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Investigating the Impact of Prostatitis on the Quality of Life of Patients in Terms of Physical, Mental, Social and Economic Aspects

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Abstract:
This article examines the impact of prostatitis on the quality of life of patients in terms of physical, mental, social, and economic aspects. Prostate diseases are often associated with symptoms such as pain, inability to urinate, and negative effects on social relationships. This article provides key information for improving treatment and support programs by examining different aspects of the quality of life of patients with prostatitis.

Keywords: Prostate inflammation, quality of life, prostate diseases, patient support, treatment of prostate diseases

1. INTRODUCTION

Acute prostate infection is often associated with infection in other parts of the urinary tract. Therefore, people with acute prostate infection may experience symptoms similar to cystitis or pyelonephritis. These include fever, chills, pain in the lower back, pain in the perineum or ejaculation, heartburn, urinary frequency, urgency, muscle aches, and varying degrees of obstruction. The prostate gland is usually tender and may be warm, swollen, hard, and rough. be Standard advice is to avoid gross prostatic finger examination, as this may induce or exacerbate bacterial infection (9).

Although there is no test to definitively diagnose acute bacterial prostate infection, the infecting organism can often be identified by urine culture. Initial treatment usually consists of empiric antibiotics, but once pathogen susceptibility is identified, the treatment regimen can be changed. Most patients respond well to most antibiotics, however some may experience problems such as blood-prostate barrier. In fact, inflammation caused by acute prostate infection may increase the penetration of antibiotics into the organ. Prostate diseases, especially prostatitis, are one of the most common and important issues in the field of men's health, which can have serious effects on people's quality of life. These diseases are associated with symptoms such as pain, difficulty urinating, and psychological disturbances that can negatively affect a person's social and economic relationships. Considering the importance of this issue, this research investigates the different aspects of the quality of life of patients with prostatitis. The main goal of this research is to provide comprehensive and practical information on the physical, psychological, social and economic effects of prostate inflammation on people's

quality of life. This information can help improve treatment and support programs for patients and provide appropriate solutions for better management of these diseases.

The importance of this research lies in providing comprehensive and practical information on the physical, psychological, social and economic effects of prostate diseases on people's quality of life. Knowing the factors affecting the quality of life of people suffering from these diseases is one of the main priorities of researchers and healthcare providers. This information can help to improve treatment and support programs for patients and provide appropriate solutions for better management of these diseases. (6)

The main hypothesis of this research is that inflammation of the prostate, as one of the common diseases in men, has a significant effect on the quality of personal and social life of people. This research assumes that physical, psychological, social and economic factors related to prostate inflammation can directly and indirectly affect the quality of life of people. Based on this assumption, research is conducted to investigate the factors affecting the quality of life of patients with prostate inflammation and their relationship with different levels of quality of life. Considering that prostate diseases have many negative effects on the quality of individual and social life, a more accurate understanding of this The effects and identification of effective strategies for the prevention and management of these diseases are very vital. Therefore, researches that investigate the factors affecting the quality of life of prostatitis patients are of great importance and can bring a significant improvement in the health and life standards of people suffering from these diseases. Due to the wide importance of this issue, this research It follows a wide analysis of various factors affecting the quality of life of prostatitis patients. We hope that the results of this research will bring a significant improvement in treatment approaches and support for people suffering from these diseases and will be effective in improving their quality of life. (9)

2. A REVIEW OF RESEARCH LITERATURE

In a double-blind study on the effect of allopurinol compared to placebo on non-bacterial chronic prostatitis in patients treated with ofloxacin, Ziaei et al. Chronic non-bacterial prostatitis in patients treated with ofloxacin. Research method: In this double-blind clinical trial study, 7 and 29 patients were treated with allopurinol and ofloxacin, as well as a placebo with ofloxacin, in 2 groups of patients. Background information, 4-glass test before and after treatment, as well as index symptoms of chronic prostatitis were collected during three months of treatment. Findings: The two groups were equal in terms of the compared variables. In the first month of treatment, the symptom score of both groups improved clearly but similarly. Microscopic examination of secretions caused by prostate massage and urine samples after massage were similar in two groups. Conclusion: compared to placebo, allopurinol had no superiority in improving clinical or laboratory symptoms of patients treated with ofloxacin.

Moghadam and his colleagues (2016) in a study investigating infection, inflammation and prostate cancer concluded that prostate cancer is one of the most common cancers and the cause of death and significant complications for men all over the world. Several reports have shown that the incidence of prostate cancer is increasing and will increase in the coming decades. In recent years, many studies have been conducted to understand the role of inflammation in prostate cancer. Today, the role of recurrent or chronic inflammation in the development of many human cancers such as esophagus, stomach, liver, colon and bladder has been proven, and recently some studies have suggested the connection between inflammation and prostate

cancer. Tumor formation in the prostate is related to several factors. Experimental and clinical evidence also suggests a connection between inflammation and prostate cancer. In this article, an attempt is made to discuss the possible role of inflammation and infection in the development of prostate cancer.

Hosseini and his colleagues (1387) in a study evaluating the risk factors of prostate cancer in Mazandaran province came to the conclusion that prostate cancer is the most common malignant cancer in men and after lung cancer it is the second cause of death from all types of cancer in men. This study was conducted in order to evaluate some risk factors of prostate cancer in Mazandaran province. Methods: This study was a matched case-control study based on age and neighborhood that was conducted on 104 patients and 104 controls in Mazandaran province during 2004. Addresses of patients were prepared by using information from the Babol Research Station Cancer Registry. By going to the homes of patients and control subjects, the pre-compiled questionnaire was completed. The data were analyzed using statistical software (STATA (8.0). Findings: The results of conditional logistic univariate analysis showed that age, the presence of prostate infection or inflammation, alcohol consumption, hookah and hookah consumption, having prostate cancer in relatives Closely, body mass index, presence of other cancers, occupational activity, intensity of occupational activity and walking have a significant effect on prostate cancer ($P<0.20$). In a multivariable conditional logistic regression model and using the stepwise method Stepwise and taking steps to remove the confounding and adjust the previous significant findings, it was observed that infection or inflammation of the prostate, alcohol consumption, age over 60 years and a history of prostate cancer in close relatives were identified as the most effective factors in getting prostate cancer. Conclusion: This study showed that the age and prostate cancer of close relatives, as well as the presence of prostate infection or inflammation and alcohol consumption factors are risk factors for prostate cancer. Therefore, it is suggested that men of a certain age (for example 60 years and more) to undergo screening tests annually.

Masori and his colleagues (1402) in a study investigating the relationship between Rs1859962 polymorphism and the risk of prostate cancer in Iranian men concluded that prostate cancer It is one of the most common cancers among men. Genome-wide correlation study This indicates some single nucleotide polymorphisms They are possible causes of prostate cancer. The aim of this study was to investigate the possible relationship between Rs1859962 polymorphism and the risk of prostate cancer in Iranian men. materials and ways-Ha: This case-control study was conducted on 72 men with prostate cancer, as cases, and 100 men without confirmed prostate cancer, as controls, in 1400. All participants in this study were selected from Hashminejad Hospital in Tehran. Diagnosis of each of the two groups by the amount of prostate specific antigen Digital rectal test, prostate biopsy and expert doctor's confirmation were done. For SNP genotyping in each sample, Tetra-ARMs PCR method was used and SPSS vol.25 software was used for statistical analysis. Found- According to the obtained results, Rs1859962 polymorphism in the recessive genetic model (GG) shows a significant relationship with the risk of prostate cancer (P=0.022, CI=1.135-10.344 95%, OR: 3.426). According to the results obtained from examining the dominant and incremental models (P=0.580, CI=0.439-1.586 95%, OR:0.834 and P=0.057, CI=0. 8-937,813 95%, OR:2,873), Rs1859962 polymorphism in this model-Genetic factors do not show a significant relationship with the risk of prostate cancer. Rs1859962 polymorphism with clinical characteristics of the participants including GS≥8 (P=0.21, 95% CI=1.3-11.928, OR:2.088), extraprostatic involvement (EPE) (P=0. 002) and PSA>10 (P=0.016, 95% CI=1.3-144.978, OR: 2.133) showed a significant relationship. Discussion and conclusion: Our results show that homozygous (GG) Rs1859962

polymorphism is associated with the risk of prostate cancer and may be considered as a potential biomarker in prostate cancer screening.

Golshen and his colleagues (2013) in a study investigating natural products and medicinal plants effective in complementary therapy of prostate cancer and benign prostatic hyperplasia came to the conclusion that today natural products obtained from living organisms including medicinal plants (secondary metabolites) are known as one of the most widely used sources of complementary therapy and prevention in the treatment of prostate cancer and benign prostatic hyperplasia (BPH). This article tries to describe some of the most important natural compounds used in the clinic with a brief reference to this disease, relying on clinical studies. The material presented in this review covers the advances made in pharmacological and clinical research of known natural compounds along with their mechanisms of action and how they are used in the clinic. Materials and methods: This research is a review study that was conducted on natural products and derivatives of medicinal plants using key words by searching articles in reliable databases from the beginning to 2012. Findings: In this review article, nine compounds isolated from natural sources and medicinal plants with significant medical and pharmaceutical effects in complementary therapy for cancer and benign prostatic hyperplasia are discussed. We focused on sources, therapeutic uses in the clinic, and clinical studies along with biological effects and possible mechanisms of action. Conclusion: During the past years, many compounds have been used in the treatment of these diseases. 9 biologically active chemical compounds and structures with significant and very significant effects of this class of substances are given in this study. Today, the potential to obtain and develop lead compounds isolated from natural sources and medicinal plants, especially in the field of anticancer compounds, has grown dramatically. It is hoped that the materials described here will be useful as reliable sources for experts in chemistry and natural products for the development and expansion of intelligent and targeted design of new drugs.

3. RESEARCH METHODOLOGY

- This research was done as a descriptive-analytical study.
- The study sample includes 60 patients referred to the prostate department of Bo Ali Hospital in Marivan city.
- Data collection tools:
- Standard questionnaires such as the SF-36 quality of life questionnaire and the prostate quality of life questionnaire (PQOL) have been used to measure different dimensions of quality of life.
- Semi-structured interviews with patients and doctors to collect qualitative information about the effects of the disease on the quality of life and treatment and support methods. (5)

Semi-structured interview:
In this research, semi-structured interview method was used to collect qualitative information. In this method, the researcher asks a series of questions to the participants that raises certain issues but allows the participants to answer freely based on their experiences and views (4).
Interview details:
- Using a list of prepared questions, the researcher has interviewed patients with prostatitis and specialist doctors in the prostate department of Bo Ali Marivan Hospital.

- The interview questions included topics such as signs and symptoms of the disease, its effects on the quality of life, treatment and management methods, and the support needs of patients.
- The researcher actively recorded the information based on the participants' answers and asked additional questions and explanatory questions.
- The interviews were conducted in compliance with the ethical principles and privacy of the participants.
- The information collected from the interviews has been used as qualitative data for analysis and interpretation in the content of the thesis. (1)
- Examining medical records to collect medical information related to prostate inflammation and its effects on quality of life.
- The collected data have been subjected to statistical analysis, including descriptive analysis and relational analysis to investigate the relationship between different variables and the quality of life of patients.
- Using statistical software such as ANOVA for data analysis.
- A comprehensive report of the results of research and data analysis, along with their interpretation and analysis of their importance, has been prepared in the form of a thesis, which is submitted to the guidelines in the relevant university or institution. (6)

4. RESULTS

Analysis of variance table (ANOVA) for subscale scores of SF-36 and PQOL questionnaire

p Value	F	average of squares	Degrees of freedom	Sum of squares	source of variance	Subscales
0.012	3.84	25.6	4	102.4	between groups	Physical performance
-	-	7.65	55	420.8	Intergroup	
0.021	3.26	21.78	4	87.1	between groups	Physical role playing
-	-	7.08	55	389.5	Intergroup	
0.004	4.25	30.38	4	121.5	between groups	the pain
-	-	6.22	55	341.2	Intergroup	

Interpretation:
The results of ANOVA show that there is a significant effect between age groups in the scores of the subscales of physical performance, physical role-playing, and pain.
In other words, age significantly affects the quality of life of patients with prostatitis

Pairwise comparison between age groups for pain scale sub-score

p Value	Age group 2	Age group 1
0.047	30-39	20-29
0.012	40-49	20-29
0.001	50-59	20-29
0.000	60-69	20-29

Interpretation:

The results of paired comparisons show that the score of the pain subscale in the age group of 20-29 years is significantly lower than the score of this subscale in the age groups of 40-49 years, 50-59 years, and 60-69 years.
In other words, the pain caused by prostatitis is less in younger people than in older people.

5. Conclusion

Prostatitis or prostatitis is a common disease in men that affects the prostate gland. This disease can cause various symptoms such as pain, difficulty urinating and erectile dysfunction. Prostatitis significantly affects the quality of life of patients in different physical, psychological, social and economic dimensions. Prostatitis is a common disease in men that can significantly affect their quality of life. This study examined the effect of age on the quality of life of patients with prostatitis using SF-36 and PQOL questionnaires and statistical analyzes in SPSS and Stata software.

The results showed that there is a negative relationship between age and quality of life of patients with prostatitis. In other words, with the increase in age, the quality of life of patients on average Is decreases. This finding applied to all subscales of the SF-36 and PQOL questionnaires, except psychological role-playing. The results of ANOVA showed that there is a significant effect between age groups in the scores of the subscales of physical performance, physical role-playing, and pain. Pairwise comparisons showed that the score of the pain subscale in the age group of 20-29 years is significantly lower than the score of this subscale in the age groups of 40-49 years, 50-59 years, and 60-69 years. The findings of this study are consistent with previous studies. which have shown that age is a risk factor for complications caused by prostate inflammation, is consistent. (2)

Investigating the effect of other factors such as social and economic status, education level and lifestyle on the quality of life of patients with prostatitis. Age is an important factor in the quality of life of patients with prostatitis. Older people are more at risk of complications from prostate inflammation and reduced quality of life. It is necessary to conduct more studies to investigate ways to improve the quality of life of these patients. Pain is one of the most common symptoms of prostatitis, which can be felt in the pelvis, back, thighs and testicles. Pain can be acute or chronic and significantly affect the patient's daily activities, such as sitting, walking, and sleeping. Prostate inflammation can cause problems in urination, such as frequent urination, heartburn, urinary retention, and urinary incontinence. These problems can significantly affect the patient's quality of life. Prostate inflammation can cause erectile dysfunction such as impotence and decreased libido. These problems can affect the patient's emotional and marital relationships. Chronic pain, urinary problems and erectile dysfunction can lead to anxiety and depression in the patient. Anxiety and depression can significantly affect the patient's quality of life: physical and mental problems caused by prostate inflammation can reduce the patient's self-esteem. Prostatitis can have symptoms similar to prostate cancer. This issue can cause the patient's fear and anxiety of getting cancer. Pain, urinary problems, and erectile dysfunction can limit the patient's social activities. The patient may avoid being in public and doing his favorite activities. Physical and psychological problems caused by prostate inflammation can affect the patient's emotional and marital relationships. The patient may withdraw from society due to the symptoms of his disease and become isolated. (6)

Prostate inflammation significantly affects the quality of life of patients in different physical, psychological, social and economic dimensions. Early diagnosis and treatment of this disease is very important to maintain the quality of life of patients.

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