



Infeções Sexualmente Transmissíveis em Homens com 50 Anos ou Mais em Clínica de Doenças Sexualmente Transmissíveis de Lisboa, Portugal

Ana Sofia Borges¹, Margarida Rato², Ana Brasileiro¹, Cândida Fernandes¹, Ana Rodrigues¹

¹Dermatology and Venerology Department, Hospital Santo António dos Capuchos, Centro Hospitalar de Lisboa Central, Lisbon, Portugal

²Dermatology Department, Hospital de Santarém, Santarém, Portugal

RESUMO – Introdução: As infeções sexualmente transmissíveis (ISTs) são um problema de saúde pública a nível global. São mais frequentes em jovens do sexo masculino, no entanto verifica-se um aumento da sua prevalência em indivíduos mais velhos. Este estudo teve como objectivo principal analisar a prevalência de ISTs em homens com idade igual ou superior a 50 anos. Também foram comparadas as características demográficas e comportamentais dos doentes com diagnóstico de IST com os doentes com diagnóstico não-IST. **Métodos:** Realizámos um estudo retrospectivo que incluiu todos os homens com idade igual ou superior a 50 anos que recorreram à Consulta de ISTs do Centro Hospitalar de Lisboa Central, Portugal, entre Julho de 2015 e Dezembro de 2017. **Resultados:** Entre Julho de 2015 e Dezembro de 2017, na Consulta de ISTs foram observados 1722 indivíduos do sexo masculino, dos quais 323 (18,8%) com idade igual ou superior a 50 anos. Destes 323 homens, 137 (41,4%) tiveram o diagnóstico de IST, mais frequentemente condilomas anogenitais (32,9%), infecção genital por herpes *simplex* (19,7%) e sífilis recente (19,0%). A idade média dos doentes com IST foi de 59.9 anos e a maioria reportou um uso ocasional de preservativo (90,5%). O número de homens com sexo com homens foi significativamente superior nos doentes com IST ($p = 0,003$) em relação aos doentes com diagnóstico não-IST. Além disso, 40 (29,2%) dos doentes com IST tinham o diagnóstico prévio de infecção pelo vírus da imunodeficiência humana (VIH) e 33 (24,1%) tiveram sífilis no passado, ambos em numero significativamente superior que nos doentes com diagnóstico não-IST ($p = 0,015$ e $p = 0,001$, respectivamente). **Conclusão:** Dados atuais sobre ISTs focam-se principalmente na população jovem com escassos estudos efetuados em indivíduos mais velhos. O nosso estudo reporta um elevado número de homens com idade igual ou superior a 50 anos, permitindo uma melhor percepção desta faixa etária. Níveis elevados de ausência de protecção sexual e diagnóstico de VIH enfatizam a importância da promoção da educação sexual em indivíduos mais velhos.

PALAVRAS-CHAVE – Adulto; Doenças Sexualmente Transmissíveis; Idoso; Sexo Masculino.

Sexually Transmitted Infections in Men Aged 50 Years and Older in a Sexual Transmitted Diseases Clinic of Lisbon, Portugal

ABSTRACT – Introduction: Sexually transmitted infections (STIs) are a significant public health problem worldwide. They are more frequent in young men; however the prevalence in older individuals is increasing. The aim of this study was to assess the prevalence of STIs diagnosis in men aged 50 years and older. We also aimed to compare the demographic and behavioral characteristics of those diagnosed with STIs and those with non-STI conditions. **Methods:** We conducted a retrospective study including all men aged 50 years and older who have attended a Sexual Transmitted Diseases (STD) clinic of a central hospital in Lisbon, Portugal, between July 2015 and December 2017. **Results:** Between July 2015 and December of 2017,

Correspondência: Ana Sofia Borges
Serviço de Dermatovenerologia – Hospital Santo António dos Capuchos
Alameda S. António dos Capuchos
1169-050 – Lisboa, Portugal
Tel.: +351213136300; Fax 213562208
E-mail: a.sofia.r.borges@gmail.com
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1722 men attended the STD clinic, of which 323 (18.8%) were aged 50 years and older. Out of these 323 men, 137 (41.4%) were diagnosed with a STI, more often anogenital warts (32.9%), genital herpes simplex virus infection (19.7%) and early syphilis (19.0%). The mean age of the patients with a STI was 59.9 years and almost all (90.5%) reported an inconsistent use of a condom (90.5%). The number of men that have sex with men (MSM) was significantly higher in patients with a STI ($p = 0.003$) than those with a non-STI diagnosis. Additionally, 40 (29.2%) of these STI patients had been previously infected with the human immunodeficiency virus (HIV) and 33 (24.1%) had a past history for syphilis, which were significantly higher than in patients in patients with a non-STI diagnosis ($p = 0.015$ and $p = 0.001$, respectively). **Conclusion:** Existing data on STI has mainly focused younger population with few studies performed in older individuals. Our study reports a large number of men aged 50 years and older that allows a better understanding of this age group. High levels of unsafe sex and previous diagnosis of HIV and syphilis emphasizes the importance of sexual health promotion in older individuals.

KEYWORDS – Adult; Aged; Male; Sexually Transmitted Diseases.

INTRODUCTION

Sexually transmitted infections (STIs) are more dynamic than other diseases prevailing in the community. Their epidemiological profile tends to change along the time and with ethnographic, demographic, socioeconomic and health factors.

Although most studies about STIs have focused on young people, much has changed in the sexual behavior in other age groups, with many older people remaining sexually active into advanced age.¹ Most of them, especially men, report sexual risk behaviors with increasing levels of unsafe sex and many important sexual health problems.² However, individuals aged 50 and over are more likely to have their diagnosis of a STI later. All of these emphasize the importance of knowing more to program better sexual health interventions for older people.¹

Published data points to an increased incidence of STIs in patients aged 50 and over.³ However, there is a significant lack of epidemiological details of these infections among older people. The aim of the present study was to determine/evaluate the prevalence of STIs diagnosis in men aged 50 years and older who attended a STD clinic of a central hospital in Portugal and to compare their demographic and behavioral characteristics with those from the same age group diagnosed with non-STI conditions.

MATERIALS AND METHODS

This retrospective study included all men aged 50 years and older who presented at the STD clinic of Hospital Santo António dos Capuchos, Centro Hospitalar de Lisboa Central. STI Clinic is a walk-in sexual health clinic and no referral from another physician is needed. Patients attend the clinic because of genital symptoms, contact with infected partners, screening for STIs and follow-up of previous diagnosed STIs, mainly syphilis.

Clinical information recorded by a doctor is subsequently entered onto a database which was previously approved by the ethical committee of the hospital.

A cut-off of 50 years was chosen to allow comparison with the few published studies involving people of this age. The diagnosis of STI was made based on clinical findings and laboratory results. Clinical information was obtained

from the hospital database. The ethical committee of the hospital approved the study.

Statistical analysis was undertaken using Microsoft Excel. Differences in continuous variables between groups were tested using the independent t-test, and in categorical variables the chi-test or Fisher's exact test, as appropriate. Significance was defined for $p < 0.05$.

RESULTS

Between July 2015 and December 2017, 1722 men were admitted at the STD clinic, of which 323 men aged 50 years and older were included in our study. Of these 323 patients, over half (52.9%) were aged 50-59 years, 31.3% were aged 60-69, 10.5% were aged 70-79 and 5.3% were aged 80 and above. Regarding their sexual orientation, 88 (27.2%) reported having sex with men and 10 (3.1%) with men and women.

A total of 137 (41.4%) men aged 50 and older were diagnosed with a STI. Demographic findings comparing patients with and without a diagnosis of STI are summarized in Table 1. In both groups, the majority reported having sex with women and an inconsistent use of condom. The number of MSM in patients with a STI was significantly higher than in patients without a diagnosis of STI ($p = 0.003$) even without considering men that have sex both with men and women ($p = 0.002$). A previous diagnosis of HIV infection was also significantly higher ($p = 0.015$) as well as a past history of syphilis ($p = 0.001$) in those with a present STI diagnosis when compared to those without a STI diagnosis.

The most frequent diagnosis are summarized in Table 2. Anogenital warts (32.9%), herpes simplex virus infections (19.7%) and early syphilis (19.0%) were the most frequent STI diagnosis. In relation to the non-STI diagnosis, the most frequent were genital eczema (24.7%) and candidal balanoposthitis (9.7%). Among patients with a STI, 12 (8.8%) men were diagnosed with more than one infection. Of these, three were diagnosed with proctitis due to both *Neisseria gonorrhoeae* and *Chlamydia trachomatis*, two with urethritis due to *Chlamydia trachomatis* and proctitis due to *Mycoplasma genitalium*, two with gonococcal urethritis and pharyngitis and HSV infection, two with gonococcal urethritis and

Table 1 - Characteristics of patients aged 50 years or older attending the STI clinic who had a positive STI diagnosis (n=137) or with no STI (n=186).

	Patients with STI (n=137)	Patients without STI (n=186)	Significance
Mean age (years)	59.9	61.1	$p > 0.05$
MSM	53 (38.7%)	44 (23.7%)	$p = 0.003$
Use of condom			
No	69 (50.4%)	133 (71.5%)	$p > 0.05$
Yes, regularly	13 (9.5%)	11 (5.9%)	$p > 0.05$
Occasionally	55 (40.1%)	42 (22.6%)	$p > 0.05$
HIV infection	40 (29.2%)	32 (17.2%)	$p = 0.015$
Syphilis in the past	33 (24.1%)	19 (10.2%)	$p = 0.001$

syphilis (one early and one latent syphilis), one with gonococcal urethritis and HSV infection and the last one with gonococcal urethritis and HPV infection.

DISCUSSION

Existing data on STI has mainly focused on younger populations, however STIs in older individuals are increasing.^{3,4}

Concerns about complications and sequelae of STIs are not so relevant as in young people.⁵ However, older people have been shown to delay seeking care for anogenital

symptoms, and STI is a possible cause of significant morbidity.⁶ Additionally, at a population level, their contribution in transmission of STIs is relevant.

According to previous data, there is an increased prevalence of HIV diagnosis in older people,^{7,8} who are more likely to be diagnosed later and also have more comorbidities and worse responses to antiretroviral therapy.⁹ In our study there was no de novo HIV diagnoses but there was a statistically significant higher number of STI diagnosis ($p = 0.015$) in patients with a previous diagnosis of HIV, thus pointing to a maintained high risk behaviour of this population subset.

In our study, the percentage of men aged 50 years and older diagnosed with a STI is higher than reported previously by Bourne *et al*² and Tobin *et al*¹⁰ These authors reported a rate of 23.2% and 18% of STI, respectively, in the same sex and age group, however both studies were performed 10 years ago and the sexual behaviour probably has changed in the last decade. On the other hand, the only Portuguese study previously performed in people older than 60 years reported 63.5% of patients with a STI diagnosis.¹¹

Additionally, our study showed a significant percentage of patients with more than one STI at the same time, mostly acute bacterial infections, emphasizing a pattern of high-risk sexual behaviour in this population subset.

Based on previously published data, a large portion of older patients, especially men, reported sexual risk behaviors resulting in an increased risk for STI.^{5,10}

Although men that have sex with men are a well-known risk group for STIs in younger people,¹² information about the sexual orientation in older people is sparse. In our study, there was a statistically significant higher number of STI diagnosis in homosexual men ($p = 0,003$), emphasizing the importance to better understand the new trends in the sexual behaviours of this age group.

The main limitation of this study was its retrospective design, which restrains obtaining more detailed patient's

Table 2 - The five most common STI (n=137) and non-STI diagnosis (n=186) among patients aged ≥50 years attending Sexual Transmitted Diseases clinic

STI diagnosis	n (%)
Genital warts	45 (32,9)
Genital herpes	27 (19,7)
Early syphilis	26 (19,0)
Late syphilis	13 (9,5)
Gonococcal urethritis	13 (9,5)
Non-STI diagnosis	n (%)
Genital eczema	46 (24,7)
Candidiasis balanoposthitis	18 (9,7)
Dermatological conditions outside genital area	11 (5,9)
Lichen sclerosus	8 (4,3)
Penile squamous cell carcinoma*	8 (4,3)

* Important to refer the possible association with human papilloma virus infection

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information. However, it includes a large number of patients over 50, a minority but important group attending STD clinics. In fact, many older individuals engage in significant risk behaviors and are often diagnosed with STIs but few studies have been performed in this age group. Continuing social changes associated to lower rates of condom use highlights for need to sexual health education and STI prevention targeting this group of people.

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Proteção de pessoas e animais: Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia da Associação Médica Mundial

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