

## ORIGINAL RESEARCH

# Men's Health Week in Iran; the Discrepancy between Experts and the General Population for Educational Priorities

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**Abstract:** **Introduction:** With the obsolescence of the paternalistic model of the doctor-patient relationship, considering public opinion regarding healthcare policymaking seems to be of great necessity. The present study was conducted to determine the educational priorities of male urology specialists and the general male population concerning urological diseases. **Material and Methods:** In this cross-sectional survey study, 400 male urologists and 400 men from the general population were assessed. Our investigation was carried out using a seven-item questionnaire covering the most important urological conditions. Respondents gathered from all over Iran through the 22nd Congress of Iranian Urological Association (IUA) and street surveys. **Results:** The mean age of the participants was  $40.69 \pm 13.23$ . The mean age for the general population and urologists was  $35.8 \pm 13.7$  and  $45.6 \pm 10.6$  years, respectively ( $P=0.0001$ ). 56.8% of the respondents from the general population had a university degree. Overall, erectile dysfunction and sexually transmitted diseases (STDs) were the most mentioned diseases as an educational priority (40.1%). Chronic prostatitis was also the least mentioned condition as an educational priority in both groups and overall among all the participants (20.9%). A significant difference was observed between the general population and urologists in all the examined conditions ( $P<0.05$ ). **Conclusion:** This study indicated the differences among the educational priorities of the general male population and male urologists, and the necessity to make these two points of view closer and to involve the opinion of general population in decision making for men's health week educational topics.

**Keywords:** Education, General population, Men's health, Urology

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## 1. Introduction

In the last decades of the 20th century, the doctor-patient relationship was the field of many controversies and disagreements (1). With the paternalistic model making way for the informative model of the doctor-patient relationship, the emphasis on patients' opinion concerning health and their priorities became one of the most important parts of this process (1, 2). Recently, a trend has been developed toward the involvement of public opinions and priorities in healthcare policymaking (3-5). Considering the sophisticated nature of these policies, limitations in health literacy among the general population are significant issues, ahead of public en-

agement in healthcare policymaking, particularly in urology (6-8).

Urological disorders encompass a wide range of illnesses (9). These conditions could affect every individual in any stage of life (10). Many of these disorders are chronic and might severely impair the quality of life and function (11). The prevalence of urological symptoms has been reported to be as high as 59.9% in male population (12). Despite such high prevalence, urology remained one of the least known specialties in medicine (13). The limited knowledge of the public about these conditions might make a huge difference between public priorities as well as those of specialists. Nevertheless, public opinions are important and should be considered in screening, education, insurance coverage, and health service planning.

Men are more likely to engage in high-risk behaviors, such as smoking, alcohol consumption, and an unhealthy lifestyle

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and more prone to develop a wide range of disorders and morbidities. Education might be of use regarding the reduction of such behaviors. Hence, the determination of educational priorities seems to be of great importance. 15th-21st of June has been named International Men's Health Week. In Iran also, since 2007, the first week of Esfand (last month of the Iranian calendar) has been named Men's Health Week. In order to develop an education plan for men's health and shed light to the current situation and possible differences of education priorities among the public and specialists, the current study aimed to determine the educational priorities of male urology specialists and the general male population concerning urological diseases.

## 2. Material and Methods

This study was a cross-sectional survey. It included 800 respondents: 400 urologists and 400 males from the general population without any medical specialty. To the best of our knowledge, there has been no valid questionnaire available regarding healthcare workers' or the public's attitude toward urological educational priorities before this study. We carried out this research utilizing a seven-item questionnaire. This questionnaire was developed by a committee of experts in charge of national Men's health week planning. Each Item represented one of the most important urological conditions which were the center of attention in previous years in Iran (sexually transmitted disease (STD), benign prostatic hyperplasia (BPH), prostate cancer, urolithiasis, chronic prostatitis/chronic pelvic pain syndrome (CPPS), infertility, and erectile dysfunction). The respondent had to mark at least one out of the seven diseases as an answer to the following question: "what is the most prior subject for education on the national men's health week?" Each respondent could mark one to three items as a probable priority for education. Urologist respondents were recruited from the 22nd Congress of Iranian Urological Association (IUA) with participants from all over the country. The respondents from general population were recruited through a street survey by trained medical students in Tehran, the capital city of Iran, and other major cities in the center, north, south, west and east of the country (Kerman, Babol, Shiraz, Hamedan and Mashhad, respectively). The age and educational level of the respondents were also recorded. Subsequently, the recorded data were inserted into SPSS 27.0 (Statistical Package for the Social Sciences Version 27.0) software and analyzed. The frequency of each response reported and the differences between the groups were assessed employing the chi-square test. The value of significance was considered to be less than 0.05.

## 3. Results

The mean age of the participants in this work was  $40.69 \pm 13.23$  years. The mean age of the general population and urologists was  $35.8 \pm 13.7$  and  $45.6 \pm 10.6$ , respectively ( $P=0.0001$ ). 42.1% of the participants in the general population were under 30 years old (Table 1). 56.8% of the general population respondents in this study had a university degree (Table 2). Table 3 summarizes the prevalence of the educational priorities among urologists and the general population. In general, erectile dysfunction and STDs were the most mentioned diseases as an educational priority (Table 3). 49.3% of the urologists considered erectile dysfunction as an educational priority whereas 31% of the general population mentioned it as a priority ( $P=0.0001$ ). STDs were an educational priority among 45.3% of urologists while 35% of the general population mentioned it as a priority ( $P=0.003$ ). Urolithiasis was an educational priority for 40% of the specialists and 26.8% of the general population ( $P=0.0001$ ). 37.3% of urologist participants and 29.8% of the general population mentioned prostate cancer as a priority ( $P=0.025$ ). 37.3% of urologists also prioritized infertility while 17.8% of the general population considered infertility an educational priority ( $P=0.0001$ ). BPH was taken into account as an educational priority by 34.5% of urology specialists and 23.0% of the general population ( $P=0.0001$ ). Chronic prostatitis was considered an educational priority among 30.5% of urologists and 11.3% of the general population ( $P=0.0001$ ).

## 4. Discussion

In this study, we surveyed the educational priorities of male urology specialists and the general male population. We found that there is a significant difference in the educational priorities between specialists and the general population. The number of urologists who mentioned STDs, BPH, urolithiasis, chronic prostatitis, Infertility and erectile dysfunction as a priority was higher than general population. This observation calls for a comprehensive education addressing urological conditions to enhance public awareness regarding these conditions. Moreover, it could be an opportunity for specialists to consider the public's opinion and to meet their needs by considering these opinions in policy-making and health system planning.

According to Basiri et al., renal calculus has inflicted the highest burden on the health system among all the urologic conditions (9). In the mentioned study, renal calculus was reported to be followed by acute cystitis, chronic prostatitis, benign prostatic hyperplasia, male infertility, and adult polycystic kidney disease. Renal calculus was the third most mentioned condition among urologists and the fourth among the general population in our study. Meanwhile, STD was the condition considered as a priority among most of the general

**Table 1:** The distribution of general participants in the age groups among different groups.

Age group	Urologist	General population
Less than 30 years	—	168 (42.1%)
30-40 years	158 (39.5%)	120 (30.1%)
41-50 years	124 (31.0%)	42 (10.5%)
51-60 years	65 (16.3%)	46 (11.5%)
More than 60 years	53 (13.3%)	23 (5.8%)

**Table 2:** The distribution of general participants in educational levels.

Educational level	Frequency	Percent
Illiterate and undergraduate	37	11.5%
Diploma	99	30.7%
University degree	187	57.8%

male population whereas urologists mostly mentioned erectile dysfunction.

The prevalence of urolithiasis is on the increase (14). Certain researches link the epidemiological changes in urolithiasis to modern lifestyle (15). Environmental factors, obesity for instance, might influence stone disease development (16, 17). Education and raise of social awareness could be a useful approach to this engendered condition.

STDs are believed to be a worldwide issue. The sexual revolution has brought the world freedom of sex and more sexual partners. It also brought more STDs. While this has been a major problem in the USA, Canada, and Europe since the 1960s (18-20), STD rise has emerged in Iran in the recent decades (21). There is also an increasing trend in Iran, which is more severe in people aged 20-29 (22). Most of the respondents of male general people in this study were under 30 and in the age of sexual activity. This observation might explain their concern with STDs.

The fact that most urologists considered erectile dysfunction as a priority needs further investigation. In a study in Denmark, 17.8% of men were observed to have experienced erectile dysfunction in the past 6 months (12). Accordingly, it was reported that erectile dysfunction is the second most prevalent urological symptom among men (12). Erectile dysfunction adversely affects mental health and quality of life and might also affect self-esteem and trigger marital tensions (23, 24). This high prevalence of erectile dysfunction as an educational priority among urologists might be due to the help-seeking behaviors of patients affected by erectile dysfunction. Reports have suggested that most men with erectile dysfunction do not seek treatment and the main reason for not seeking treatment is ignorance or misinformation (25). Surprisingly, even in developed countries, a large portion of the male population are unaware or uncertain of the availability of medical treatments for erectile dysfunction (25).

The prevalence of most urologic conditions grows higher with age (9, 11). BPH is one of these conditions. In this study, a low percentage of specialists and the general pop-

ulation considered BPH as a priority for education. Reports have shown a high burden of BPH all over the world (9, 10). BPH might affect marriage and quality of life. Men with BPH might withdraw from sexual life and physical intimacy (26). Most of BPH diagnosis is made through patient symptom reports rather than screening or routine examination (26). Despite its high prevalence and morbidity, men hesitate to seek treatment for BPH (26, 27). In certain cultures, BPH symptoms are known to be a normal aging process (27). This might result in delayed help-seeking. Such observations indicate the need of general education about BPH, its symptoms, and its consequences.

Prostate cancer is the second cause of cancer-related death worldwide, which is among the top three visceral cancers in Iran (28, 29). Prostate cancer was the fourth answer for educational priority in this study among the urologists and the fifth among the general population. Its incidence is relatively low in Iran and its mortality rate is decreasing (30, 31). However, some of the researches performed on male practice toward screening of prostate cancer demonstrated poor results (32-35). Participation in prostate cancer screening is associated with the patient's knowledge and attitude (32). A study on the Iranian population illustrated that an educational program can positively affect prostate cancer screening behaviors of individuals (36).

The prevalence of infertile couples in Iran has been estimated to be 10-17.3% (37, 38). 29.1%-34.0% of these infertilities seems to be due to male-factors. Male infertility tends to inflict a high burden in Iran (9). In spite of such worrisome figures, infertility was the fifth prevalent overall educational priority in this study. The most significant difference between the public and specialists' opinion was also observed in this matter. Only 17.8% of the general population, who participated in this study, prioritized infertility for education. Since 1983, the fertility rate in Iran has reduced substantially (39). Population growth rate declined from 3.1% in 1989 to 1.6% in 2000 (40). The low concern with infertility in our study might be due to low childbearing intention in new generations. Yet



**Table 3:** The prevalence of priorities among different groups.

Disease	Urologist	General population	Total	P-Value
Erectile Dysfunction	197 (49.3%)	124 (31%)	321 (40.1%)	0.0001
STDs1	181 (45.3%)	92 (35.0%)	230 (40.1%)	0.0001
Urolithiasis	160 (40.0%)	107 (26.8%)	267 (33.4%)	0.0001
Prostate cancer	149 (37.3%)	119 (29.8%)	268 (33.5%)	0.025
Infertility	149 (37.2%)	71 (17.8%)	220 (27.5%)	0.0001
BPH2	138 (34.5%)	92 (23.0%)	230 (28.7)	0.003
Chronic Prostatitis	122 (30.5%)	45 (11.3%)	167 (20.9%)	0.0001

1. STD: sexual Transmitted diseases.

2. BPH: benign prostate hyperplasia.

it is also possible that the exact extent of infertility problem would not be perceived by nor public neither specialists.

Despite having the third-highest burden among urological conditions in Iran, the smallest portion of our respondents considered chronic prostatitis a priority for education. This was observed to be equal among specialists and the general population. Chronic prostatitis has been a source of confusion for physicians and patients (41). Lack of uniformity in diagnosis and treatment have been reported in several countries (42). This condition is worse in Iran, with some of the diagnostic tools not validated until recently (43). The development of chronic prostatitis is associated with several risk factors and etiologies, yet all remained unconfirmed hypotheses (44). Lack of knowledge and effective diagnostic and treatment modalities might be one of the contributing factors to undermining this condition as an educational priority.

## 5. Limitations

The small sample size of the current study was a serious limitation. 400 urologists responded to our survey, which is only 44% of active urologists in Iran. We also failed to attain a well-distributed age range in the general male population or to match the age between the two study groups. Most of the respondents in the general male population herein were under 30, while an older study population might have answered the questions differently. The education status of the general population respondents might also make a significant difference in our results since we wanted to compare a group of well-educated doctors with the general population, therefore we were unable to match the education level between two groups of this study, which limited this study in some aspects.

## 6. Conclusion

This study revealed the differences among the educational priorities of the general male population and male urologists in the assessed urological conditions. We also observed a uniform higher prevalence for all conditions as an educational priority among urologist specialists. In order to reach a collective agreement between the public and specialists re-

garding health education, a comprehensive approach should be introduced in order to minimize this gap.

## 7. Appendix

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None.

### 7.2. Author contribution

All the authors have the same contribution.

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None.

### 7.4. Conflict of interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

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