

## The monograph “The epidemiology of erectile dysfunction in the Republic of Moldova”

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The author: **Ion Dumbraveanu**, MD, PhD, Associate Professor, Department of Urology and Surgical Nephrology Nicolae Testemitsanu State University of Medicine and Pharmacy, Chisinau, the Republic of Moldova

The monograph “Epidemiology of erectile dysfunction in the Republic of Moldova” is exposed on 203 pages, it contains six chapters. The content of the monograph is based on a thorough analysis of 232 bibliographic sources, mainly from abroad, more than 30% of the references being published in the last 5 years. The paper contains 53 tables and 44 figures.

Chapter I of the monograph describes the history of epidemiological studies of erectile dysfunction, the questionnaires specifically developed for this purpose and the most important investigators who studied the problem. The author presents data on the prevalence of pathology worldwide, starting with the first scientific study that remains a reference, Massachusetts Male Aging Study (MMAS), published in the US in 1994. Subsequent studies conducted over 2 decades in over 60 countries in the world have shown a prevalence of erectile dysfunction from 11 to 57%, being dependent on the socio-economic state of the investigated region. The risk factors estimated and studied in these works were diabetes mellitus, cardiovascular diseases, depression, some medications and smoking.

Chapter II of the paper describes the methodology of own research and presents the characteristics of the study group. The transversal descriptive study was conducted on a representative sample of 1,186 men aged 18-80. A questionnaire based on similar research and the requirements of scientific societies in the field of urology and sexual medicine has been used, which included questions from 4 scales and questionnaires: BSSCMV – Brief Sexual Symptom checklist: men’s version, IIEF -5 International Index of Erectile Function, MSHQ – Male Sexual Health Questionnaire, IPSS-International Prostate Symptom Score. Respondents were assigned according to their living environment, age, family status, schooling level, etc.

Chapter III shows the prevalence of erectile dysfunction in the Republic of Moldova according to self-assessment and validated questionnaires depending on age, living environment, family status, sexual relations, etc. The author shows the prevalence of erectile dysfunction of 19.4% followed by self-assessment and 47.1% following the completion of the IIFE-5 questionnaire, including 12.7% with severe form, 12.4% moderate and 22% of the mild form. The presented data place the Republic of Moldova close to the top of the countries with the obvious predominance of pathology. The author explains the difference between the two questionnaires by the fact that in the case of self-assessment, only the severe and moderate forms of erectile dysfunction were reported, the mild ones not being considered a problem. Another conclusion of the monograph should be noted, the prevalence of erectile dysfunction is about 25% higher in rural areas. At first sight, it seems a paradox considering that the rural environment according to the general opinion is considered healthier.

Chapter IV has 10 subchapters, where the author describes in detail the mechanism of erection and the influence of the principal risk factors on it. Older age is one of the most important non-modifiable risk factors for erectile dysfunction. The author assessed the erectile function of the respondents according to the IIFE-5 index, where a score greater than 21 equals a normal erectile function and less than 8 indicates a severe erectile dysfunction. The erectile function score is presented in age-dependent. Although the tendency to diminish erection is logical with age, it is worrying that in the Republic of Moldova, only 48% did not report problems with erection, men after the age of 40, and after the age of 65 the prevalence of

erectile dysfunction was greater than 80%. The author has thoroughly analyzed the literature data regarding the main risk factors blamed for erectile dysfunction, especially cardiovascular and endocrine ones, which have similar mechanisms of action on vascular endothelium. The conclusion of the studies published by this time, including the author of this monograph, is that erectile function reflects men’s health, and erectile dysfunction may be an early marker of other illnesses, such as cardiovascular, endocrine or urogenital diseases in apparently asymptomatic patients. Some authors quoted in the paper believe that a man over his 40s diagnosed with erectile dysfunction needs to be interpreted as a potential cardiac patient until proof of the opposite is demonstrated. In the author’s paper, about 75% of patients with cardiovascular pathology and 79% of patients with endocrine pathology suffer simultaneously of erectile dysfunction, and in about 50% of them, erectile dysfunction started more than 1 year before other clinical manifestations occurred.

In Chapter V, the author analyzes erectile function depending on the presence of modifiable risk factors. Thus, over 60% of people with obesity and reduced physical activity developed an erectile dysfunction, compared to 19-30% of the control group, in the absence of suspected risk factors ( $p < 0.05$ ). The attitude of respondents to smoking and the influence of smoking on erections are analyzed. It is noted that the risk of erectile dysfunction in smokers is 1.85 times higher than in non-smokers. The author continues to demonstrate that the risk of erectile dysfunction depends on the number of cigarettes smoked daily. Alcohol consumption may influence erection, a dose-effect relationship was established. No significant differences were found in the prevalence of erectile dysfunction in people who do not consume alcohol compared to people who occasionally consume. Instead, daily alcohol consumption leads to a prevalence of erectile problems in about 75% of men, and the probability of erectile dysfunction occurring is 3.69 times higher in people with daily alcohol consumption.

The last chapter, VI, is dedicated to addressability of patients with erectile dysfunction. The author mentions that, as a relatively delicate subject, in most countries, few erectile patients address medical workers. Among respondents in the Republic of Moldova, only 17% of men with erectile dysfunction performed a specialized consultation, and only 15.4% followed treatment. The fact that men with sexual problems remain alone with their problems raises some questions not only because of the social consequences but primarily of the medical ones, making it often impossible to detect early other more serious comorbidities, first of all cardiovascular.

In conclusion, the monograph “Epidemiology of erectile dysfunction in the Republic of Moldova” by Ion Dumbraveanu is a pioneering scientific work for the Republic of Moldova, reflecting the first such study conducted in our country. It is an original work with a certain scientific value and practical utility, which addresses the problems that need to be solved now and in perspective and draws new ways of development of andrology in the Republic of Moldova.

**Emil Ceban**, MD, PhD, Professor  
Chairman of the Department of Urology and Surgical Nephrology Nicolae Testemitsanu State University of Medicine and Pharmacy Chisinau, the Republic of Moldova