy to cope with present sexual difficulties. If this is the case, estimates of sexual difficulties reported in this study might be somewhat underestimated compared to its occurrence in the general population.

Another important limitation of this study concerns the potential self-reported biases of current sexual function. The IIEF is a standard instrument for assessing male sexual function (Cappelleri & Rosen, 2005; Rosen, Cappelleri, & Gendrano, 2002) but this assessment is ultimately made by the individual himself. Therefore, self-biases on sexual

function should be expected to some extent as in self-reported assessments the individual as no other point of comparison besides his own sexual function pattern and idiosyncratic sexual beliefs may come into play. Finally, the lack of information regarding sexual distress among men reporting sexual difficulties is also recognized. The psychological and interpersonal impact of sexual difficulties is an important aspect when assessing sexual function and a measure of sexually-related distress could have been included in this study (Hayes, 2008).

In conclusion, a wide range of sexual problems are highly prevalent among sexually active men from the general population. Although there is no information in the present study whether men experience such sexual difficulties with distress or as a major problem in their sex lives with a partner, the well-known negative impact of these conditions on men's overall well-being and quality of life has been consistently demonstrated and more clinical attention in the management of this health problem has been advocated. Still, a significant number of men do not seek specific treatment for their sexual difficulties and a large proportion of men continue to have their conditions undiagnosed and untreated (Najman, Dunne, Boyle, Cook, & Purdie, 2003). Health professionals can play an important role in helping patients overcome reluctance and embarrassment when addressing questions concerning their sexuality and have a crucial role in regularly screening for sexual problems in their clinical practice.

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Figure 1

Age-specific prevalence and severity of sexual difficulties in men from the Portuguese community sample (N = 650).

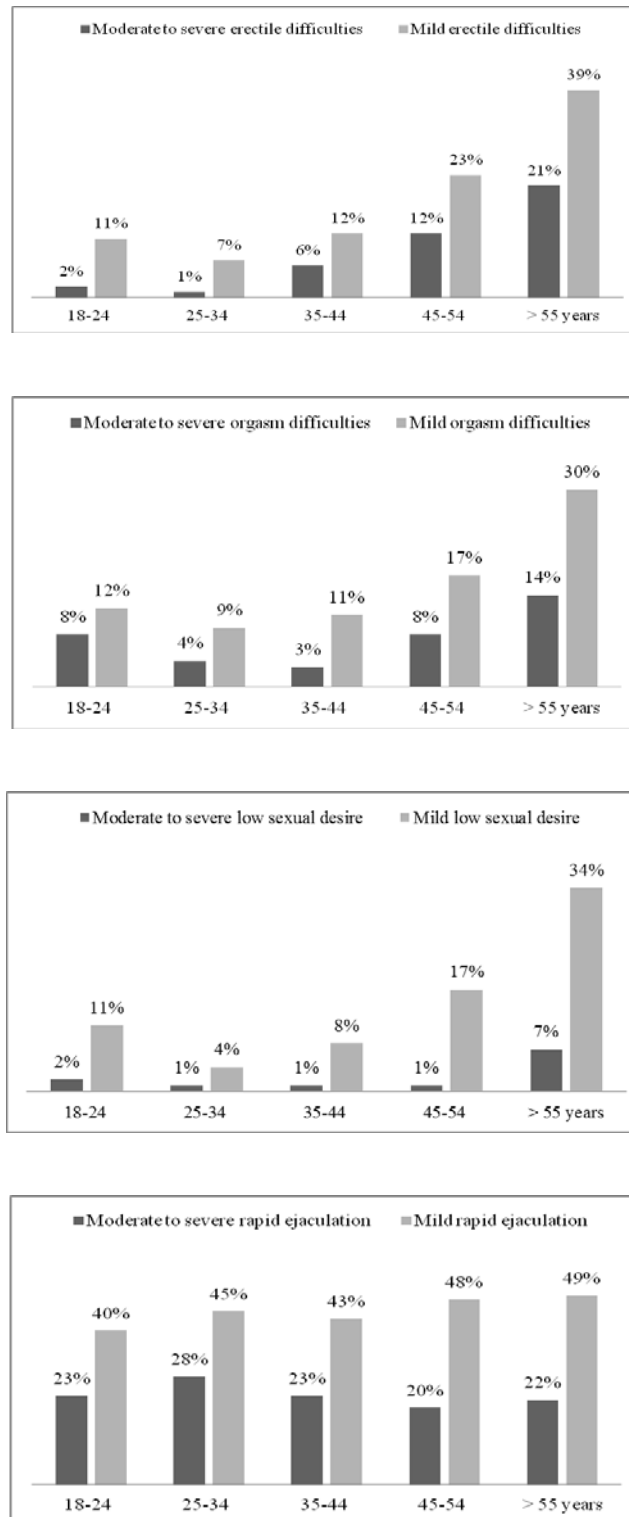


Table 1

Demographic characteristics of men from the Portuguese community (N = 650).

	N (%)
Age (in years)	
18-24	93 (14.3)
25-34	123 (18.9)
35-44	120 (18.5)
45-54	111 (17.1)
> 55	203 (31.2)
Marital status	
Single	152 (23.4)
Married/Cohabiting	443 (68.4)
Divorced/Widowed	53 (8.3)
Educational Level	
0-9 years	448 (68.9)
10-12 years	107 (16.5)
> 13 years	95 (14.6)

Table 2

Frequency of sexual difficulties among 650 men aged 18-70 years from the Portuguese community sample.

Sexual difficulties	Almost never/ Never	Few times/ Much less than half the time	Sometimes/ About half the time	Most times/ Much more than half the time	Almost always/ Always
	N (%)	N (%)	N (%)	N (%)	N (%)
Low sexual desire ^a	312 (48)	226 (34.8)	93 (14.3)	19 (2.9)	0 (0)
Erectile difficulties ^a	373 (57.4)	140 (21.5)	71 (10.9)	48 (7.4)	18 (2.8)
Orgasm difficulties ^a	406 (62.5)	130 (20)	61 (9.4)	37 (5.7)	16 (2.5)
Rapid ejaculation ^b	186 (28.9)	164 (25.5)	145 (22.5)	77 (12)	72 (11.2)

Note: All participants reported having sexual activity with a partner for the last four weeks.

^a Response to items 11, 1, 9, and 18 of the IIEF (inversely scored).

^b Response to an additional item about rapid ejaculation frequency.

Table 3

Comorbidity of sexual difficulties among 650 men aged 18-70 years from the Portuguese community sample.

	Comorbid sexual difficulties			
	Erectile difficulties	Orgasm difficulties	Low sexual desire	Rapid ejaculation
	N (%)	N (%)	N (%)	N (%)
Erectile difficulties	-	24 (36.4)	12 (18.2)	21 (31.8)
Orgasm difficulties	24 (45.3)	-	12 (22.6)	-
Low sexual desire	12 (63.2)	12 (63.2)	-	4 (21.1)
Rapid ejaculation	21 (14.1)	-	4 (2.7)	-

Note: Each participant may have reported more than one additional sexual difficulty.

Table 4

Odds ratios for each sexual difficulty category broken down by socio-demographic variables of 650 sexually active men from the Portuguese community sample.

	Erectile difficulties	Orgasm difficulties	Low sexual desire	Rapid ejaculation
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Age (years)	1.07 (1.04-1.09)***	1.05 (1.03-1.08)***	1.07 (1.02-1.11)**	1.00 (.98-1.01)
Length of current relationship (months)	.91 (.75-1.11)	.85 (.68-1.07)	.96 (.69-1.35)	.97 (.82-1.15)
Educational level				
0-9 years	2.30 (.94-5.64)	14.71 (1.94-111.37)**	4.98 (.62-40.41)	.73 (.44-1.22)
10-12 years	1.51 (.42-5.37)	10.35 (1.64-92.10)*	0 (0-0)	.54 (.27-1.05)
> 13 years	Referent	Referent	Referent	Referent
Marital status				
Single	Referent	Referent	Referent	Referent
Married/Cohabiting	1.02 (.34-3.01)	.40 (.16-1.02)	.29 (.06-1.46)	.61 (.36-1.02)
Divorced/Widowed	.82 (.21-3.22)	.29 (.07-1.13)	.17 (.01-2.12)	.52 (.22-1.19)

* $p < .05$, ** $p < .01$, *** $p < .001$

Note: Sexual difficulties experienced in at least 75% or more of sexual occasions involving sexual contact with a partner in the previous four weeks were included.