Relation between Body Image, Quality of Life, and Sexual Function among Patients Post Urinary Diversion at Urology and Nephrology Center

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Received: 13 /06/2025

Revised: 28/ 06/ 2025

Accepted: 29/ 06/2025

ABSTRACT

Background: Urinary diversion (UD) is a surgical procedure which redirects the path of urine excretion and creating an alternative route. It is considered a an approach of therapeutic type which can be either interim or persistent, with creating a stoma usually from the ureters. **Aim:** the study's aim was exploring the correlation between life quality, body image, and sexual function among patients undergoing urinary diversion at Urology and Nephrology Center. **Subjects and Method Design:** A research design of descriptive correlation type was utilized. **Setting:** the study was carried out in inpatient and outpatient clinics at urology and nephrology center in Mansoura, Egypt. **Subjects:** an inclusion of 148 patients as purposive sample of whom undergoing urinary diversion were conducted. **Tools:** for collection of data, four tools were employed which comprised of; Structured interview, Body Image Scale, WHO Quality of Life (QOL) Scale, and Sexual function index (male and female). **The Results**: It has been demonstrated by the current study that, the males were more prevalent in this study compared to females with a moderate level of body image and high quality of life level. Both sex had an optimal sexual function. **Conclusion**: A positive correlation which is statistically significant was evident between the image of body, life's quality and the sexual function of males and females. **Recommendations**: Designing future health education programs about urinary diversion based on patients' experiences and needs to promote the body image, quality of their life and sexual function regarding urinary diversion.

Keywords: Body Image, Patients, Quality of Life, Sexual Function, Urinary Diversion

INTRODUCTION

Urinary diversion is defined as a surgical approach which comes along with alterations of functional and metabolic type that impact the patient's life quality. Following cancerous bladder excision, an urinary diversions are conducted in order to reposition the flow of urine to normal path or create a novel path for the purpose of urine release. Stomas more commonly in older adults with conditions such as bladder cancer, traumatic bladder injuries, congenital bladder defects, and unreparable birth defects (El-Masry & Al-Ghamdi, 2023).

The eighth most prevalent cancer in women and the fourth most common in males is bladder cancer (BC). It is responsible for 3% of female malignancies and 7% of male cancers. Bladder cancer is more prevalent in those between the ages of 50 and 70, and its frequency rises with age, declining in those under 40 (Ferlay et al., 2021).

In men, over the age 40 years, urinary cancer increase gradually due to functional or structural changes of the prostate leads to discomfort associated with bladder distension or urinary retention. Therefore, health professional's assessment and support the QoL, body image and sexual function of men helps to patient's body satisfaction and self-esteem in order to prevent the occurrence of other diseases (Amaral, Costa, Lima, Domingues, Barbosa, & Belasco, 2020).

A global statistical insight reveals that roughly 550,000 novel cases of bladder cancer (BC) are evident, and roughly 200,000 deaths attributed to cancer of bladder (Bray, Ferlay, Soerjomataram, Siegel, Torre, & Jemal, 2018). Egypt stands as the country with highest prevalence of bladder cancer across the globe. The incidence among male population is roughly twice over than that relevant to communities within west. In accordance with the National Cancer Institute, it makes up 30.3% of whole cancers, 16% of male cancers, and 14.3% of female cancer (Saleh, Ali, & Elkhateb, 2020).

In terms of bladder cancer of muscle-invasive type, radical cystectomy (RC) with lymphadenectomy is deemed the "gold standard" treatment modality (Witjes, Bruins, Cathomas, Compérat, Gakis, & van Der Heijden, 2021) and (Babjuk, Burger, Capoun, Cohen, Compérat, Escrig, & Sylvester, 2022).

Body image is an intricate, multidimensional concept that encompasses an individual's thoughts, perceptions, behaviors, and emotional reactions related to their physical appearance (Barnes, Abhyankar, Dimova, & Best, 2020). Also, it turns out that some studies focus on a one-dimensional construct of body image by focus on the negative remarks, mainly relevant to those seeking mental health treatment by variations, ranging from negative to positive (Chan, Lee, Koh, Lam, Leung, & Tang, 2020).

In accordance with the definition provided by the World Health Organization, quality of life is an individual's perception of their position in life, within the framework of their cultural and value systems, and in relation to their goals, expectations, standards, and concerns. It is influenced by a variety of factors, including physical health, psychological well-being, personal beliefs, social connections, and interactions with key aspects of the surrounding environment. This definition highlights that quality of life is subjective and varies from person to person, depending on their unique aspirations and expectations (Seghers, Kregting, Huis-Tanja, Soubeyran, O'hanlon, Rostoft, & Portielje, 2022).The World Health Organization Quality of Life (WHOQOL).While the urinary continence consider an independent prognostic factor that impaired the patient quality of life (QoL) post-surgery (Grimm, Grimm, Buchner, Schulz, Jokisch, Stief, & Kretschmer, 2019).

Sexual function is a concept that is best described as multifaceted and subjective which evolves with age and life experience. It encompasses more than just the capability to physically engage in sexual activity or conceive; it also corresponds to other essential aspects of human nature, such as eroticism, sexual preference, gender, sexual and sexual identities, emotional attachment/love, and procreation (Den Ouden, Pelgrum-Keurhorst, Uitdehaag, & De Vocht, 2019). Disorders relevant to substance use are conditions correlated with problematic drug-using behavior that in turn negatively impacts individual's social life. To name but a few, these issues encompass negligence at home, school, and job place, as well as potential legal issues for the individual. It can seriously harms societies in ways that might be political, social, economic, cultural or health-related. In addition to that, it has a consequence that are socio-cultural in nature including a surge in crimes induced by addiction like abuse of children, failure to attain education, homicides, theft, unemployment, and

more separations (Kabbash, Zidan & Saied, 2022).

Significance of the study

Urinary diversion involves rerouting the ureters to the skin surface to restore urinary function, often through orthotopic reconstruction using segments of the patient's intestine. The selection of the diversion type will most probably lead to decrease the postoperative morbidity and improve the life's quality (Sperling, Lee, & Aggarwal, 2021). Urinary diversion is a key factor that consider when radical cystectomy.

A comprehensive method for treating and protecting the patient's life after radiation therapy is a radical cystectomy along with a pelvic lymphadenectomy. When a woman has a radical cystectomy, her uterus, fallopian tubes, ovaries, anterior vagina, bladder, and urethra are all removed. It involves the removal of the seminal glands, prostate, urethra, and bladder in males (Rossetti, Schindler, Sutter, Rüegg, Zubler, Novy, & Alvarez, 2020).

Urinary diversion (UD) selection is a crucial choice that is frequently influenced by clinical features, pathological and anatomical considerations, and patient preferences (e.g. histological subtype, tumor site). at this regard, centralization for RC at teaching and large volume institutions is linked to better perioperative outcomes, postoperative morbidity and mortality, and increased incidence of continent urinary diversion (CUD) (Mitra, Cai, Miranda, Bhanvadia, Quinn, Schuckman, & Daneshmand, 2022).

The most effective treatment for people with a high risk of developing muscle invasive bladder cancer is still radical cystectomy and urine diversion. More than eighty percent of patients undergo incontinent urine diversions, mainly to reduce problems and enhance postoperative voiding function, even though the majority of patients are eligible for orthotopic neobladder surgery. Therefore, we investigate the causes, prevalence, and management of voiding dysfunction in both male and female patients following surgery (Ghodoussipour, & Daneshmand, 2020).

AIM OF THE STUDY

Exploring the association between image of body, quality of life and sexual function among patients post urinary diversion at Urology and Nephrology Center.

Objectives

- Assess Assess body image among patients post urinary diversion at urology and nephrology center.
- Identify life's quality of patients post urinary diversion at urology and nephrology center.
- Sexual functions among patients post urinary diversion at urology and nephrology center.
- Find out the relation between image of body, quality of life, and sexual function across patients post urinary diversion at urology and nephrology center.

Research Question

What are a relation between body image, quality of life, and sexual function among patients post urinary diversion at urology and nephrology function?

SUBJECTS AND METHODS

A. Technical design

The technical design encompasses a description of data gathering tools, the design of research, setting, and subjects.

Study design

A research design of descriptive correlation type was utilized.

Study setting

The study was implemented in inpatient and outpatient clinics within nephrology and urology center in Mansoura. The Urology and Nephrology Center is comprised of two key divisions: the main facility, and the outpatient clinics building. Centralized inpatient care is delivered in the main building, which contains five departments—three dedicated to male

patients and two to female patients. Each department is equipped with 16 standard beds, supplemented by two additional smaller rooms, each furnished with 2 beds, to accommodate patient overflow or special care needs. Follow up of patients at the outpatient clinics building

Subjects

- The subjects involved in the study were a purposive sample of patients undergoing urinary diversion (both sexes) based on the following criteria.
- Patients who had permanent urinary diversion.
- Adult male and female patients.

Sample size

Based on data from literature *Saleh, Ali, and Elkateb (2020)*, yielding a precise sample size is doable by using the following formula, as it is fundamentally important to set error of 5% and type 1 error of 5% in order to have an accurate sample size:

$$n = \frac{(Z1-\alpha/2)^2.SD^2}{d^2}$$

So,

$$n = \frac{(1.96)^2.(9.3)^2}{(1.5)^2} = 147.6$$

In accordance with the formula, a total of 148 patients is the necessitated sample size for the study.

Collection of data tools

In terms of data collection, four tools were implemented:

Tool (I): Structured interview

Development of this tool was carried out by the researcher in an arabic language for the assessment of socio demographic characteristics and clinical data.

This tool covered two parts:

Part (A): Patient's socio-demographic characteristics

It was included patients' socio-demographic characteristics regard to age, sex, educational level, residence and occupation.

Part (B): Patient's clinical data

It was included patients' body mass index, medical history, family history, and complications after permanent urinary diversion.

Tool (II): Body Image Scale:

This scale is a brief self-report which developed by McDermott et al., (2014) and Hopwood et al., (2001) and underwent translation to Arabic by Gamal, (2015) in order to evaluate three dimensions of body image for patients of urinary diversion: the Cognitive (such as contentment with appearance), the Behavioral (such as difficulties staring at the bare body), and the Affective (such as self-consciousness). Nine items make up the Body Image Scale, which employs a four-point Likert scale with 0 representing "not at all," 1 representing "a little," 2 representing "quite a bit," and 3 representing "very much.".

Scoring system: The sum score is between 0 and 27 degrees. Patients who score between 0 and 9 are the least concerned about their body image, those who score between 10 and 18 are somewhat concerned, and those who score between 19 and 27 are highly concerned.

Tool (III): WHO Quality of Life (QOL) Scale (Brief Version):

This scale was developed by World Health Organization (1998), in an English language and translated into Arabic by Ahmed (2008). It is used to assess quality of life. The WHOQOL-Brief has 26 items derived from WHOQOL-100; it is a multicultural, multilingual, generic quality of life instrument. This measure places more emphasis on the participants' personal evaluations than on their actual living circumstances. The circumstances in the two weeks before the assessment serve as the basis for evaluation. The following major dimensions are measured by the WHOQOL-Brief: general health and overall QOL (2 items), which are not part of the scoring system; the physical domain (7 items), psychological domain (6 items), social connections domain (3 items), and environmental domain (8 items). Only three of the 26 questions are negative reverse and cover question 3, question 4, and question 26); the other 23 are positive. Questions inquire 1(Not at all), 2 (Not much), 3 (Moderately), 4 (Mostly), and 5 (Completely).

Scoring system: The patient's quality of Life was deemed high in case the percentage exceeded 60% and low in case it is below 60%.

Tool (IV): Sexual functions index:

Part (A): Male Sexual Functions Questionnaire

It was created in English by Elalfi (2019) to evaluate the husband's sexual functions. In order to evaluate sexual desire, ejaculation, frequency of sexual activity, existence of variation in the wife's vaginal opening and its impact on sexual interaction, satisfaction, and degree of satisfaction, it included seven questions. The response of three questions ranges from 0 to 1 while the other four questions range from 0 to 2, for all questions the higher score indicates a better response.

Scoring system: The total score for questionnaire is the sum of the scores of the individual items and ranges from 0 was classified sexual dysfunction to 11 was classified normal sexual function.

Part (B): Female Sexual Functions Index

The 19-item Female Sexual Function Index survey was taken from Wiegel et al. (2005). Desire, arousal, lubrication, orgasm, pleasure, and pain were the six areas of sexual functions that were covered. Desire (two items) was evaluated in the first domain, arousal (four items) in the second, lubrication (four items) in the third, orgasm (three items) in the fourth, satisfaction (three items) in the fifth, and pain (three items) in the sixth. Each item was evaluated based on the participant's experiences over the previous four weeks. Sexual desire was rated on a scale from 1 (almost never or never) to 5 (almost always or always). Arousal was scored starting by 0 (sexual activity non-evident) to 5 (remarkably high). Lubrication confidence ranged starting by 0 (sexual activity non-evident) to 5 (remarkably high). Orgasm difficulty was measured from 0 (no sexual activity) to 1 (extremely difficult or impossible), and satisfaction levels were rated from 1 (very dissatisfied) to 5 (very satisfied).

Scoring system: Items 1, 2, 15, and 16 were scored on a scale from 1 to 5, while the remaining questions had a scoring range from 0 to 5 and included an additional option for “no sexual activity.” The overall Female Sexual Function Index (FSFI) score was calculated by summing the scores of the six individual domains. A total score above 26.55 indicated normal sexual function, whereas a score below 26.55 suggested the presence of sexual dysfunction.

B- Operational design

The study field of work was carried out through the following phases:

Preparatory Phase

It includes reviewing of relative in addition to recent literature relevant to the topic of research, various studies and theoretical knowledge of diverse aspects of the arguments utilizing all official websites as PUBMED, GOOGLE SCHOLAR, MEDLINE database, CINAHL, EBESCO Cochrane Database and Scopus, Scientific books, Articles, and Periodicals as well as Nursing Centre were also consulted to help the researcher acquire a more thorough comprehension of the topic and to aid in the development of data collection tools.

Tools validity

The validity of content was putted into examination by a conglomerate of nine experts in medical surgical nursing and assured that the content was assessed what the researcher wants to measure.

Tools reliability

Tools'reliability was assessed through test of Cronbach's Alpha which is testing in internal consistency, the reliability of Body Image Scale was 0.75, while the reliability of WHO Quality of Life (QOL) Scale (Brief Version) was 60% is indicated as the optimal cut-off point for assessing QOL, the reliability of Male Sexual Functions questionnaire was 0.70 and the Female Sexual Functions Index reliability was 0.97.

Pilot Study

An implementation of pilot study was performed on 10% of the sample (15 patients) prior to the primary study to evaluate the clarity, do ability, and data gathering tools capabilities, as well as to determine the appropriate duration needed for conducting the interviews.

Field work

Data collection tools were designed following a review of both recent and previous local and international literature, along with theoretical insights from books, articles, and online sources covering various aspects of the study. The researcher also provided all participating patients with a clear explanation of the study's purpose. Patients were assured that all information will be confidential and it will be used only for research purpose. The researcher attended at outpatient clinics five days per week in the morning shift from 9 am to 12 pm. Oral consent for participation was obtained from the studied patients following illustration the study's aim. Following that, the researcher initiated the interview process, with each session lasting approximately 15 to 30 minutes per patient.

The four tools were completed by the researcher during the interview. After each tool was completed, the researcher reviewed all items with the patient to ensure that no information was omitted. The fieldwork was conducted over a four-month period, starting in July 2024 and concluding by the end of October 2024.

C- Administrative design

Prior to initiating any phase of the study, an official letter from the Dean of the Faculty of Nursing at Port Said University was submitted to the Director of the Urology and Nephrology Center to acquire allowance for conducting collection of data at the center. The director provided official written consent for the study's conduct, and each participant (patient) provided verbal agreement after being made aware of the study's nature and objectives.

Ethical considerations

The study received approval from the Research Ethics Committee (REC) of the Faculty of Nursing, Port Said University, under code number NUR 3/9/2023 (29), in accordance with the committee's ethical standards. Approval to carry out the study was secured from the Director of the Urology and Nephrology Center following a thorough explanation of the study's aims and methodology. Verbal informed consent was also obtained from all participants after clearly outlining the study details. Patients were made aware of their right to withdraw from the research at any point without any negative consequences. The researcher maintained participant anonymity and confidentiality, ensuring that all gathered data would be handled discreetly and used exclusively for the

purposes of the study.

D. Statistical design

SPSS software, version 25 (PASW Statistics for Windows, Version 25.0; SPSS Inc., Chicago, IL) was employed for the purpose of analysing data. Presentations of qualitative variables were carried out as frequencies in addition to percentages. Variables of qualitative type were summarized utilizing the median with minimum and maximum values for data of non-normally distributed type, meanwhile the mean ± standard deviation for data of normally distributed type, following normality testing with the Kolmogorov-Smirnov test. A level of significance of ≤0.05 was deemed statistically significant. In terms of data of non-normally distributed type, One-Way ANOVA was utilized. The implementation of Spearman's rank-order correlation was carried out to evaluate both direction and strength of the correlation between two non-normally distributed continuous variables and/or ordinal variables.

RESULTS

Table 1 shows that about 70.9 % of studied patients treated with urinary diversion were in age group 50-60 years, While 70.9 % of them were male. Regarding the educational level 42.6% of the studied patients were Primary or illiterate. Also 59.5 % of studied patients came from rural origin. In addition to 70.9 % of patients still in the work.

Figure 1 Illustrates the body image of studied patients undergoing urinary diversion, according to the figure 32.4% & 11.5% of male and female patients displayed minimum body image respectively. While, about 35.8% & 16.9% of male and female patients displayed moderate body image respectively. About 2.7% & 0.7% of male and female patient displayed high body image respectively.

Figure 2 Illustrates the life's quality across patients who are subjected to urinary diversion, according to the figure 56.0% & 23.0% of both male and female individuals revealed high quality of life respectively. While, about 14.9% & 6.1% of male and female individuals displayed low quality of life respectively.

Figure 3 Illustrates the male sexual functions among patients after urinary diversion, according to the figure about 64% of male patients displayed male sexual functions. While, about 36% of male patients displayed male sexual dysfunctions.

Figure 4 Illustrates the female sexual function among patients after urinary diversion, according to the figure about 62.8% of female patients displayed female sexual functions. While, about 37.2% of female patients displayed female sexual dysfunction.

Table 2 shows that a positively significant correlation was evident between the body image, life's quality and the sexual functions of males and females.

Table (1): Features of socio-demographic type of studied patients after urinary diversion (n=148)

socio-demographic features	**N**	**%**
Age / Years		
20< 30	2	1.4
30< 40	12	8.1
40< 50	29	19.6
50- 60	105	70.9
Mean ± S.D	**3.6014 ± 0.69732**	
Sex		
Male	105	70.9
Female	43	29.1
Educational level		
Primary or illiterate	63	42.6
Moderate education	60	40.5
University education	25	16.9
Residence		
Rural	88	59.5
Urban	60	40.5
Occupation		
Working	105	70.9
Not working	10	6.8
House wife	33	22.3
	(n=148)	**%**

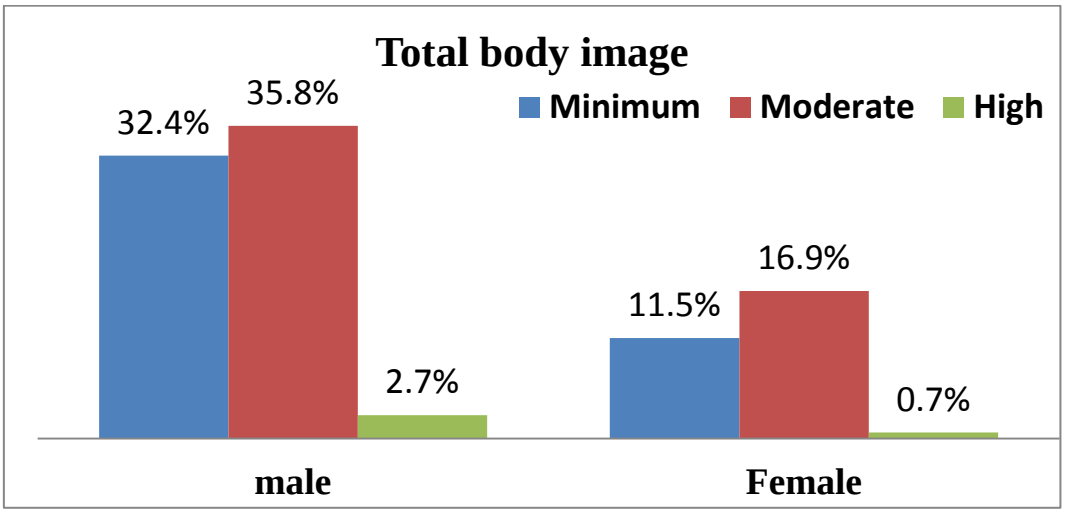

Figure (1): Body image of studied patients after urinary diversion (N=148).

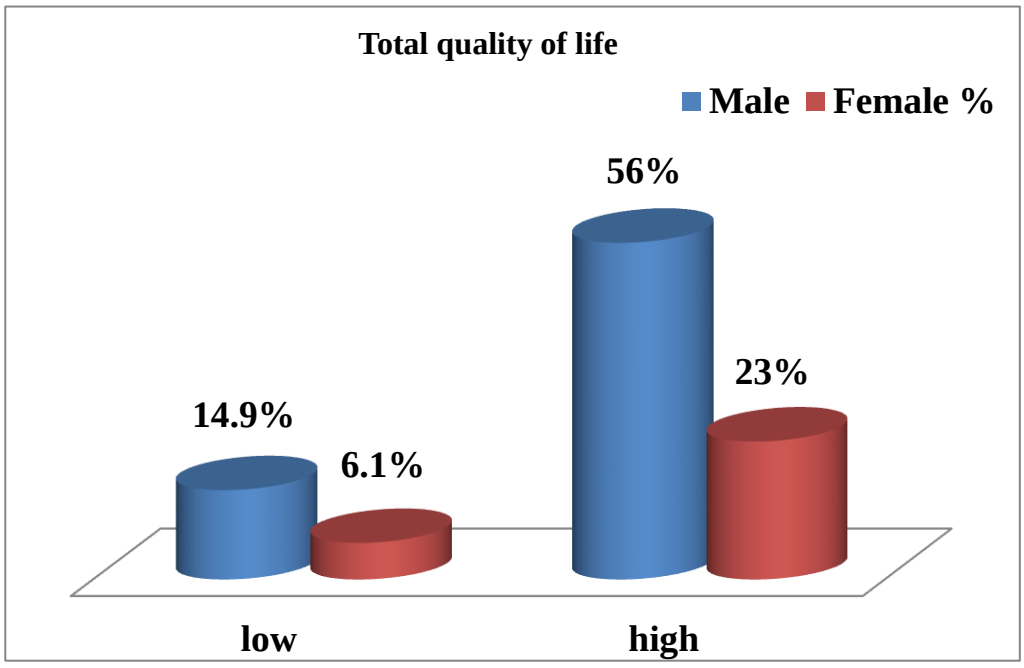

Figure (2): Quality of Life of studied patients after urinary diversion (N=148).

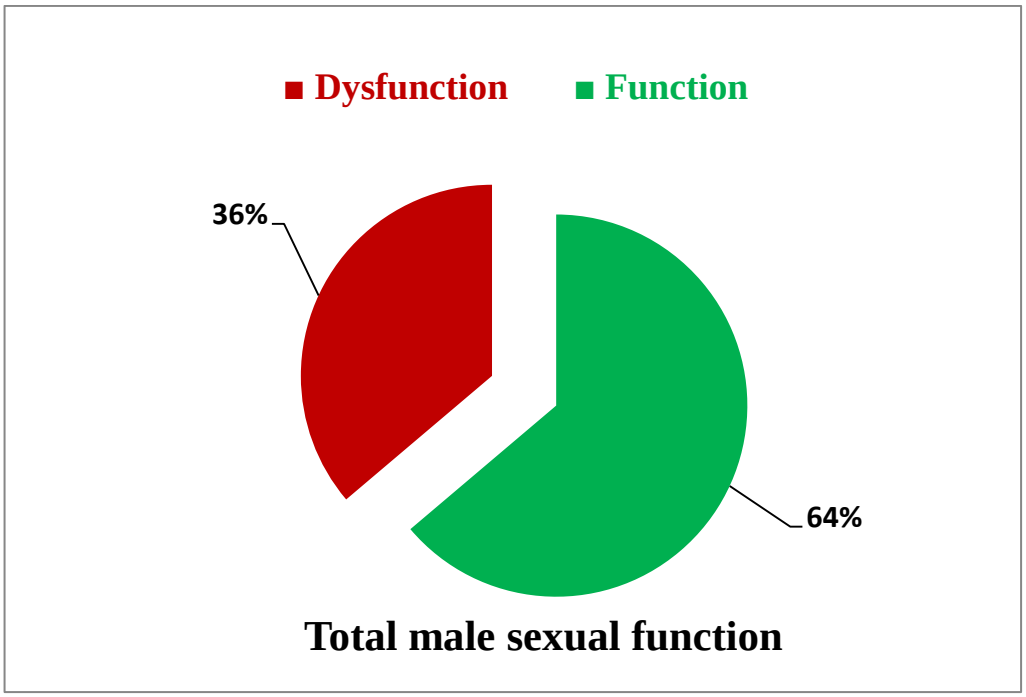

Figure (3): Total male sexual function of studied patients after urinary diversion (N=105).

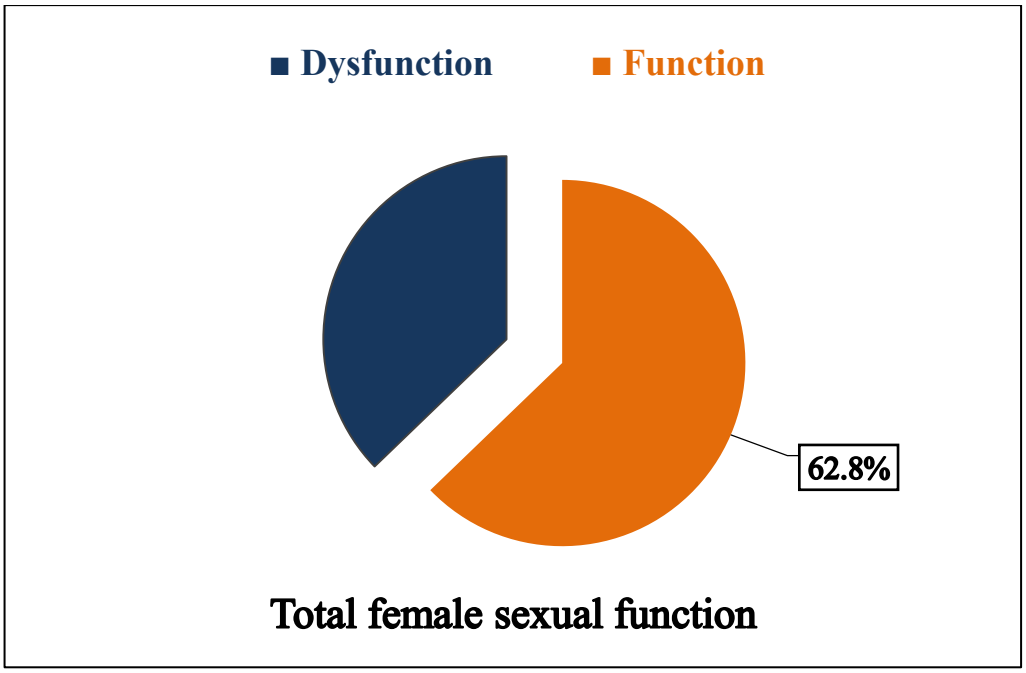

Figure (4): Total female sexual function of studied patients after urinary diversion (N=43).

Table (2): correlation between body image, quality of life, males and females sexual functions among studied cases.

	Quality of life		Males		Females	
	R	P value	R	P value	R	P value
Body image	-0.445	<0.001*	-0.424	<0.001*	-0.469	0.002*
Quality of life	-	-	0.532	<0.001*	0.381	0.012*

*statistically significant at P≤ 0.05

DISCUSSION

Urinary diversion is a major surgical procedure and life threatening event as it creates alternated new way or new place or path for urine to exit from the body. It has done when the urine can't flow normally due to block of the normal pathway or when there is a need to bypass of a disease in the ureter, bladder, urethra route or other urinary tract diseases (Mahdy, Ameen & Mousa, 2018 & Lenis, Lec & Chamie, 2020).

Urinary diversion is a traumatic event that is associated with a 20–40% reduction in physiologic and functional capacity, as it has significant impacts on normal voiding, sexual function, body image, psychosocial adjustment, social state, well-being, and mental health. These concerns have direct effects on patients' quality of life and the possible effects of treatment and recovery (Mohamed & Fashafsheh, 2019; Kamat & Black, 2021 & Barros, Favorito, Nahar, Almeida & Ramasamy, 2023).

Demographic characteristics of the studied patients after urinary diversion:

In terms of the demographic background relevant to the current study, it has been shown that the studied patient's age ranged between 20 to 60 years old. The vast majority were over fifty years old. This finding might be attributable to the normal alterations of physiological type in patients which comes along with elevated percentage of the cancer with advanced age. This result is the same of the studies which held in Egypt by Mahdy et al., (2018); Mohamed & Fashafsheh,(2019) and Abdelwahid, Salama, Mohamed & Mohamed, (2022), who found that the majority of studied patients were aged ranged from 50-60 years old. In contrast, with the result of a study held in China by Zou, Zhang, Qin, Zhang & Yang, (2022), who figured out that over half of them were age varied from 60 years or more.

Regarding to sex, males were more prevalent in this study compared to females as they constituted the majority of the studied patients. As regard to the residence, more than half of the studied patients were living in rural. This result may be due to the bladder and prostatic cancers are the most prevalent cancers with highly incidence among adult males globally. Also, there are considered as the main problem in urology especially in the rural area as a result of delaying diagnosis and treatment.

This result is supported by the study of Mahdy et al., (2018) and a study implemented within Egypt by Mahmoud, Ahmed, Gendy & Ali, (2022), who showed that the majority of them were males and living in rural area. On the other hand, this study is come in disagreement with the studies done in Egypt by Abd El-waged, Abd El-Latif & Mohamed, (2022) and Shaaban et al., (2022), they showed that more than half of the studied patients were residing in urban areas.

Moreover, the education's level; this study showed that the illiterates were prevailing as nearly half of the studied patients were primary or illiterate. This result may be owing to the fact that the majority of them were living in rural areas. This result is similarity to the study of Shaaban et al., (2022), who displayed that nearly half of them were illiterate. On the other hand, this result is contrasted to a study of Zou et al., (2022), who displayed that more than half of the studied patients had a junior/senior high level of education.

As regarding to the occupation, the current study reported that nearly three quarters of the studied patients were still in their work. This result may be due to the majority of them were young olders and living in rural area. This result is in agreement with the study of Abdelwahid, Salama, Mohamed & Mohamed, (2022), who reported that more than three quarters of them were still working. On the contrary, this study is in disharmony with the study held in Egypt by Alshaar, Ali & Allam, (2023), who reported that nearly three quarters of the studied patients were not working.

Body Image of studied patients after urinary diversion:

Urinary diversion is a complex surgery which has a great impact on different aspects of health, daily life activities and change in body shape which diminished the body image (Zewude, Derese, Suga & Teklewold, 2021, Singh, 2023 & Bahlburg et al., 2024). It has been mentioned by the present study that more than two thirds of studied patients displayed not at all response about their feeling dissatisfied with their body image. This result may be due to the psychological disturbance of these patients. This result is contrasted with the study

implemented in USA by Saidian et al., (2024), who showed that more than half of studied patients were displayed a little response about their feeling dissatisfied with their body.

Also, it has been shown by the ongoing study that over half of patients included in the study displayed quite a bit response about their viewing themselves less feminine/ masculine owing to the disease or treatment. This result may be due to the patients' knowledge regarding the natural of disease, methods of treatment and side effects of these methods. This result isn't concur with the study of Saidian et al., (2024), who revealed that more than two thirds of studied patients were displayed a little response about their self-reflection as less feminine/masculine as a consequence of your treatment or disease.

Furthermore, the current study illustrated that half of studied patients displayed quite a bit response about their feeling less sexually attractive as a result of disease or treatment. This result may be due to the patients' knowledge regarding the natural of disease, methods of treatment and side effects of these methods. In contrast with the study of Saidian et al., (2024), who mentioned that nearly half of studied patients were displayed not at all response about their feeling less sexually attractive as a result of disease or treatment.

According to the level of body image scale of the studied patients; this study displayed that more than one third of males and nearly one fifths of females had a moderate level of body image. This result might be attributed to the majority of the studied patients were males. This study is contrasted with the study done in Egypt by Ahmed, Abou-Abdou & Gaballah, (2019), who showed that more than three quarters of studied patients had a low level of body image.

Quality of Life of studied patients after urinary diversion:

Quality of life is multidimensional concept for cancer patients as it focuses on the effect of health on quality of life. It contributes to improve efficient treatment and prognosis. Subsequently, the functional and physical changes that occur after the surgery had a strong impact on their quality of life (Mahmoud, Hindawy & Hathout, 2019, Jung et al., 2020 & Huddart et al., 2020). In this study more than half of males and nearly one quarter of females had a high quality of life. This finding could be owing to the fact that most of patients tried to cope with the urinary diversion surgery. This study is in concurrence with the study of Mahmoud, et al., (2022) and Shaaban et al., (2022), they displayed that nearly half or roughly two thirds of patients in this study had a high quality of life.

Sexual Functions of studied patients after urinary diversion:

Sexual function is an important for the bladder cancer patients, but most stoma patients have sexual dysfunctions. Regardless the type of urinary diversion the urinary function and sexual activity are affected by the surgery which has a greater impact on their mental health and cause many complications with a bad effect on their quality of life (Elbadry et al., 2020& Lin, Yin & Chen, 2023). According to the sexual function of studied male patients; this study demonstrated that more than three quarters of them had sexual functions. This result may be due to males were more than females. Also, many patients try to accept their body image changes and adapt to their condition that help to reaffirm sexual desirability after surgery. This result concurrent with the study held in the United States by Nguyen, (2024), showed that more than half of men had sexual function. On contrary, this outcome is in disharmony with the study done in UK by Jubber et al., (2022), mentioned that two thirds of them were not sexually active.

As regard to the sexual function of studied female patients; the current study displayed that nearly two third of them had sexual functions. This finding might be attributable that many of patients try to accept their body image changes and adapt to their condition that help to improve sexual desirability after surgery. This result is agreement with studies held in Italy by Capone, (2022), and Cisternino et al., (2022), they displayed that more than one third of studied female patients had highly level of sexual satisfaction. On the other hand, this result is contrasted to study done in Denmark by Milling, Seyer-Hansan, Graugaard-Jensen, Jensen& Kingo, (2024) and Jubber et al., (2022), they displayed that more than three quarters of the studied female patients had no sexual activity.

Correlation between Body Image, Quality of Life, and Sexual Function among Patients after Urinary Diversion

The Correlation between body image, quality of life, and sexual function among the studied Patients Furthermore, the current study illustrated that there was a positively significant correlation between the body image, quality of life and the sexual function of males and females. This result could be attributed that after urinary diversion surgery, there are many change occurred in body image, self-esteem and sexual function which correlated with change the quality of life among patients. This result come at the same line with Ahmed et al., (2019), who revealed that there was a statistically correlation between body image and quality life.

CONCLUSION

A positively significant correlation was evident between the image of body, life's quality and the sexual functions of males and females.

RECOMMENDATIONS

Designing future health education programs about urinary diversion based on patients' experiences and needs to promote the body image, quality of their life and sexual functions after urinary diversion surgery.

references

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العلاقه بين صورة الجسم وجودة الحياة والوظيفه الجنسية لدى المرضى بعد تحويل البول بمركز أمراض الكلى والمسالك البولية

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الخلاصة

يعد تحويل مجرى البول إجراء جراحى يعيد توجيه إفراز مسار البول ويخلق مسارًا بديلاً. يعتبر نهجاً علاجياً يمكن أن يكون مؤقتاً أو دائماً. مع إنشاء فغرة عادة من الحالبين. ولذلك، تهدف الدراسة الحالية إلى إستكشاف العلاقه بين صورة الجسم وجودة الحياة والوظيفه الجنسيه لدى المرضى الذين يخضعون لتحويل البول بمركز أمراض الكلى والمسالك البولية. تم إجراء الدراسة الحالية فى العيادات الخارجية والأقسام الداخلية بمركز أمراض الكلى والمسالك البولية بالمنصوره بين 148 من المرضى الذين يخضعون لتحويل البول. تم جمع البيانات بإستخدام استبيان المقابلة المنظمة، مقباس صورة الجسم، مقياس جودة الحياة لمنظمة الصحة العالمية، مؤشر الوظيفة الجنسيه (للذكور والإناث). **النتائج:** أظهرت الدراسة الحالية أن الذكور كانوا أكثر إنتشارًا فى هذه الدراسة مقارنة بالإناث بمستوى متوسط من صورة الجسم ومستوى عالٍ من جودة الحياة. كان لدى كلا الجنسين وظيفة جنسية مثالية. وقد لخصت الدراسة بوجود علاقة إيجابية ذات دلالة إحصائية بين صورة الجسم وجودة الحياة والوظيفة الجنسية للذكور والإناث. وأوصت الدراسة بتصميم برامج تثقيف صحى مستقبلى حول تحويل البول بناءً على تجارب المرضى وإحتياجاتهم لتعزيز صورة الجسم وجودة حياتهم والوظيفة الجنسية فيما يتعلق بتحويل البول.

الكلمات المرشدة: صورة الجسم، المرضى، جودة الحياة، الوظيفة الجنسية، تحويل البول.