Exploring the influence of social support on mental health outcomes in prostate cancer patients: A descriptive correlational study

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ABSTRACT

Prostate cancer is a prevalent disease with potential psychological implications for patients. This study aims to explore the impact of social support on the mental health outcomes of prostate cancer patients, focusing on depression levels and life satisfaction. The hypotheses formulated were tested using a sample of 100 prostate cancer patients receiving treatment at the Oncology Hospital of the Hassan II University Hospital Centre in Fez. The results indicated a high level of social support with no significant differences based on demographic factors and disease-related variables. The findings also revealed a low level of depression among the patients and indicate that higher levels of social support were associated with lower levels of depression and higher levels of life satisfaction.

Key words: prostate cancer, social support, mental health, depression, life satisfaction

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INTRODUCTION

Prostate cancer patients often face psychological distress, including depression, which can significantly impact their mental well-being [1-3]. The emotional burden and challenges associated with the disease necessitate effective strategies to support patients and improve their quality of life. Social support has been recognized as a crucial factor in mitigating the negative effects of depression and enhancing psychological well-being among individuals with prostate cancer [4, 5].

Social support encompasses various forms of assistance, understanding, and emotional connection provided by family, friends, and social networks. It plays a significant role in buffering against the adverse effects of stress, anxiety, and depression [6, 7]. Given his importance in the well-being of prostate cancer patients, this study aims to investigate the relationship between social support and mental health outcomes, specifically focusing on depression levels and life satisfaction.

MATERIALS AND METHODS

Study hypotheses

Based on the theoretical framework and previous studies, the following hypotheses were formulated:

- Hypothesis 1: The sample members exhibit a high level of social support.

- Hypothesis 2: There are no significant differences in social support among the sample members based on demographic factors and disease-related variables.

- Hypothesis 3: There is no significant correlation between social support and both depression and life satisfaction among the study sample.

Study population

The target population consisted of 100 prostate cancer patients receiving treatment at the Oncology Hospital of the Hassan II University Hospital Centre in Fez. The study aimed to assess and evaluate independent and dependent variables related to

accepting the disease and improving the patients' quality of life through psychological support.

Study procedure

Data collection was conducted through clinical interviews with the study participants. The patients were approached a t the Oncology Hospital, and informed consent was obtained from each participant prior to the interviews. The interviews were conducted by trained researchers who followed a standardized procedure to ensure consistency and accuracy in data collection. The study tools, including the adapted Social Support Scale, were administered during these interviews.

Data analysis

The collected data were subjected to statistical analysis using appropriate methods. Descriptive statistics, such as frequencies and percentages, were calculated to describe the characteristics of the study sample. Inferential statistics, including correlation analysis and comparative analysis, were used to examine the relationships between variables and test the study hypotheses. Statistical software, such as SPSS or Excel, was utilized for data analysis.

RESULTS

Descriptive results

The main characteristics of the study sample were analysed based on their responses to the study tools. The descriptive results are summarized in the following Table 1.

The table presents the distribution of the study sample members based on various characteristics. For example, among the sample members, 42% were in the age range of 45-60 years, 32% had a primary qualification, 56% were married, 49% had an income level of more than MAD 5000, 54% residing in rural areas, 67% had a spread disease and in terms of the onset of the disease, 53% had the disease for 6 months and above.

Results related to the social support variable

The first hypothesis stated: "There is a high level of social support among the respondents." To test the validity of this hypothesis, the mean and standard deviation were calculated, followed by a t-test to determine the significance of the differences between the hypothetical mean and the mean scores of the sample members on the social support scale. The results indicate statistically significant differences at the 0.01 level between the hypothetical mean and the mean scores of the sample members on the social support scale. The calculated t-value of 11.457 is significant at a significance level of 0.01 suggesting that the sample members have a high level of social support. Therefore, the first hypothesis can be accepted.

The second hypothesis stated: "There are no statistically significant differences in social support among the study sample members due to the following variables: age, educational level, family status, income level, place of residence, disease location, and date of onset of illness." In summary, this hypothesis was supported for all the variables examined. There were no statistically significant differences in social support at the 0.05 level among the study sample members suggesting that these vari--ables do not significantly influence the level of social support.

Results related to the depression variable

To assess the level of depression among the sample members, the arithmetic mean and standard deviation were calculated. A t-test for one sample was conducted to determine the significance of the differences between the hypothetical mean and the mean scores of the sample members on the depression scale. The results indicate statistically significant differences at the 0.01 level between the hypothetical mean and the mean scores of the sample members on the depression scale. The calculated t-value of 14.197 is significant at a significance level of 0.01 suggesting that the sample members have a low level of depression.

Therefore, the hypothesis claiming a high level of depression among the sample members can be rejected. Instead, the alternative hypothesis stating a low level of depression in the sample members can be accepted.

Correlation between social support and both depression and life satisfaction

Pearson's correlation coefficient was used to determine the significance of the correlation between social support and both depression and life satisfaction among the study sample members. First, there was a statistically significant negative correlation ($p<0.01$) between social support and depression among the sample members suggesting that a higher level of social support is associated with a lower level of depression. Simple regression analysis further confirms this correlation ($p<0.01$) and indicates that social support has a significant impact on depression. An increase in social support by one unit is associated with a decrease in depression by 0.480 units (Figure 1). Second, there was a statistically significant positive correlation ($p<0.01$) between social support and life satisfaction suggesting that higher levels of social support are associated with higher levels of life satisfaction. Simple regression analyses support this correlation ($p<0.01$) and indicate that social support significantly affects life satisfaction. For every one unit increase in social support, life satisfaction increases by approximately 0.263 units (Figure 2).
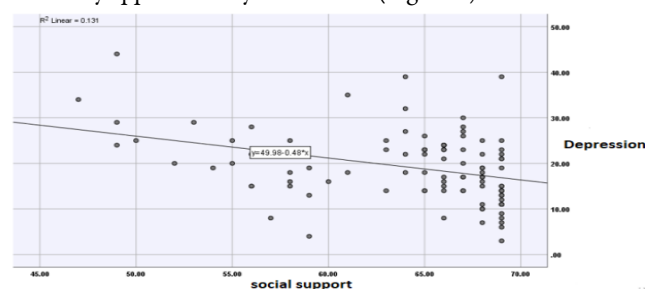

Fig. 1. Scatter plot of the linear relationship between social support and depression in sample members.
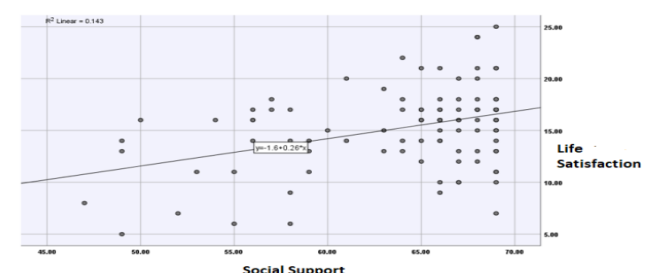

Fig. 2. Scatter plot of the linear relationship between social support and life satisfaction among sample members

Tab. 1. Descriptive results of study sample characteristics

Characteristic		Number	Percentage (%)
Age	30 years-45 years	19	19
	45 years-60 years	42	42
	60 years and above	39	39
Academic Level	Unschooled	20	20
	Primary	32	32
	Secondary	30	30
	University	18	18
Family Status	Married	56	56
	Single	11	11
	Divorced	21	21
	Widowed	12	12
Income Level	Less than MAD 1000	16	16
	Less than MAD 3000	35	35
	More than MAD 5000	49	49
Place of Residence	Urban	46	46
	Rural	54	54
Disease Localization	Localized	33	33
	Diffuse	67	67
Onset of Disease	0 months-3 months	11	11
	3 months-6 months	36	36
	6 months and above	53	53

Based on these findings, the third null hypothesis, which suggested no significant correlation between social support and both depression and life satisfaction, is rejected. The results provide support for the alternative hypothesis, indicating a significant correlation between social support and both depression and life satisfaction.

DISCUSSION

Depression is a common psychological issue among individuals diagnosed with prostate cancer. The emotional burden and challenges associated with the disease can significantly impact patients' mental well-being [1-3]. In this context, social support plays a crucial role in mitigating the negative effects of depression. Understanding the relationship between social support and depression is vital for developing effective interventions to enhance patients' quality of life. This article presents the findings of a study conducted to investigate the association between social support and depression among prostate cancer patients.

The first hypothesis of the study suggested a high level of social support among these patients and our results supported this hypothesis, indicating indeed a high level of social support with no statistically significant differences due to various variables: age, educational level, family status, income level, and place of residence, disease location, and date of onset of illness.

Social support plays a crucial role in buffering against the negative effects of stress, anxiety, and depression, which are common among men with prostate cancer. Social support can also help improve quality of life and enhancing psychological well-being [4]. It can be one of the main factors in better assessing the quality of life at any stage of the recovery process and reduced the adverse psychological effects of treatment. Social support encompasses emotional, informational, and instrumental support from significant others such as family, friends, and social networks. Data suggests that men with prostate cancer should consider joining support groups, talking to friends and family members, and seeking professional counselling if needed [5,6]. The presence of strong social support systems can provide individuals with resources, surviving mechanisms, and a sense of belonging, which can contribute to lower levels of depression [7].

The relationship between social support and depression has been extensively studied in the literature. Several studies have consistently shown a negative correlation between social support and depression, indicating that higher levels of social support are associated with lower levels of depressive symptoms.

In the present study, we examined the correlation between social support and depression among our patients. The results revealed a statistically significant negative correlation, indicating that as social support increased, levels of depression decreased. This finding suggests that individuals who perceive higher levels of social support are less likely to experience symptoms of depression.

These findings are in line with previous research that has consistently reported the protective effect of social support on mental health, particularly depression. Several studies have highlighted the association between social supports and reduced depressive symptoms. The presence of a supportive social network and access to various forms of support, such as emotional support, instrumental support, and informational support, serves as a buffer against stressors by offering individuals a sense of belonging, emotional validation, and practical assistance. It promotes adaptive strategies, such as problem-solving, seeking social guidance, and expressing emotions, which can help individuals navigate difficult situations. By providing a network of trusted individuals who offer understanding, empathy, and encouragement, social support mitigates the negative impact of stressors and reduces the risk of developing depressive symptoms [8-11].

Among men with prostate cancer, data found that social support was positively associated with less depression, better quality of life and mental health outcomes [12,13]. It offers a platform for patients to express their fears, concerns, and anxieties related to the disease. Having someone who listens and provides emotional support can alleviate feelings of isolation and loneliness, leading to reduced levels of depression.

This finding is consistent with previous research indicating that higher levels of social support are associated with greater life satisfaction [13,14]. Social support plays a crucial role in enhancing individuals' overall well-being and happiness, which in turn contributes to higher levels of life satisfaction. When

When individuals receive support from their social networks, their needs for connection, belongingness, and positive interactions are fulfilled. The concept of social support is rooted in the theory of social relationships and well-being. According to Helliwell and Putnam, social connections and supportive relationships are integral to individuals' happiness and overall life satisfaction [15]. The presence of social support systems helps individuals navigate through challenges, cope with stress, and experience a greater sense of fulfilment and satisfaction in their lives.

CONCLUSION

The findings of this study underline the importance of social support in mitigating the risk of depression and enhancing life satisfaction. Recognizing the significance of social support in mental health promotion can inform interventions and strategies aimed at preventing and managing depression. Healthcare professionals should consider incorporating social support interventions into treatment plans for individuals at risk or or experiencing depression. Future research could expl-

-ore the effectiveness of specific social support interventions in reducing depression symptoms. Longitudinal studies could also examinethe dynamic nature of social support and its effects on depression over time, considering potential fluctuations in support availability and its impact on mental health.

AUTHOR'S CONTRIBUTIONS

Badr Elmarjany and Abdelhak Maghous share the first position in this manuscript to conceptualized the study, designed the research methodology, collected, and analyzed data. AM drafted the initial version of the manuscript. All authors critically reviewed and revised the manuscript for intellectual content. All authors read and approved the final version for submission.

COMPLIANCE WITH ETHICAL STANDARDS

Conflict of interest

The authors declare that they have no competing interests. Informed consent: Informed consent was obtained from all individual participants included in the study.

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