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Effectiveness of Psycho- Educational Program on Quality of Life and Body Image of Prostatic Cancer Patients

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Abstract: **Cancer is a chronic disease affecting all dimensions of the human life. Prostate cancer is one of the most prominent health problems among older men who have not received sufficient attention from scientific research in Egypt. Improving quality of life and body image considered a basic concern for patients with prostate cancer (PCa). Aim of the study: was to evaluate the effectiveness of psycho-educational program on quality of life and body image of prostatic cancer patients. Research design: -. Quasi experimental design (one group pre/posttest) was used to achieve the goal of the study. Setting: - The study was carried out at Shebin El-kom teaching & University Hospital Oncology department in Menoufia University. Sample: - A convenient sample compromised 60 patients with prostate cancer were selected in the chosen setting. Tools: - three tools were utilized for data collection: (1): Structured interviewing questionnaire. (2): Body image scale (3): Quality of Life scale (QOLS). The collected data were analyzed using SPSS (Statistical Package for Social Sciences) version20. Student's t-test, one a way ANOVA (F-test) and paired T-test were used for parametric data. Mann-Whitney was used for non-parametric data. Pearson's Correlation analysis was used to show strength and direction of association between two quantitative variables. P value <0.05 is considered significant. Results: There were statistically significant differences between pre and post psycho educational program regarding total score of body image and quality of life. Conclusion: Implementation of psycho educational program with prostatic cancer patients had a constructive effect on quality of life and body image of prostatic cancer patients. Recommendation: - Future research should focus on enhancing group interventions to improve disease-specific Quality of Life (QOL), particularly sexual and urinary functioning.**

Keywords: **prostate cancer, quality of life (QOL), body image, psych educational program.**

1. INTRODUCTION

Prostate cancer (PC) is the 2nd most frequent cancer diagnosis and the fifth leading cause of cancer mortality in men [1]. Prostate cancer is a heterogeneous disease with fatal and indolent phenotypes. A whole of 221,000 men had been expected to receive a new diagnosis of prostate cancer in the USA in 2015 while 28,000 are predictable to die from the disease [2]. The most common negative effects of active prostate cancer therapy involve urinary, sexual and bowel dysfunction can reduce patient welfare and quality of life (QoL). Somatic alterations which results from patients receiving treatment for prostate cancer have impact on quality of life [3, 4].

Quality of life (QoL) defined as a whole, integrated state of physical, intellectual and psychosocial well-being. Quality of life (QoL) involves greater than a mere absence of disease, although it is deeply associated with its severity [5] For cancer patients, QoL is a critical concern both when cancer is existing and when the disease has been treated [6,7]. Oncologic clinical remedies lead to QoL improvements, however occasionally variety of side effect can occur and almost convey huge health-related complaints [8, 9]. Similarly, When cancer is treated, patients exhibit greater ranges of Quality of lifestyles (QoL), but physical and Psychological sequelae frequently reduce it [10,11,12].

Fronting a cancer or its sequelae may additionally lead to considerable psychological despair and psychiatric symptomatology, Such as sleep difficulty, extreme worries regarding survival and depressive mood. These signs and symptoms are commonly associated with decrease Quality of lifestyles (QoL) and well-being [13, 14]. Poor QOL may lead to noncompliance with treatment. Moreover, the coexistence of cancer and psychological despair is associated with a tremendous extend in risk of dying in aged human beings [15].

Body image has been connected with quality of life in patients with prostate cancer. Patients receiving treatment for prostate cancer frequently experience a series of physical changes that may impact body image, including reduced penile length; reduced lean muscle mass and increased body .In a study of body image awareness in prostate cancer patients, those receiving androgen deprivation therapy (ADT) experienced worse body image perception [18]. In the study by [19] exhibits that body image is a main component of the prostate cancer experience.

Behavioral interventions as a progressive muscle relaxation and body–mind interventions. Progressive muscle relaxation is a physical stimulation and intellectual peace with emphasis on muscle systematic stretching and release (contraction-release) [20]. Deep diaphragmatic breathing is one of the relaxation strategies that provide the body with more oxygen. Good breathing behaviors increase individuals' capability to cope with bodily tension and lead to stress management [21].

2. SIGNIFICANCE OF THE STUDY

Prostate cancer is a central health problem that was no longer sufficiently studied in Egypt. Prostate cancer is a most important reason of disease and mortality amongst men, and every year 1.6 million men are recognized with and 366,000 men die from prostate cancer .It is predictable that by 2030, 1.7 million new cases and 499,000 deaths will occur in the entire world. [22]**.** Patients with cancer frequently suffer from emotional distress as anxiousness or depression. The presence of psychological symptoms combined with the complicated nature of oncology approaches can negatively influence patients' quality of lifestyles [20]**.** A broad range of psychological interventions may be utilized to decrease the psychological distress and improve adjustment to being a cancer patient, consequently improving quality of life (QoL) [23]**.** Patient education is a crucial issue; Nurses should assist patients to manage therapy side effects and to deal with body image changes or any other changes in functional living and appearance. Also, they can influence certain environmental factors and offer knowledge to patients with respect to symptoms management [24] "Evidence revealed non-invasive interventions such counseling, psychotherapeutic, psychosocial and educational interventions; these measures can play a role in improving patients' quality of life"[25]**.**

Well-being and Quality of lifestyles (QoL) remain as vital elements to promote adjustment to every day surroundings. As no **study** has investigated the **effect of** psych **educational program** on **quality** of **life** and **body image among** prostatic **cancer patients; so,** the **current study** aimed to **assess** the Effectiveness of Psycho- Educational **program** on **quality** of **life** and **body image** of prostatic **cancer** patients.

3. SUBJECTS AND METHODS

3.1 Aim of the Study:

The aim of this study is to assess effectiveness of psycho- educational program on quality of life and body image of prostatic cancer patients**.**

3.2. Research Hypothesis:

Application of psycho educational program for patients diagnosed with prostatic cancer will improve their quality of life and their body image.

3.3 Research design:

Quasi-experimental design (one group pre –posttest design) was used to achieve the aim of the study.

3.4. Setting:

The study was conducted at Shebin El-kom teaching & University Hospital Oncology department in Menofyia University.

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3.5. Subjects:

A convenient sample compromised 60 patients with prostatic cancer were selected in the chosen setting.

3.5.1. Inclusion Criteria:

1. Men diagnosed with prostate cancer
2. Aged between 50- 70 years old
3. Under treatment therapy
4. Willing to participate in the study

3.5.2. Exclusion criteria:

1. Had any other psychiatric or physical disorder.
2. Had impairment in verbal communication.

3.6. Instruments of the Study:

Data were collected using the following tools:

Tool (1) structured interviewing questionnaires**.**

It was designed by the researchers in Arabic language after reviewing the related literature .It divided into two parts:-

Part one: includes socio-demographic data about patient as age, education, employment.....

Part two: - includes symptoms of disease, date of initial treatment therapy, awareness of treatment side effect, associated risk factors for prostatic cancer.

Tool (2) Body image scale (BIS)

The Body Image Scale (BIS): it consisted of a ten items developed to measure changes in body image in cancer patients. It was developed by [26]**;** and translated into Arabic by the researcher. The scale has four possible responses: 0 corresponds to "not at all"; 1 corresponds to "a little"; 2 correspond to "quite a bit" and 3 correspond to "very much". Total scores are calculated by adding the score obtained on each item, yielding a range of possible scores from 0-30, with higher scores indicating a greater degree of negative body image change or dissatisfaction.

Tool (3) Quality of Life scale (QLS)

The Quality of Life scale developed by [27] and translated into Arabic by the researcher. It consisted of 33 items in each of 2 sections for a total of 66 items. The first section measures satisfaction in 4 domains; the second measures the importance to the individual of the 4 domains. The four domains include health and functioning, psychological/spiritual, social and economic, and family. Responses to items in the first part of the scale range from "very dissatisfied" to "very satisfied" on a 6-point Likert scale. Responses for items in the second part of the scale range from "very important" to "very unimportant" on a 6-point Likert scale. QLI scores are calculated using a weighted scale which pairs a satisfaction response with an importance response. The weighted scale calculations yield an overall QOL score, and separate subscales for each domain. Scores range from 0-30, with higher scores indicating better QOL.

3.6.1. Reliability of the Tools:

Reliability was applied by the researcher for testing the internal consistency of the tool, by administration of the same tools to the same subjects under similar conditions on one or more occasions. Answers from repeated testing were compared (Test-re-test reliability).

3.6.2. Validity of the Tools:

The content validity of the tools were examined by means of jury of five experts in the area of medical surgical nursing department, psychiatric mental health nursing and community health nursing for clarity, relevance, comprehensiveness, understanding, applicability and ease for implementation. The required modification was carried out accordingly.

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3.7. Procedure:

An official approval was obtained from the dean of faculty of nursing and the director of Shebin El-Kom teaching & University Hospital Oncology branch in Menoufia University. Ethical Consideration: The patients give fully informed verbal consent to participate. The questionnaire used in the study was administered by the researchers. The patients were briefed about the study, encouraged to participate and motivated to express their feeling. It was emphasized that all data collected was strictly confidential and the data would be used for scientific Purposes only and the patients have full right to withdraw from the study at any time. A Pilot study was carried out on 5 patients before starting data collection; this was done to estimate the time required for filling out the sheet and to check the clarity of the tools. The pilot study sample was excluded from the study. Data collection for the study was carried out in the period from July 2017 to September 2017. The researcher gathered the data throughout the morning at two days/week from 10 AM to 12 AM. The subjects were divided into 10 groups; each of them consisted of 6 patients. Implementation of the study passed into three phases pre assessment phase, implementation phase and post assessment phase.

3.7.1. Pre assessment phase (Measure 1):

A comfortable, non-public place was used to be chosen for the interview. Orientation was done about the researcher's name, purpose, significance, content of the study. Subjects were interviewed individually at their rooms where pre-assessment was done using Body image scale (BIS) and Quality of Life scale (QLS).

3.7.2. Implementation Phase:

Educational program aimed to assess the effectiveness of psych educational program on quality of life and body image among prostatic cancer patients

The psych educational groups met for twelve sessions consecutive weekly sessions that lasted approximately 2 hr. The researcher led the group and the co-leader recorded the sessions. This program has a set of precise goals for each of the ten sessions. This used to be carried out through several teaching strategies such: brain storming, lecture, discussion, data show, video, and pictures have been used as media. At the end of every session summary, feedback and further clarification were performed for vague items.

The sessions for psych educational program were:

Session 1: Concerned with open discussion for identification, integration of the group, clarification of purpose and time table allowed for program.

Session 2: Focused on information about definition, causes, predisposing factors and signs and symptoms of prostatic cancer according to patients' educational level

Session 3: Targeted on knowledge about different treatment regimens, mode of action & side effect of treatment therapy
Session 4: Highlighted on knowledge about diet regimen throughout taking treatment therapy and how to make progressive relaxation technique

Session 5: Concentrated on application of progressive relaxation technique to reduce emotional distress about changes in body image and enhance coping with illness and medication side effect.

Session 6: Focused on effective communication skills, offering psychological support and involving patients in conversation & activities they enjoy.

Session 7: Discussing real expectations through education & guidance and the effective strategies to replace a negative thought with a positive one

Session 8: Discuss the use of physical activity as daily walks to enhance body image and how to make breathing exercise.
Session 9: Offering psychosocial interventions in response to patients' needs and application for breathing exercise.
Session 10: Improving understanding of psychosocial, educational and cultural aspects of appearance and how to make meditation.
Session 11: Targeted on importance of emotional expressivity and practice in breathing exercise and meditation

Session 12: Practicing for progressive relaxation technique, breathing exercise and meditation.

A short descriptions about strategies employed in the study are discussed below.

(i) Progressive Muscle Relaxation (PMR) [28]**.**

"A technique used to decrease stress and anxiety by alternately tensing and relaxing the muscles. It was developed by means of American physician Edmund Jacobson in the early 1920s. Jacobson argued that since muscle tension accompanies anxiety, one can minimize anxiety by learning how to relax the muscular tension. Progressive Muscle Relaxation (PMR) entails a physical and mental component".

(ii) Deep Breathing Exercises

"Patients are taught by the researcher, manual or audio how to inhale and exhale deeper and slower. They need to practice several times a day, for a few minutes to see immediate benefits". Method: -" (1) Sit comfortably with your back straight. Put one hand on your chest and the other on your stomach. (2) Breathe in through your nose. The hand on your stomach rise. The hand on your chest should move very little. (3) Exhale through your mouth, pushing out as much air as you can while contracting your abdominal muscles. The hand on your stomach should move in as you exhale, but your other hand should move very little. (4) Continue to breathe in through your nose and out through your mouth. Try to inhale enough so that your lower abdomen rises and falls. Count slowly as you exhale".

(iii) Meditation

"Clients were given training on meditation which involves assuming a relaxed position, closing the eyes, casting off all other thoughts and concentrating on a single word, sound, or a phrase that has positive meaning to the individual. It can be practiced 20 m. once or twice daily".

3.7.3. Post Assessment Phase (Measure2):

Evaluation was done using Body image scale (BIS) and Quality of Life scale (QLS)

3.8. Data Processing and Analysis:

Results were statistically analyzed by SPSS version 20. Student's t-test, one a way ANOVA (F test) and paired t test were used for parametric data. Mann-Whitney was used for non-parametric data. Chi-Squared (χ^2) was used for qualitative variables. Pearson's Correlation analysis was used to show strength and direction of association between two quantitative variables. P value <0.05 is considered significant.

Statistical analysis:

Results were statistically analyzed by SPSS version 20. Student's t-test, one a way ANOVA (F test) and paired t test were used for parametric data. Mann-Whitney was used for non-parametric data. Chi-Squared (χ^2) was used for qualitative variables. Pearson's Correlation analysis was used to show strength and direction of association between two quantitative variables. P value <0.05 is considered significant.

4. RESULTS

Table (1) showed that (71.7%) of studied patients were in age group (≥60) years, Regarding marital status (70.0%) were married, half of studied patients (50.1% , 50.1% respectively)were Illiterate and farmer , (66.7% of studied patients)were had not enough income and (70.1% of studied patients) were had four children and more.

Table (2) illustrated that two third of studied subjects (66.7%) hadn't any health problems while one third (33.3%) had health problems as (hypertension ,diabetes mellitus , arthritis, others health problems), the majority of studied patients (90.0%) were smokers and (68.3%) were eating food rich with fat ,(70.0%) were not eating red meat frequently, most of studied subjects (78.3%,78.3% respectively) hadn't family history of prostatic cancer and were exposure to stress.

Table (3) clarified that, (68.3%) were complained from pain, incontinence, prostate enlargement as a symptoms of disease and (61.7% of studied patients) were started the initial treatment within (sex month-1 year) and (90.0%) were not had awareness about treatment therapy.

Table (4) presented that there were no statistically significant differences between total score of body image and socio demographic characteristics as (age, marital status, education, occupation, and income) of prostatic cancer patients.

Table (5) displayed that there was statistically significant difference between quality of life and education, occupation, income and children numbers of prostatic cancer patients, while there was no statistically significant difference between quality of life and age, marital status and income.

Table (6) indicated that there was statistically significant difference between quality of life and types of health problems and family history of prostatic cancer**.**

Table (7) revealed that there was positive relation between body image and quality of life but not significant.

Figure (1) showed that there were statistically significant differences between pre and post intervention program regarding total score body image and total score of quality of life.

Table 1: Socio-demographic Characteristics of The Studied Prostatic Cancer Patients

Socio-demographic characteristics	**Participants (n=60)**	**Percent (%)**
Age		
<60	**17**	28.3
≥60	43	71.7
Marital status		
Married	42	70.0
Single	3	5.0
Divorced	7	11.7
Widow	8	13.3
education		
Illiterate	30	50.1
Read& write	8	13.3
Basic	20	33.3
Secondary	2	3.3
Occupation		
farmer	30	50.1
Employee	5	8.3
worker	5	8.3
does not work	20	33.3
Income		
Enough	18	30.0
Not enough	40	66.7
More than enough	2	3.3
Children number		
1	2	3.3
2	8	13.3
3	8	13.3
≥4	42	70.1

Table 2: Distribution of the Participants regarding related Risk Factors for Prostatic Cancer:

Related risk factors:	**Participants (n=60)**	**Percent (%)**
Health problem		
Yes	20	33.3
No	40	66.7
Type of health problem		
hypertension	14	23.3
diabetes mellitus	4	6.7
Arthritis	2	3.3
Others health problem	40	66.7
Smoking		
Yes	54	90.0

No	6	10.0
Exposure to pollution		
Yes	27	45.0
No	33	55.0
Eating food rich fat		
Yes	41	68.3
No	19	31.7
Eating red meat frequently		
Yes	18	30.0
No	42	70.0
Family history of prostatic cancer		
Yes	13	21.7
No	47	78.3
Exposure to stress		
Yes	47	78.3
No	13	21.7

Table 3: Distribution of The Participants regarding Their Clinical Characteristics:

Clinical characteristics:	**Participants (n=60)**	**Percent (%)**
Symptoms of the disease		
Pain	8	13.3
Incontinence	5	8.3
Prostate enlargement	6	10.1
All of the above	41	68.3
Period of initial treatment		
1-6 month	23	38.3
> 6 month-1 year	37	61.7
Awareness of side effects of treatments		
Yes	6	10.0
No	54	90.0

Table 4: Relation between Body Image and Socio demographic characteristic of Prostatic Cancer Patients:

Socio demographic characteristic:	**Body image**	
	Mean ±SD	**P value**
Age		
<60	18.29 ±4.13	0.976
≥60	18.25 ±4.46	
Marital status		
Married	18.04 ±4.29	0.283
Single	23.0 ±1.0	
Divorced	18.28±4.85	
Widow	17.62 ±4.47	
Education		0.750
Illiterate	17.73 ±4.37	
Read& write	18.50 ±4.34	
Basic	18.75±4.57	
Secondary	20.50 ±2.12	
Occupation		
farmer	18.20 ±4.52	0.378
Employee	20.60 ±4.39	
worker	20.0±4.69	
does not work	17.35 ±3.92	
Income		
Enough	19.0 ±4.93	0.692
Not enough	17.97 ±4.06	
More than enough	17.50±6.36	

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Table 5: Relation between Quality of Life and Socio demographic Data of Prostatic Cancer Patients:

Socio demographic Characteristic:	Total Quality of Life	
	Mean ±SD	P value
Age		
<60	118.0±14.98	0.508
≥60	121.19 ±17.31	
Marital status		
Married	117.57 ±17.69	
Single	116.67 ±11.54	0.160
Divorced	126.86±8.25	
Widow	130.12 ±13.99	
Education		
Illiterate	114.07 ±15.0	0.018
Read& write	131.75 ±13.58	(S)
Basic	125.10±17.39	
Secondary	119.50 ±7.77	
Occupation		
farmer	115.27 ±15.38	0.041
Employee	136.0 ±27.95	(S)
worker	125.0±8.77	
does not work	122.70 ±14.12	
Income		
Enough	123.06 ±14.83	0.592
Not enough	118.75 ±17.73	
More than enough	126.0±1.41	
Children number		
1	145.50 ±17.67	
2	127.12 ±8.25	0.005
3	130.38±25.44	(S)
≥4	115.68 ±13.70	

Table 6: Relation between Quality of Life and related Risk Factors of Prostatic Cancer Patients:

Related Risk Factors	Total Quality of Life	
	Mean ±SD	P value
Type of health problem		
hypertension	93.85 ±13.43	
diabetes mellitus	107.5±11.15	0.002
Arthritis	71.50±7.77	(S)
Others	95.65 ±8.82	
Smoking		
Yes	95.12 ±11.84	0.892
No	96.0 ±5.40	
Exposure to pollution		
Yes	93.22 ±12.72	0.221
No	96.84 ±9.96	
Eating food rich fat		
Yes	96.0 ±12.10	0.436
No	93.52 ±9.54	
Eating red meat frequently		
Yes	98.27 ±7.62	
No	93.90 ±12.44	0.173
Family history of prostatic cancer		
Yes	87.84 ±11.07	0.018
No	92.25 ±10.63	(S)
Exposure to stress		
Yes	95.95 ±11.70	0.346
No	92.53 ±9.81	

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Table 7: Correlation between Body Image and Total Quality of Life of Prostatic Cancer Patients:

Total quality of life	Body Image			
	Pre (n=60)		Post (n=60)	
	r	P value	r	P value
Total of quality of life	0.13	0.309	0.10	0.424

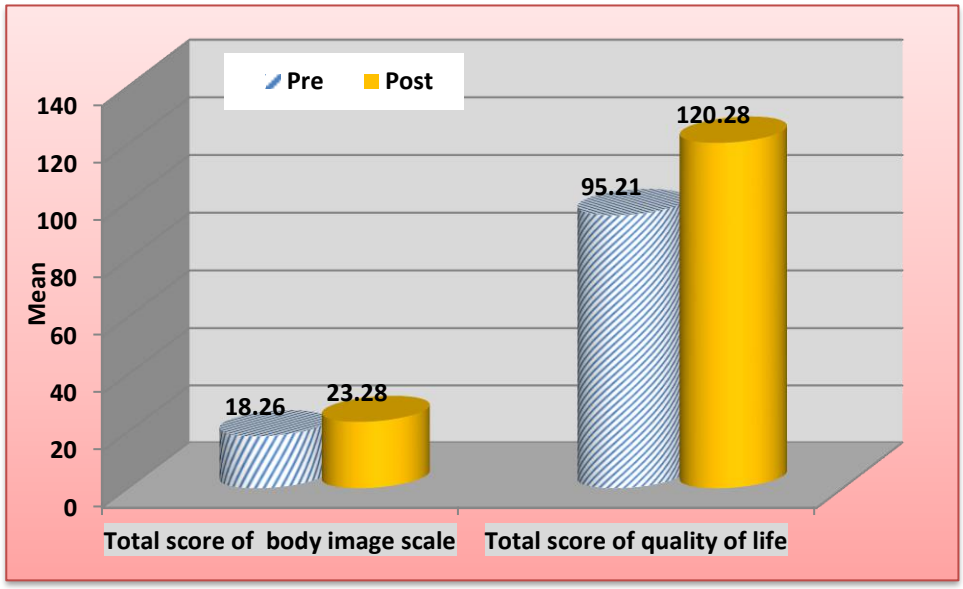

Figure 1: Mean pre and post total score of Body Image and Quality of Life among studies group

5. DISCUSSION

Quality of lifestyles and connected constructs become more relevant over time [29]. Psychological treatments should take part in this context for enhancing the global adjustment to daily surroundings and increasing the sense of well-being [30, 31].So existing study intended to assess the influence of psycho educational program on quality of life and body image among prostatic cancer patients. The current study revealed that most studied patients had been in age group (≥60) years, this was in the identical line with [32], explained that "with increasing age, men are prominently more expected to have high-risk prostate cancer". Also, [33, 34, 35]; stated that "Prostate cancer incidence increases with advancing age. Almost 6 cases in 10 are diagnosed at the age of sixty five years or later".

Regards marital status, the outcome of this study showed that greatest numbers of studied patients had been married and had four children or more this may be due to stressful life experiences they faced which may be risk for cancer; contradict to this outcome [36] showed that "Unmarried men have a greater risk of prostate cancer-specific mortality compared to married men of similar age, race, stage, and tumor grade". Regarding education, the existing finding shown that half of studied prostatic patients were uneducated. This finding was congruent with [37]. They confirmed that "education, an indicator of socioeconomic status, has been shown to be inversely associated with the incidence of cancer at several (but not all) anatomic sites; that is, in general, the higher the degree of educational attainment, the lower the cancer risk".

Occupation is greatly associated with prostate cancer risk in numerous studies. The existing outcome indicated that half of studied patients had been farmer; it may be due to everyday exposure to carcinogenic environmental materials; this result was in the same line with[39,40];found that "farmers had about four times greater risk for developing prostate cancer as compared to controls". Also, [41, 42]; mentioned that "an elevated risk was observed in farming and agriculture workers". Concerning health problem the existing study found that one third of studied patients had health problem as hypertension, diabetes mellitus and other health problems; this result was reinforced by [43]; they "posted a meta-analysis which indicated that hypertension may be associated with an accelerated risk of prostate cancer". Also [44]; stated that "there is association between prostate cancer and comorbidities frequently seen in diabetic patients that suggests a more complicated scenario in the link between prostate cancer and diabetes at different disease stages".

The current result displayed that the majority of studied patients were smokers' this could be due to their exposure to hazards elements from smoking which enhance cell proliferation in the prostate, which perhaps connected with malignant transformation ; this result consistent with [45, 46]; they mentioned that "smoking is associated with more aggressive disease at diagnosis. So, smokers persistently have a greater risk of prostate cancer progression". Also, [2] concluded that "Dietary factors and daily lifestyle play an important role in the development of prostate cancer, although facts are sparse. Therefore, not-smoking and maintaining healthy body weight and practicing exercise on a regular basis reduces the risk of prostate cancer progression".

The contemporary finding revealed that slightly above two third of studied patients consume food rich fat, this result was congruent with [47], stated that "use of fat items were strongly associated with increased risk of prostate cancer". Also, [48] concluded that "high total fat-adjusted saturated fat consumption was associated with increased prostate cancer (PC) aggressiveness". Moreover, [2] mentioned that "saturated fat intake is associated with an increased risk of developing advanced or fatal prostate cancer, while long-chain omega-3 fatty acids (such as those found in fatty fish) are associated with lower risk". The present result revealed that most studied patient were not consume red meat frequently; this outcome was consistent with [49, 50]; revealed that "no association between processed red meat consumption and risk of advanced or fatal prostate cancer". While this outcomes was in consistent with [47, 51]; determined that "a positive association between processed red meat consumption and risk of advanced or fatal prostate cancer".

The present result indicated that more than three quarter of studied patients hadn't family history of prostatic cancer. This could be due to small sample size. This result incongruent with the result of [52], their findings highlighted "the clear association between a family history of prostate cancer and increased risk of developing the disease". Also, [53]; concluded that "age, race/ethnicity, family history of cancer are the well-established risk factors of prostate cancer". The existent finding displayed that more than three quarter of studied patient had been exposure to stress; this could be due to greater burden of disease, elevated fees of care which associated with economic &social burden, where is two third of studied patient were had not sufficient income. This end result was supported by [38, 54] stated that "studies have suggested that psychological or behavioral factors may also have an effect on the incidence or development of cancer through psychosocial influences on immune function". Also, [55] mentioned that "studies suggested that stress-related psychosocial factors have an adverse effect on cancer and cancer recurrence".

The current result displayed that there were no statistically significant differences between body image and age; agreement with this result [56]; they determined that "no relationship was identified between age and body image dissatisfaction". The current study discovered that nearly above two third of studied patient had poor quality of life before psych educational program this may be due to therapy side effect and economic and social burden of the disease. This outcome was in the same line with [58]; they noted that "a significant decline in quality of life (QoL) was observed after radiotherapy ($p < 0.001$). The addition of hormonal therapy to radiotherapy was associated with a decrease level of role functioning". The existing work showed that there was statistically significant difference between education and occupation in relation to quality of life, this finding was supported by [62],They exhibited that "Lower socioeconomic status (SES) measured by income, education and occupational status is significantly associated with lower HRQOL 6 months after treatment". Also [63], concluded that "men with less education experienced worse health-related quality of life throughout a wide range of domains and greater urinary & sexual symptoms than their peers who had more education". While this result was not supported by [64]; they found that "men of all education levels experienced similar changes in their daily functioning associated to prostate cancer and its treatment".

The contemporary study revealed that there was statistically significant difference between quality of life and health problems types of studied group; this may be due to the higher burden of disease , the greater health care needs, increased probability of disability, increased cost of care, greater possibility of financial burden, and resulting socioeconomic disadvantage. All these can be linked with impaired quality of life. This end result was in the equal line with [65]; they stated that "studies of patients with early stage prostate cancer have suggested that those with comorbidity have lower quality of life throughout the diagnosis and treatment period but that all patients report a similar magnitude of reduction in quality of life over that period". Also, [2]; their findings suggested that "as the number of patient comorbidities and caregiver conditions increased, their own QOL decreased".

The existing result revealed that there was positive relation between body image and quality of life but not significant; i.e. when patient's perception of body image improved; patient's quality of life will improve. This result was in the same line with [16, 17], concluded that "body image has a meaningful association with quality of life among prostate cancer survivors". Contradict to this result [66] mentioned that "there was a significant negative correlation between body image dissatisfaction and quality of life(QOL.) : the higher the dissatisfaction with one's body image, the less satisfactory was one's perceived quality of life (QOL)".

The existing study revealed that there were statistically significant differences between pre and post psych educational program regarding quality of life. This could be as a result of the impact of the program which provided them with an opportunity to acquire essential knowledge which enhances their capabilities to make decisions about treatment option of the disease and handling therapy side effects. In addition to enhancing them to improve physical & sexual performance which enhance optimism about the future; this result was reinforced by [59], illustrated that, "a statistically significant overall impact size of psychological treatments was observed concerning the integrated sense of quality of life (QoL) of cancer patients and survivors". Also, [60], determined that "there was statistically significant improvement in quality of life (QoL) ($P < 0.001$) and physical functioning ($P < 0.001$) after progressive muscle relaxation, guided imagery and deep diaphragmatic breathing intervention". Moreover, [61], their outcomes indicated that "psychosocial strategies were more effective in reducing anxiety and depression of patients diagnosed with prostate cancer compared with routine care, even though the impact was not sustainable".

The recent study confirmed that there was highly statistically significant difference between pre and post psych educational program regarding body image; this may be due to the effect of psych educational program which help patients to minimize their negative perception about body image by increasing patient's knowledge and shaping patients' behaviors and attitudes. Also, having discussions with other men within the sessions may help to normalize and validate men's experiences with sexual dysfunction, as a result lowering some of the distress it causes, which can help them set realistic expectations and supply optimism about future functioning.

6. CONCLUSION

Implementation of psycho educational program with prostatic cancer patients had a constructive effect on quality of life and body image of prostatic cancer patients**.**

7. RECOMMENDATION

Future research should focus on enhancing group interventions to improve disease-specific Quality of Life **(**QOL), particularly sexual and urinary functioning.

REFERENCES

[1] Wong MC, Goggins WB, Wang HH, et al.(2016) Global Incidence and Mortality for Prostate Cancer: Analysis of Temporal Patterns and Trends in 36 Countries. Eur Urol,70:862-74.

[2] Peisch, S. F., Van Blarigan, E. L., Chan, J. M., Stampfer, M. J., & Kenfield, S. A. (2017). Prostate cancer progression and mortality: a review of diet and lifestyle factors. World journal of urology, 35(6), 867-874

[3] Lehto U-S, Tenhola H, Taari K, Aromaa A (2013) *Eturauhassyövän hoitojen haitat ja potilaiden tyytyväisyys*. Suom Laakaril 46: 2997–3005;

[4] Gavin AT, Drummond FJ, Donnelly C, O'Leary E, Sharp L, Kinnear HR (2015) *Patient-reported 'ever had' and 'current' long-term physical symptoms after prostate cancer treatments*. BJU Int 116: 397–406

[5] P. Amedro, A. Basquin, V. Gressin, P. Clerson, X. Jais, J.-B. Thambo, D. Bonnet (2014).Quality of life of patients with pulmonary arterial hypertension associated with congenital heart disease: The multicenter cross-sectional ACHILLE study. European Respiratory Journal, 44, p. P2384

[6] S.Y. Cheng, Y.H. Lai, S.C. Chen, S.C. Shun, Y.M. Liao, S.H. Tu, C.S. Chen, C.Y. Hsiang, C.M. Cheng. (2012). Changes in quality of life among newly diagnosed breast cancer patients in Taiwan. Journal of Clinical Nursing, 21, pp. 70-79,

[7] G. Costa-Requena, A. Rodríguez, P. Fernández-Ortega. (2013). Longitudinal assessment of distress and quality of life in the early stages of breast cancer treatment. Scandinavian Journal of Caring Sciences, 27, pp. 77-83,

[8] P. Gogou, E. Tsilika, E. Parpa, I. Kouvaris, D. Damigos, M. Balafouta, V. Maureas, K. Mystakidou. (2015).The impact of radiotherapy on symptoms, anxiety and QoL in patients with cancer.Anticancer Research, 35, pp. 1771-1775

[9] S.A. Goh, J.R. Steele, S.C. Jones, B.J. Munro. (2013).Self-reported side effects of breast cancer treatment: A cross-sectional study of incidence, associations, and the influence of exercise Cancer Causes Control, 24, pp. 517-528,

[10] W.A. Bardwell, L. Fiorentino. (2012). Risk factors for depression in breast cancer survivors: An update. International Journal of Clinical and Health Psychology, 12, pp. 311-331

[11] .F.A. Duijts, M.P. van Egmond, E. Spelten, P. van Muijen, J.R. Anema, A.J. van der Beek.(2014). Physical and psychosocial problems in cancer survivors beyond return to work: A systematic review. Psychooncology, 23, pp. 481-492.

[12] J. Howard-Anderson, P.A. Ganz, J.E. Bower, A.L. Stanton. (2012).Quality of life, fertility concerns, and behavioral health outcomes in younger breast cancer survivors: A systematic review. Journal of the National Cancer Institute, 104, pp. 386-405,

[13] C.C. Bornbaum, K. Fung, J.H. Franklin, A. Nichols, J. Yoo, P.C. Doyle. (2012).A descriptive analysis of the relationship between quality of life and distress in individuals with head and neck cancer.Supportive Care in Cancer, 20, pp. 2157-2165,

[14] H. Oh, Y. Seo, H. Jeong, W. Seo.(2012).The identification of multiple symptom clusters and their effects on functional performance in cancer patients.Journal of Clinical Nursing, 21, pp. 2832-2842,

[15] Clegg, A., Young, J., Iliffe, S., Rikkert, M.O., and Rockwood, K. (2013).Frailty in elderly people. Lancet. 381: 752–762

[16] Harrington JM. (2011). Implications of treatment on body image and quality of life. Semin Oncol Nurs.;27(4):290–299. doi: 10.1016/j.soncn.2011.07.007

[17] Taylor-Ford, M., Meyerowitz, B. E., D'orazio, L. M., Christie, K. M., Gross, M. E., & Agus, D. B. (2013). Body image predicts quality of life in men with prostate cancer. Psycho-Oncology, 22(4), 756-761.

[18] Isbarn H, Boccon-Gibod L, Carroll PR, Montorsi F, Schulman C, Smith MR, et al. (2009). Androgen deprivation therapy for the treatment of prostate cancer: consider both benefits and risks. Eur Urol . 55(1):62–75. doi: 10.1016/j.eururo.2008.10.008

[19] Yu Ko WF, Degner LF, Hack TF, Schroeder G. (2010).Penile length shortening after radical prostatectomy: men's responses. Eur J Oncol Nurs. 14(2):160–165

[20] Parás-Bravo, P., Salvadores-Fuentes, P., Alonso-Blanco, C., Paz-Zulueta, M., Santibañez-Margüello, M., Palacios-Ceña, D., ... & Fernández-de-las-Peñas, C. (2017). The impact of muscle relaxation techniques on the quality of life of cancer patients, as measured by the FACT-G questionnaire. PloS one, 12(10), e0184147.

[21] Charalambous.(2011) A. Integrative oncology in the Middle East: Role of traditional medicines in supportive cancer care, a conference of the Middle East Cancer Consortium. Eur J Integr Med. 3:125–31.

[22] Pernar, C. H., Ebot, E. M., Wilson, K. M., & Mucci, L. A. (2018). The Epidemiology of Prostate Cancer. Cold Spring Harbor perspectives in medicine, a030361

[23] H. Badr, P. Krebs. (2013).A systematic review and meta-analysis of psychosocial interventions for couples coping with cancer. Psychooncology, 22, pp. 1688-1704,

[24] Maria Lavdaniti (2015) Quality of Life in Cancer Patients- A Nursing Perspective . J Nurs Care 4:e126. doi:10.4172/2167-1168.1000e126

[25] Rueda JR, Solà I, Pascual A, SubiranaCasacuberta M (2011) Non-invasive interventions for improving well-being and quality of life in patients with lung cancer. Cochrane Database Syst Rev 7: CD004282.

[26] Hopwood, P., Fletcher, I., Lee, A., & Al Ghazal, S. (2001). A body image scale for use with cancer patients. European journal of cancer, 37(2), 189-197.

[27] Ferrans, C.E. (1996). Development of a conceptual model of quality of life. Scholarly Inquiry for Nursing Practice: An International Journal, 10(3), 293-304.

[28] Jacobson E. Progressive relaxation. Chicago: University of Chicago Press. 1938.

[29] M. Miret, M. Cabello, C. Marchena, B. Mellor-Marsá, F.F. Caballero, C. Obradors-Tarragó, J.M. Haro, J.L. Ayuso-Mateos. (2015). The state of the art on European well-being research within the area of mental health International Journal of Clinical and Health Psychology, 15, pp. 171-179,

[30] Andersen, L.M. Thornton, C.L. Shapiro, W.B. Farrar, B.L. Mundy, H.C. Yang, W.E. Carson.((2010). Biobehavioral, immune, and health benefits following recurrence for psychological intervention participants Clinical Cancer Research, 16, pp. 3270-3278,

[31] Cordella, M., & Poiani, A. (2014). Complementary psychological therapies. In Behavioural Oncology (pp. 551-662). Springer, New York, NY.

[32] Bechis, S. K., Carroll, P. R., & Cooperberg, M. R. (2010). Impact of age at diagnosis on prostate cancer treatment and survival. Journal of Clinical Oncology, 29(2), 235-241

[33] A Jemal, R Siegel, J Xu , et al: (2010).Cancer statistics, CA Cancer J Clin 60: 277– 300,2010 Crossref, Medline

[34] Heinzer, T Steuber(2009): Prostate cancer in the elderly Urol Oncol 27: 668– 672,

[35] Bashir MN, Ahmad MR, Malik A (2014). Risk factors of prostate cancer: a case- control study in Faisalabad, Pakistan. Asian Pac J cancer Prev, 15, 10327-30

[36] Tyson, M. D., Andrews, P. E., Etzioni, D. A., Ferrigni, R. G., Humphreys, M. R., Swanson, S. K., & Castle, E. K. (2013). Marital status and prostate cancer outcomes. Canadian journal of urology, 20(2), 6702-6706.

[37] Mouw, T., Koster, A., Wright, M. E., Blank, M. M., Moore, S. C., Hollenbeck, A., & Schatzkin, A. (2008). Education and risk of cancer in a large cohort of men and women in the United States. PloS one, 3(11), e3639

[38] S.K. Lutgendorf, A.K. Sood. (2011). Biobehavioral factors and cancer progression: Physiological pathways and mechanisms Psychosomatic Medicine, 73, pp. 724-730,

[39] Parent M E, Desy M, Siemiatycki J (2009). Does exposure to agricultural chemicals increase the risk of prostate cancer among farmers? Mcgill J Med, 12, 70-7

[40] Ragin C, Davis B, Tadesse H, Daniels D (2012). Farming, reported pesticides use, and prostate cancer. Am J Men's Health, 6 , 224-9.

[41] Sritharan, J., Demers, P. A., Harris, S. A., Cole, D. C., Peters, C. E., & Villeneuve, P. J. (2016). O22-4 Occupational risk factors for prostate cancer in a canadian national level case-control study.

[42] Barry, K. H., Martinsen, J. I., Alavanja, M. C., Andreotti, G., Blair, A., Hansen, J., ... & Tryggvadottir, L. (2017). Risk of early-onset prostate cancer associated with occupation in the Nordic countries. European Journal of Cancer, 87, 92-100.

[43] Liang, Z., Xie, B., Li, J., Wang, X., Wang, S., Meng, S., ... & Xie, L. (2016). Hypertension and risk of prostate cancer: a systematic review and meta-analysis. Scientific reports, 6, 31358

[44] Tseng, C. H. (2011). Diabetes and risk of bladder cancer: a study using the National Health Insurance database in Taiwan. Diabetologia, 54(8), 2009-2015

[45] Kenfield SA, Stampfer MJ, Chan JM, Giovannucci E (2011). Smoking and prostate cancer survival and recurrence. JAMA 303 :2548-2555

[46] Rieken M, Shariat SF, Kluth LA, Fajkovic H, Rink M, Karakiewicz PI et al (2015). Association of cigarette smoking and smoking cessation with biochemical recurrence of prostate cancer in patients treated with radical prostatectomy. Eur Urol 68:949–956

[47] Bashir MN, Malik MA. (2015).Case-control study of diet and prostate cancer in a rural population of Faisalabad, Pakistan. Asian Pac J Cancer Prev. 16:2375–8.

[48] Allott, E. H., Arab, L., Su, L. J., Farnan, L., Fontham, E. T., Mohler, J. L., ... & Steck, S. E. (2017). Saturated fat intake and prostate cancer aggressiveness: results from the population-based North Carolina-Louisiana Prostate Cancer Project. Prostate cancer and prostatic diseases, 20(1), 48

[49] Alexander DD, Mink PJ, Cushing CA, Sceurman B. (2010). A review and meta-analysis of prospective studies of red and processed meat intake and prostate cancer. Nutr J.;9:50

[50] Richman EL, Kenfield SA, Stampfer MJ, Paciorek A, Carroll PR, Chan JM (2011) Physical activity after diagnosis and risk of prostate cancer progression: data from the cancer of the prostate strategic urologic research endeavor. Cancer Res 71:3889–3895

[51] Sinha, R., Park, Y., Graubard, B. I., Leitzmann, M. F., Hollenbeck, A., Schatzkin, A., & Cross, A. J. (2009). Meat and meat-related compounds and risk of prostate cancer in a large prospective cohort study in the United States. American journal of epidemiology, 170(9), 1165-1177

[52] Madersbacher, S., Alcaraz, A., Emberton, M., Hammerer, P., Ponholzer, A., Schröder, F. H., & Tubaro, A. (2011). The influence of family history on prostate cancer risk: implications for clinical management. BJU international, 107(5), 716-721

[53] Sharma, M., Lawson, J., Karunanayake, C., Dosman, J. A., & Punam, P. (2016). Prostate cancer, farming and other risk factors: A mini review. J Pros Canc, 1(109), 231

[54] Soung, N. K., & Kim, B. Y. (2015). Psychological stress and cancer. Journal of Analytical Science and Technology, 6(1), 30

[55] Conti CM, Fulcheri M. Interrelationship between psychology and cytokines. J Bioi Regul Homeost Agents 2010; 24:485-90.

[56] Harrington, J. M., Jones, E. G., & Badger, T. (2009, March). Body image perceptions in men with prostate cancer. In Oncology nursing forum (Vol. 36, No. 2).

[57] Chang, O., Choi, E. K., Kim, I. R., Nam, S. J., Lee, J. E., Lee, S. K., ... & Cho, J. (2014). Association between socioeconomic status and altered appearance distress, body image, and quality of life among breast cancer patients. Asian Pac J Cancer Prev, 15(20), 8607-12

[58] Schaake, W., de Groot, M., Krijnen, W. P., Langendijk, J. A., & van den Bergh, A. C. (2013). Quality of life among prostate cancer patients: A prospective longitudinal population-based study. Radiotherapy and Oncology, 108(2), 299-305

[59] de la Torre-Luque, A., Gambara, H., López, E., & Cruzado, J. A. (2016). Psychological treatments to improve quality of life in cancer contexts: A meta-analysis. International Journal of Clinical and Health Psychology, 16(2), 211-219.

[60] Shahriari, M., Dehghan, M., Pahlavanzadeh, S., & Hazini, A. (2017). Effects of progressive muscle relaxation, guided imagery and deep diaphragmatic breathing on quality of life in elderly with breast or prostate cancer. Journal of education and health promotion, 6

[61] Chien, C. H., Liu, K. L., Chien, H. T., & Liu, H. E. (2014). The effects of psychosocial strategies on anxiety and depression of patients diagnosed with prostate cancer: a systematic review. International journal of nursing studies, 51(1), 28-38

[62] Klein, J., Hofreuter-Gätgens, K., Lüdecke, D., Fisch, M., Graefen, M., & von dem Knesebeck, O. (2016). Socioeconomic status and health-related quality of life among patients with prostate cancer 6 months after radical prostatectomy: a longitudinal analysis. BMJ open, 6(6), e010968

[63] Knight, S. J., Latini, D. M., Hart, S. L., Sadetsky, N., Kane, C. J., DuChane, J., & Carroll, P. R. (2007). Education predicts quality of life among men with prostate cancer cared for in the department of Veterans affairs. Cancer, 109(9), 1769-1776

[64] Augustus,J. S., Kwan, L., Fink, A., Connor, S. E., Maliski, S. L., & Litwin, M. S. (2009). Education as a predictor of quality of life outcomes among disadvantaged men. Prostate cancer and prostatic diseases, 12(3), 253-258.

[65] Fenn, K. M., Evans, S. B., McCorkle, R., DiGiovanna, M. P., Pusztai, L., Sanft, T., ... & Abu-Khalaf, M. (2014). Impact of financial burden of cancer on survivors' quality of life. Journal of oncology practice, 10(5), 332-338.

[66] Daskivich, T. J., van de Poll-Franse, L. V., Kwan, L., Sadetsky, N., Stein, D. M., & Litwin, M. S. (2010). From bad to worse: comorbidity severity and quality of life after treatment for early-stage prostate cancer. *Prostate cancer and prostatic diseases*, *13*(4), 320.

[67] eisch, S. F., Van Blarigan, E. L., Chan, J. M., Stampfer, M. J., & Kenfield, S. A. (2017). Prostate cancer progression and mortality: a review of diet and lifestyle factors. World journal of urology, 35(6), 867-874

[68] Liu, Y., & Cao, C. (2014). The relationship between family history of cancer, coping style and psychological distress. Pakistan journal of medical sciences, 30(3), 507.

[69] Kao, Y. L., Tsai, Y. S., Ou, F. Y., Syu, Y. J., Ou, C. H., Yang, W. H., ... & Wang, J. D. (2015). Determinants of quality of life in prostate cancer patients: A single institute analysis. Urological Science, 26(4), 254-258

[70] Harrington, J. M., & Badger, T. A. (2009). Body image and quality of life in men with prostate cancer. Cancer nursing, 32(2), E1-E7

[71] Harrington, J. M. (2007). Body image and quality of life among men with prostate cancer. The University of Arizona