ORIGINAL RESEARCH—EPIDEMIOLOGY

Age-Related Changes in General and Sexual Health in Middle-Aged and Older Men: Results from the European Male Ageing Study (EMAS)

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DOI: 10.1111/j.1743-6109.2009.01601.x

ABSTRACT

Introduction. Limited information is available concerning the general and sexual health status of European men.
Aim. To investigate the age-related changes in general and sexual health in middle-aged and older men from different countries of the European Union.
Methods. This is a cross-sectional multicenter survey performed on a sample of 3,369 community-dwelling men aged 40–79 years old (mean 60 ± 11 years). Subjects were randomly selected from eight European centers including centers from nontransitional (Florence [Italy], Leuven [Belgium], Malmö [Sweden], Manchester [United Kingdom], Santiago de Compostela [Spain]) and transitional countries (Lodz [Poland], Szeged [Hungary], Tartu [Estonia]).
Main Outcome Measures. Different parameters were evaluated including the Beck's Depression Inventory for the quantification of depressive symptoms, the Short Form-36 Health Survey for the assessment of the quality of life (QoL), the International Prostate Symptom Score for the evaluation of lower urinary tract symptoms, and the European Male Ageing Study sexual function questionnaire for the study of sexual function.
Results. More than 50% of subjects reported the presence of one or more common morbidities. Overall, hypertension (29%), obesity (24%), and heart diseases (16%) were the most prevalent conditions. Around 30% of men reported erectile dysfunction (ED) and 6% reported severe orgasmic impairment, both of which were closely associated with age and concomitant morbidities. Only 38% of men reporting ED were concerned about it. Furthermore, concern about

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ED increased with age, peaking in the 50–59 years age band, but decreased thereafter. Men in transitional countries reported a higher prevalence of morbidities and impairment of sexual function as well as a lower QoL.
Conclusion. Sexual health declined while concomitant morbidities increased in European men as a function of age. The burden of general and sexual health is higher in transitional countries, emphasizing the need to develop more effective strategies to promote healthy aging for men in these countries. **Corona G, Lee DM, Forti G, O'Connor DB, Maggi M, O'Neill TW, Pendleton N, Bartfai G, Boonen S, Casanueva FF, Finn JD, Giwercman A, Han TS, Huhtaniemi IT, Kula K, Lean MEJ, Punab M, Silman AJ, Vanderschueren D, Wu FCW, and EMAS Study Group. Age-related changes in general and sexual health in middle-aged and older men: Results from the European Male Ageing Study (EMAS). J Sex Med 2010;7:1362–1380.**

Key Words. Aging; Male Health; Population Survey; Sexual Function; Quality of Life; Sexual Health

Introduction

In past decades, there has been a disproportionate focus on women's health, while men's health has not received similar attention. In all industrialized countries, and especially in the transitional countries of eastern Europe, men have lower life expectancy than women [1–3]. Life expectancy has been increasing in western European countries since 1950; however, for men living in eastern European (transitional) countries, life expectancy has not only remained unchanged, but a further decrease (currently about 6–7 years lower) [1–5] is predicted for 2020 [4]. Accordingly, the Disease Control Priorities Project [6] demonstrated that death rates from cardiovascular diseases (CVD) among adults aged under 60 years between 1990 and 2001 have fallen worldwide except in the low- and middle-income eastern countries of Europe and Central Asia. There is a consensus that changes in health are related to the deterioration in social and economic conditions in all European transitional countries [2,5,7,8].

Erectile dysfunction (ED) has been proposed as an indicator of male health [9–11]. Although 10% to 20% of men in the general population of many countries are said to be affected, data on the prevalence of ED in transitional countries are lacking [12]. The European Male Ageing Study (EMAS) is a multicenter, prospective study of aging in eight European centers, including three from eastern Europe.

Aim

The aim of this study is to investigate the age-related changes in general and sexual health in middle-aged and older men from different countries of the European Union.

Methods

Subjects and Study Design

Three thousand three hundred sixty-nine men aged 40–79 years (mean age 60 ± 11 years) were recruited from population registers in eight European centers (Florence [Italy], Leuven [Belgium], Lodz [Poland], Malmö [Sweden], Manchester [United Kingdom], Santiago de Compostela [Spain], Szeged [Hungary], Tartu [Estonia]). Ethical approval for the study was obtained in each of the centers in accordance with local practice and requirements. The term transitional country is often used to cover the countries of central and eastern Europe and the Former Soviet Union (http://en.wikipedia.org/wiki/Transition_economy); hence, this term will be used in the rest of the article to indicate men living in Lodz, Szeged, and Tartu.

The choice of the sampling frame was limited by the availability of specific registers within each center. Registers used included general practitioner age–sex registers (Florence, Manchester, Tartu), population or national registers (Malmö, Santiago), electoral registers (Leuven, Szeged), and a city register (Lodz). The population registers were, to the knowledge of the participating centers, those most current at the onset of the study. There were no specific exclusion criteria apart from subjects being able to provide written, informed consent. Stratified random sampling was used with the aim of recruiting equal numbers of men into each of the four age bands (40–49, 50–59, 60–69 and 70–79 years). Subjects were invited with a letter of invitation to attend a screening at a local clinic as previously described [13]. For those patients who had not replied after two attempts, a sample of them were contacted by telephone, inviting them to verbally answer a series of questions taken from the postal questionnaires ([13], see below).