



Men's Health: What Should We Know?

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The publication of several studies on health disparities between men and women in medically advanced countries such as the USA and UK around the 2000s reflected an increasing interest in this topic among medical scientists. Metabolic diseases, such as obesity and diabetes, were rapidly increasing worldwide at this point, and an urologist had called attention to male health in this context by establishing a relationship between metabolic and urological diseases. Subsequent developments led to the expansion of urology as a specialty, and providing many opportunities for urologists to contribute to treating more general health problems. Urologists must improve male health by implementing appropriate early therapies, understanding the wide range of diseases related to male health, and encouraging patients to adopt preventative methods such as lifestyle changes, dietary improvement, and regular checkups.

GENDER-BASED MEDICINE

Gender-based medicine has been of interest to the medical community since the 1990s, with a particular interest in health disparities between males and females. The USA founded a national research institute for female health in 1990 and the Food and Drug Administration established a department of female health. As a result, quantitative and

qualitative developments in female health have since progressed, and female health now plays a primary role in research. In addition, the foundation of female health centers allowed comprehensive and systematic medical services to be offered, thereby making a significant contribution to the improvement of female health. However, similar research programs and initiatives to improve male health were only initiated after 2000, and although research has revealed health disparities between males and females, the impact of these initiatives has been insignificant. An active interest in female health emerged in the early 1970s due to the social and economic challenges faced by women. Consequently, women's health initiatives, which aimed to increase interest in maternity-related health issues and mental health, naturally came to include efforts to decrease female mortality and the prevalence of female-specific diseases such as cervical and breast cancer. In contrast, men's health is more difficult to define clearly. However, a response to the women's health movement did emerge, leading to research on prostate and testicular diseases as well as on gender-based disparities in mortality and disease prevalence.

Globally, the average male lifespan is four or five years shorter than the female lifespan, and this discrepancy is approximately seven years for Korean males. Males have been found to have higher mortality rates than females

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from the embryo stage to old age. This discrepancy is generally attributed to lifestyle-related health problems in youth as well as a relatively high incidence of cardiovascular disease and malignant tumors after middle age. Pinkhasov et al [1] compared the differences between men and women regarding 15 major causes of death based on an analysis of medical statistics from the USA. They found higher mortality rates among men for 12 diseases, and identified especially large differences in cardiovascular disease, hypertension, diabetes, and cancer. The biological rationale for this may be greater oxidant stress, compensation of the X chromosome, length differences in telomeres, superior function of the immune system in women, and a protective effect of estrogen against various diseases in women. Identifying the reasons for the difference in average lifespan between men and women; however, is the first step to improving male health, and such research must account for various differences that cannot be explained by only genetic factors. Biological differences, such as hormonal differences, and environmental factors, such as higher-risk occupations among males, should be taken into consideration. Furthermore, men have specific lifestyles that may be detrimental, such as high-risk lifestyles, a penchant to resist changing unhealthy behaviors, and a lower likelihood of seeking medical care. Systematic and continuous efforts to analyze and improve these factors could potentially establish a sound basis for men's health as a distinct specialty.

DIFFERENCES IN THE UTILIZATION OF MEDICAL RESOURCES BY SEX

It has been established that males are less likely to seek medical assistance for managing their health. They are also less likely to follow medical prescriptions and sometimes refuse long-term therapy. Since American males typically visit the doctor or wellness centers to a limited extent, they often do not receive consultations involving general health tests and preventative therapy. Moreover, it has been shown that men are more likely to disregard pathological conditions and pain, and are more likely to delay medical therapy. They are more sensitive to diseases with higher prevalence among males such as baldness, impotence, and injuries than they are to chronic diseases

that can seriously affect their health, and are more likely to visit the hospital for the former type of condition than for the latter type. A general health test is recommended for men suffering from impotence. Impotence is known to be a premonitory symptom for cardiovascular disease, and males with impotence have an increased ten-year risk of cardiovascular disease equivalent to that of male smokers or men with a family history of cardiovascular disease [2]. In this context, urologists may play a very important role in managing male health.

A tendency for men to visit health care providers less frequently than women has been observed worldwide and may be due to several causes. Women who are sick generally have a stronger desire to seek treatment and a higher interest in disease prevention than men. Due to stereotypical perceptions of masculinity, men are often hesitant to visit health care providers. According to such stereotypes, the foundation of manhood is physical strength, self-confidence, and emotional control. According to a survey performed in the USA, fewer men seek help from medical experts for depression, drug abuse, physical disorders, and psychological stress than women [3]. Men visit health care providers less frequently, and are more likely to do so for physical issues than for emotional or mental problems. Moreover, it has been found that women tend to see doctors, nurses, social volunteers, and psychologists for health problems more frequently than men, whereas men visit emergency rooms for accidents more frequently than women [4].

Even in cases of disease, men tend to ignore their symptoms and wait for the symptoms to resolve naturally. This tendency may be interpreted as reflecting stereotypes about masculinity. Many studies have suggested that a traditional view of manhood and associated beliefs may be responsible for the lower utilization of medical resources, with the consequence that men are disadvantaged in terms of health care. However, no studies have attempted to explain how men with such views about masculinity would decide to receive medical services when they were actually sick [4,5]. Therefore, an effective explanation for why men visit health care providers less frequently has yet to be proposed. Parameters other than masculinity should be taken into consideration with regard to ensuring that medical services are accessible. Therefore, further re-

search is necessary to develop methods for improving men's health, focusing on the comprehensive analysis of health-related parameters as well as on treating and preventing diseases after visits to health care providers.

THE FUNCTION OF UROLOGISTS AS THE FAMILY DOCTOR FOR MEN'S HEALTH

Men frequently visit hospitals for diseases related to impotence and other male-specific conditions. In light of this, urologists play an important role in the early detection of chronic diseases and are able to help males prevent these diseases. Moreover, urologists play a role for men analogous to that played by gynecologists for women. However, many aspects of the function of physicians in male health can be duplicated across specialties, and limitations may be encountered in professional treatment options for chronic diseases. Preferentially screening males with urological diseases is important to identify commonly associated diseases such as diabetes, hyperlipidemia, and hypertension. This can be accomplished by performing not only basic physical examinations, including general interviews and measurements of height, weight, waistline, and blood pressure, but by also performing basic lab tests for blood sugar and blood cholesterol levels in patients with impotence and symptoms of lower urinary tract disease [6,7]. In order to diagnose comorbidities associated with urological conditions, consultation with the relevant department is necessary, but it is nonetheless necessary to suggest lifestyle improvement, dietary changes, and exercise in cases involving pre-chronic diseases or patients at a high risk of chronic diseases. Chronic diseases can be prevented with these efforts [7]. Urologists must play the role of the family doctor for men's health in general, rather than being limited to the treatment of urological diseases. This role may provide opportunities to expand the duties of urologists and associated disciplinary boundaries. A basic medical knowledge of chronic diseases is required for this new function. Improvements in male health can be accomplished by interviewing and advising male patients regarding major health problems.

Regular exercise reduces the prevalence of chronic diseases such as cardiovascular disease, hypertension, diabetes, and hyperlipidemia, in addition to malignant tumors.

Exercise is also known to improve the prognosis of cardiovascular disease [8]. A healthy diet is important, and the rapidly increasing incidence of obesity in recent years has been fueled by the consumption of a large number of calories. Obesity causes diabetes, hypertension, an increased risk of cancer, and hyperlipidemia, and significantly decreases the quality of life by increasing the frequency of backaches, lower leg swelling, and joint diseases [9]. Since obese patients with excessive food intake may still have a shortage of some essential nutrients, a healthy diet must include balanced nutrients and three regular meals a day. The intake of fruits, vegetables, and grains should also increase while the consumption of saturated fats should decrease. A study has suggested that individuals over 70 years of age who maintain a Mediterranean diet and a healthy lifestyle can decrease their general mortality by over 50% [5]. It is important to eliminate stress and to find pleasure in life with a balanced routine and appropriate rest. Consultations for sexual health are necessary, and impotence has a very high prevalence, affecting 32.4% of males between 40 and 70 years of age in Korea [10]. The number of patients with impotence is expected to increase in connection with increased worldwide aging in the future. Since impotence is a premonitory symptom for cardiovascular disease, the early diagnosis of associated diseases could increase the effect of therapy, in addition to the benefits of the initial diagnosis and therapy for sexual health. The risk for hypertension increases with age. Hypertension leads to many other diseases, such as cardiovascular disease, cerebral infarction, peripheral vascular disease, renal failure, and retinal abnormalities. Although hypertension can be prevented or controlled with medication, only a fraction of patients continue with therapy, which is a major problem for men's health. Hypertension can also be prevented and controlled by a lifestyle changes. The consumption of foods with a high potassium content, such as fruits and vegetables, as well as aerobic exercise lasting over 30 minutes performed four to five times a week, are beneficial due to the corresponding reduction of salt consumption and body weight. The prevalence of type 2 diabetes is rapidly increasing due to the increased average lifespan, insufficient exercise, and the increased prevalence of obesity. Diabetes can affect the entire body negatively, causing retinal disease, kidney dis-

ease, and neural damage, and reducing the average lifespan. Controlling blood sugar levels is essential for reducing diabetic complications and therefore, a healthy diet, regular aerobic exercise, and abstinence from smoking or alcohol are necessary. Hyperlipidemia is very common in adult males, and the frequency of coronary arterial disease increases as blood cholesterol levels increase. The prostate is a problem in every male and induces lower urinary tract symptoms as its size increases and degenerative changes occur in the bladder with age. Lower urinary tract symptoms and sexual dysfunction are independent of other associated conditions, hence the presence of one symptom may necessitate a test for other related conditions. Prostate cancer is the most common carcinoma in Western males. Healthy lifestyle practices such as maintaining a proper weight, a healthy diet, regular exercise, and abstaining from drinking are known to be helpful in preventing prostate cancer. Cardiovascular diseases are caused by atheromas, in which fat is deposited on the artery wall over time, and which may cause hypertension, heart disease, cerebral infarction, and peripheral vascular disease. Ischemic heart disease is a related disease and is the most common cause of death in males and females worldwide. Ischemic heart disease occurs approximately 10 years earlier in males. Its risk factors are meals with high levels of saturated fat, smoking, high serum cholesterol levels, and diabetes. Lifestyle improvements can reduce the risk of ischemic heart disease.

DIRECTIONS FOR THE DEVELOPMENT FOR MEN'S HEALTH

The studies that have so far been published studies on male health contain results from only a few Western countries with relatively good public health systems. Results from developing countries and Asian countries, which actually have worse health outcomes, are very limited. According to the Malaysian National Health and Morbidity Survey, significantly more cases of newly diagnosed diabetes and impaired glucose tolerance occur every year among males than females. Females are screened for diabetes and impaired glucose tolerance during pregnancy, but males do not have a similar opportunity for early screening. Additionally, many males in this study did not

know whether they had hypertension or hyperlipidemia [11]. Studies and initiatives focused on sexual health must be actively implemented in Asian countries, including Korea. The results of Western studies cannot be applied to Asian countries due to social and cultural differences, and it is recommended that these studies only be used for reference. Therefore, systematic and long-term studies about male health in Asian countries, including Korea, are necessary, and health policies based on the results of these studies should be implemented. It is true that men's health is less clearly defined and engenders a lower level of social interest than women's health. According to a study on men's health published in Australia, men have a higher mortality rate due to heart disease, shorter average lifespans, higher rates of injury from accidents, and higher suicide and alcoholism rates than women. However, caution should be exercised in interpreting these results, because the results of many studies that analyze gender-based differences tend to be interpreted as general differences between men and women. Contrary to previously existing expectations, many studies have shown no psychological differences or differences in general health between men and women. The analysis of such results does not take into consideration the interconnected relationship between men and women. Most studies on health according to gender are not integrated, and are fundamentally flawed in that they compare the separate groups individually. Of course, weaknesses in studies on men's health do not diminish the importance of the studies' focus. This problem can be solved by integrating and evaluating the relationship with female health in studies focused on male health. Furthermore, it is important to simultaneously analyze specific patterns in differences and similarities between men and women rather than to focus on establishing general gender-related differences. The mechanism underlying health disparities can be understood by employing this method, which can also lead to an appreciation of the social importance of the problem. Developing a strategy that can integrate men's and women's health and thereby improve the health of the entire population is the future goal for men's health as a field.

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CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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