Impact of Urinary Incontinence on Psychological Well-being and Quality Of Life among Elderly People

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Abstract

Background: Urinary incontinence is a highly prevalent health problem among elderly people with a relevant impact on physical and psychological aspects of life with consequent effect on the quality of life. **Aim:** Study aimed to assess the impact of urinary incontinence on psychological well-being and quality of life among elderly people. **Research design:** A descriptive design was utilized to fulfill the aim of this study. **Setting:** The study was conducted in Urological outpatient clinic at Benha University Hospital at Benha City, Kaluobia Governorate. **Sample:** The sample of the study was purposive sample of (100) elderly people who are attending at the above mentioned settings. **Tools: Tool (I):-** A structured interviewing questionnaire sheet which comprised of two parts: part (1) socio-demographic characteristics & part (2) clinical characteristics of the studied sample. **Tool (II):** Goldberg's psychological well-being scale, and **Tool (III)** Incontinence related quality of life scale. **Results**: Findings showed that nearly two thirds of the studied sample had low level of psychological well-being while, more than two thirds of them had low level of quality of life and also, there was a highly statistically significant positive correlation between total Goldberg's psychological well-being Scale and total Incontinence-related quality of life scale. **Conclusion:** Based on the result of this study it was concluded that urinary incontinence is a chronic disease that has a negative impact on psychological well-being of elderly people which subsequently impacts negatively on their quality of life in the form of performing activities of daily living and enjoying their normal life. **Recommendation:** The study recommended that recurrent assessment for psychological status and all quality of life domains for elderly people should be a part of the routine nursing care.

Key Words: Urinary Incontinence, Psychological well-being, Quality of Life, Elderly people

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Introduction

Urinary Incontinence (UI) is defined as any involuntary leakage of urine and it is an important and common health care problem affecting the elderly population. It is not a normal result of aging. Rather it is a medical problem that is often curable and should be treated. Normally urine is stored in the bladder and emptied via the urethra. During urination, muscles of the bladder wall contract, forcing urine from the bladder into the urethra. Sphincter muscles surrounding the urethra relax thus releasing urine from the body. In contrast, urinary incontinence in elderly people occurs if bladder muscles suddenly contract or sphincter muscles are not strong enough to contain urine **(Neki, 2016).**

Urinary incontinence among elderly people poses significant physical,

psychological and social consequences. Common physical complications associated with urinary incontinence are urinary tract infections, local perineum infection and perineal skin irritation caused by ammonia in the urine. Psychological and social consequences from urinary incontinence can be profound including anxiety, anger, shame, guilt, depression, embarrassment and low self-esteem. Very often a combination of these feelings will lead to social isolation, avoiding social gathering, decreased mobility, increased dependency and diminished interpersonal relationship. For elderly who are dependent, there is an increased burden on their caregiver and may increase the likelihood of placement of the elderly in geriatric institutions **(Feld et al., 2016).**

Furthermore, many studies reported that psychological well-being of elderly people with urinary incontinence is highly negatively affected as stress, anxiety and depression are found to be more prominent symptoms among these patients. As elderly with urinary incontinence may be anxious about not having ready access to a toilet and fearful of a urinary accident in public which lead to depression. Major depression was three times more common in elderly women with urinary incontinence than in continent elderly women (6.1% versus 2.2%) (**Tomasi et al., 2017).**

In addition, quality of life is a multidimensional concept comprising of social, physical and mental aspects of an individual. Urinary incontinence among elderly people with its associated symptoms, can have a significant negative impact on the quality of life as it interfere with their daily functions and activities because of shame and embarrassment as a result of urine leakage, malodor or wetness **(Nelasa et al., 2016).**

Moreover, day to day activities such as travelling, shopping, recreation activities are affected especially when the availability of restrooms is not readily accessible. Consequent social isolation and women's sexual function and relationships with their partners are significantly affected by their incontinence. So, in assessing geriatric people with urinary incontinence, it is necessary to identify psychological problems and health needs among them for effective treatment and better outcomes **(Santini et al., 2017).**

Finally, psychiatric mental health nurse has a specific role in dealing with these patients as she should give them the opportunity to express their feelings, take time to listen to the patient, and help the patient to accept positive and negative feelings, the nurse should also, discuss the capabilities and the positive aspects of their patients, help these patients stop viewing themselves as inferior to others who are better. The nurse should give praise for success, increase activities in accordance with patients' tolerance condition and give examples of how implementation of activities could be done in order to improve the patient condition **(Health wise, 2018).**

Significance of the study:

In Egypt, the prevalence of urinary incontinence among the elderly population varies from 30% to 50% according to age. It is more common in elderly women over the age of 65 years have some degree of incontinence and in men the prevalence ranges from 3-11%. The elderly patient suffering from urinary incontinence does not seek treatment voluntary due to misconception that is part of normal ageing process. Without treatment, urinary incontinence may lead to serious psychological, social complications and hence poor quality of life **(Sivalingam & Loh, 2019).**

Aim of the study:

This study aimed to assess the impact of urinary incontinence on psychological well-being and quality of life among elderly people.

Research question:

What is the impact of urinary incontinence on psychological well-being and quality of life among elderly people?

Subject and Methods

Subject and methods for this study were portrayed under four main designs as follows:

1.Technical design.
2.Operational design.
3.Administrated design.
4.Statistical design.

The Technical Design:

Research Design:-A descriptive design was utilized to fulfill the aim of this study.

Setting: The study was conducted at Urological outpatient clinic that starts from 9Am to 12Pm at Benha University Hospital in Benha City, Kaluobia Governorate which is affiliated to ministry of high education.

Research subjects: A purposive sample of (100) elderly people who are attending at the above mentioned setting and fulfill the following inclusion and exclusion criteria:

Inclusion criteria: Diagnosed as urinary incontinence, sex, aged 60 or more years old, accepted and willingness to participate in the study.

Exclusion criteria:

- Elderly people with other chronic physical diseases such as diabetic nephropathy, congenital urological disorders and urinary tract infection).

- Elderly people who have history of psy

- chotic symptoms.

- Elderly people who have visual and hearing impairment.

2. Tools of Data Collection:

Three tools will be utilized for collecting data in this current study.

Tool (I):- A Structured Interviewing Questionnaire Sheet Which comprised of two parts:

Part (1) Socio-demographic characteristics of studied patients such as (age, sex, marital status, level of education, occupation, residence). **Part (2)** Clinical characteristics such as (duration of urinary incontinence, number of urinary incontinence, causes of urinary incontinence, number of repetition of urinary incontinence per day).

Tool (II):- Goldberg's Psychological Well-being Scale: This scale developed by **Golderberg & Williams (1988)** and adapted by the researcher. It is used as a screening tool to assess psychological well-being of the individual. The scale consists of 28 items that are rated on a three-point Likert scale. All items are rated on 3 score rating scale which are (1) less than usual, (2) as usual, and (3) more than usual. The scale has four dimensions: somatic symptoms, anxiety, social dysfunction, and depression. The possible score for this scale ranges from 28 to 84.

Scoring system for this scale ranging from:

- 1-28 High level of psychological well-being.
- 29-56 Moderate level of psychological well-being.
- 57-84 Low level of psychological well-being.

Tool (3):- Incontinence Related Quality Of Life Scale.

This scale was adapted from **Patrick et al., (2015)** for assessing quality of life changes as a consequence of urinary incontinence.This scale is made up of a total of 22 questions and is divided into three subcategories, consisting of eight questions for "avoidance and limiting behaviour", nine questions for "psychosocial impact," and five questions for "social embarrassment". Each question was scored on a four-point scale, with answers ranging from "Extremely1 point" to "Not at all4 points," and with scores ranging of 1–88, higher scores signified a higher quality of life.

Scoring system for this scale ranging from:

- 1-44 Low level of psychological well-being.
- 45-66 Moderate level of psychological well-being.
- 67-88 High level of psychological well-being.

The operational design:

Preparatory phase: An extensive introduction related to the study area will be done to formulate knowledge base relevant to the study area and to get a clear picture of all aspect related to the research topic.

Validity of the tools: Tools were tested for content validity by jury of five experts in the field of psychiatric and mental health nursing to ascertain relevance and completeness. The tools proved to be valid.

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). Test-retest reliability was done and reported to be high as r = 0.92 for Goldberg's psychological well-being scale and 0.89 for Incontinence-related quality of life scale.

Pilot study

A pilot study has been carried out on 10% (10 patients) of the sample selected from the previously mentioned setting before starting the data collection to test the applicability, feasibility, clarity, objectivity of the tool. In addition, it served to estimate the approximate time required for interviewing the patients as well as to find out any problems that might interfere with data collection. These patients were excluded later from the actual study sample.

Administrative design:-

The researchers were obtained permissions from the Dean of Faculty of Nursing, Benha University to general director of Benha university hospital to conduct the study .The objectives and the nature of the study were explained and then it was possible to carry out the study with minimum resistance.

Ethical considerations:

Before conducting the study, the researcher will obtain an oral consent from all patients who are participated in the study and these patients were assured that the data will be collected from the questionnaires will remain confidential and that no personal identification was needed by any means. Also, patients were informed that they could refuse to participate in this study, or withdraw from it at any time and then acceptance of the student to participate in the study was taken.

Field work

The actual field work was carried out from the beginning of September 2019 to the end of February 2020 covering six months. The study setting was visited two days/week started from 10 Am to 12 Pm.

Statistical design:-

Analysis of the data was carried out and the collected data was organized, coded, computerized and tabulated and analyzed by using (SPSS) programs version (20). Data analysis was accomplished by the use of number, percentage distribution chi-square (X^2) test, to test the significance of some variance, significant $p = < 0.05$.

Results

Table (1) shows socio-demographic characteristics of studied patients. It explains that more than half of them (60.0%) were in the age group from 60 to < 65 years with mean age 64.41 ± 6.64, and also the table illustrate that more than half of them (60.0%) are males and nearly three quarters of them (74.0%) are married. Concerning to their occupation, nearly three quarters of studied patients were on retirement (72.0%). Regarding to residence, more than half of patients are from rural areas and mentioned that they don't have enough income in their lives (60.0% & 60.0% respectively). Regarding to cohabitation, the majority of studied patients (83.0%) are lived with their families.

Table (2) demonstrates distribution of studied patients regarding their clinical data. Regarding to duration of illness, more than half of the studied patients (60.0%) are mentioned that they have urinary incontinence from 1-3 years. In relation to doctor visits in previous year, more than half of them (60.0%) visit doctors 4-5 times and don't know the actual cause of urinary incontinence. Concerning frequency of urinary incontinence per day, more than two thirds of studied patients (70.0%) reported 3-4 times /day

Figure (1) illustrates distribution of studied patients regarding total Goldberg's psychological well-being scale. It shows that nearly two thirds of studied patients have low level of psychological well-being and only one quarter have moderate level while the minority of them have high level of psychological well-being .

Figure (2) reports distribution of studied patients regarding total incontinence-related quality of life scale. It displays that more than two thirds of studied patients have low level of quality of life while the minority of them have high level of quality of life as a result of urinary incontinence.

Table (3) shows relationship between socio-demographic characteristics and total incontinence-related quality of life scale among the studied patients. It reports that there is a highly statistically significant relationship between all items of socio-demographic characteristics and total incontinence-

related quality of life scale at p-value < 0.001.

Table (4) demonstrates relationship between socio-demographic characteristics and total Goldberg's psychological well-being scale among the studied patients**.** It clarifies that there is a highly statistically significant relationship between all items of socio-demographic characteristics and total Goldberg's psychological well-being scale at p-value < 0.001.

Table (5) reports relationship between clinical data and total Goldberg's psychological well-being scale among the studied patients. It reflects that there is a highly statistically significant relationship between all items of clinical data and total Goldberg's psychological well-being scale at p-value < 0.001.

Table (6) clarifies relationship between clinical data and total Incontinence-related quality of life scale among studied patients. It shows that there is a highly statistically significant relationship between all items of clinical data and total incontinence-related quality of life scale at p-value < 0.001.

Table (7) represents correlation between mean scores of total Goldberg's psychological well-being Scale and total Incontinence-related quality of life scale among the studied patients. It shows that, there is a highly statistically significant positive correlation between total Goldberg's psychological well-being Scale and total Incontinence-related quality of life scale at p- value <0.01.

Table (1): Distribution of studied patients according to their socio-demographic characteristics (n=100).

Socio-demographic characteristics	Studied patients (n=100)	
	N	%
Age/year		
60- 65Y	**60**	60.0
65- 70Y	29	29.0
70 and more years	11	11.0
Mean ± SD 64.41 ± 6.64		
Sex		
Male	40	40.0
Female	**60**	60.0
Marital Status		
Married	**74**	74.0
Divorced	12	12.0
Widow	14	14.0
Educational level		
Read and write	6	6.0
Basic learning	13	13.0
Secondary learning(Diplome)	**81**	81.0
Occupation		
On retirement	**72**	72.0
Not work	28	28.0
Residence		
Urban	40	40.0
Rural	**60**	60.0
Income		
Not enough	**60**	60.0
Enough	29	29.0
Enough and save	11	11.0
Cohabitation		
With family	**83**	83.0
Alone	17	17.0

Table (2): Distribution of studied patients regarding their clinical data (n=100).

Clinical data	Studied patients (n=100).	
	No	%
Duration of illness		
Less than one year	40	40.0
1-3 years	**60**	60.0
Mean ± SD 1.60 ±0 .49		
Doctor visit in previous year		
2-3 visits /year	40	40.0
4-5 visits /year	**60**	60.0
Causes of urinary incontinence		
Unknown cause	**60**	60.0
Anxiety	29	29.0
During coughing and sneezing	11	11.0
Frequency urinary incontinence (day)		
1-2 times/day	17	17.0
3-4 times/day	**70**	60.0
5times or more/day	13	23.0

Figure (1): Distribution of studied patients regarding their total Goldberg's Psychological Well-being Scale (N=100).

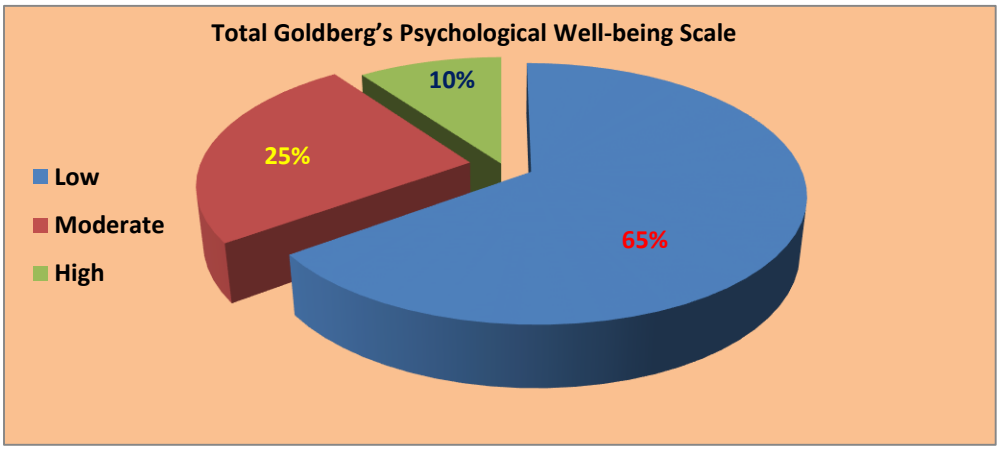

Figure (2): Distribution of studied patients regarding total incontinence-related quality of life scale (N=100).

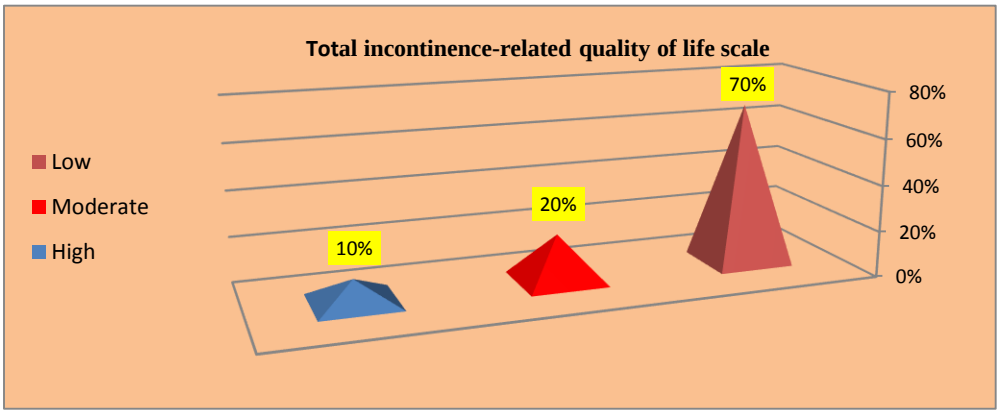

Table (3): Relationship between socio-demographic characteristics and total incontinence-related quality of life scale among studied patients (n=100).

Socio-demographic characteristics	Total Incontinence-Related Quality of Life Scale						X^2	P -value
	Low(n=70)		Moderate(n=20)		High(n=10)			
	N	%	N	%	N	%		
Age/year								
60- 65Y	60	100.0	0	0.0	0	0.0	144.24	<0.001**
65- 70Y	10	34.5	19	65.5	0	0.0		
70 and more years	0	0.0	1	9.1	10	90.9		
Sex								
Male	10	25.0	20	50.0	10	25.0	64.28	<0.001**
Female	60	100	0	0.0	0	0.0		
Marital Status								
Married	70	94.6	4	5.4	0	0.0	150.67	<0.001**
Divorced	0	0.0	2	16.7	10	83.3		
Widow	0	0.0	14	100.0	0	0.0		
Educational level								
Read and write	0	0.0	0	0.0	6	100.0	97.35	<0.001**
Basic learning	0	0.0	9	69.2	4	30.8		
Secondary learning	70	86.4	11	13.6	0	0.0		
Occupation								
On retirement	70	97.2	2	2.8	0	0.0	91.07	<0.001**
Not work	0	0.0	18	64.3	10	35.7		
Residence								
Urban	10	25.0	20	50.0	10	25.0	64.28	<0.001**
Rural	60	100.0	0	0.0	0	0.0		
Income								
Not enough	60	100.0	0	0.0	0	0.0	144.24	<0.001**
Enough	10	34.5	19	65.5	0	0.0		
Enough and save	0	0.0	1	9.1	10	90.9		
Cohabitation								
With family	70	84.3	13	15.7	0	0.0	67.75	<0.001**
Alone	0	0.0%	7	41.2	10	58.8		

**<0.001 a highly statistically significant

Table (4): Relationship between socio-demographic characteristics and total Goldberg's psychological well-beingscale among the studied patients (N=100).

Socio-demographic characteristics	Total Goldberg's psychological well-being Scale						X^2	P -value
	High(n=10)		Moderate(n=25)		Low(n=65)			
	N	%	N	%	N	%		
Age/year								
60- 65Y	0	0.0	0	0.0	60	100.0	164.35	<0.001**
65- 70Y	0	0.0	24	82.8	5	17.2		
70 and more years	10	90.9	1	9.1	0	0.0		
Sex								
Male	10	25.0	25	62.5	5	12.5	80.76	<0.001**
Female	0	0.0	0	0.0	60	100.0		
Marital Status								
Married	0	0.0	9	12.2	65	87.8	132.88	<0.001**
Divorced	10	83.3	2	16.7	0	0.0		
Widow	0	0.0	14	100.0	0	0.0		
Educational level								
Read and write	6	100.0	0	0.0	0	0.0	90.12	<0.001**
Basic learning	4	30.8	9	69.2	0	0.0		
Secondary learning	0	0.0	16	19.8	65	80.2		
Occupation								
On retirement	0	0.0	7	9.7	65	90.3	75.00	<0.001**
Not work	10	35.7	18	64.3	0	0.0		
Residence								
Urban	10	25.0	25	62.5	5	12.5	80.76	<0.001**
Rural	0	0.0	0	0.0	60	100.0		
Income								
Not enough	0	0.0	0	0.0	60	100.0	164.35	<0.001**
Enough	0	0.0	24	82.8	5	17.2		
Enough and save	10	90.9	1	9.1	0	0.0		
Co-habitation								
With family	0	0.0	18	21.7	65	78.3	64.28	<0.001**
Alone	10	58.8	7	41.2	0	0.0		

**<0.001 a highly statistically significant

Table (5): Relationship between clinical data and Total Goldberg's Psychological Well-being scale among the studied patients (N=100).

Clinical data	Total Goldberg's psychological well-being Scale						X^2	P -value
	High (n=10)		Moderate(n=25)		Low(n=65)			
	N	%	N	%	N	%		
Duration of illness								
Less than one years	10	25.0	25	62.5	5	12.5		
1-3 years	0	0.0	0	0.0	60	100.0	80.76	<0.001**
Doctor visit in previous year								
2-3 visits/year	10	25.0	25	62.5	5	12.5		
4-5 visits/year	0	0.0	0	0.0	60	100.0	80.86	<0.001**
Causes of urinary incontinence:								
-Unknown cause	10	16.7	1	1.7	49	81.7		
-Anxiety	0	0.0	24	82.8	5	17.2	75.99	<0.001**
-During coughing and sneezing	0	0.0	0	0.0	11	100.0		
Frequency of urinary incontinence (day)								
1-2 times /day	0	0.0	12	70.6	5	29.4		
3-4 times/day	10	14.2	0	0.0	60	85.8	101.32	<0.001**
5times or more/day	0	0.0	13	100.0	0	0.0		

**<0.001 a highly statistically significant

Table (6): Relationship between clinical data and total Incontinence-related quality of life scale among the studied patients (n=100).

Clinical data	Total Incontinence-Related Quality of Life Scale						X^2	P -value
	Low(n=70)		Moderate(n=20)		High (n=10)			
	N	%	N	%	N	%		
Duration of illness								
Less than one years	10	25.0	20	50.0	10	25.0		
1-3 years	60	100.0	0	0.0	0	0.0	64.28	<0.001**
Doctor visit in previous year								
2-3 visits	10	25.0	20	50.0	10	25.0		
4-5 visits	60	100.0	0	0.0	0	0.0	64.28	<0.001**
Causes of urinary incontinence:								
-Unknown cause	49	81.7	1	1.7	10	16.7		
-Anxiety	10	34.5	19	65.5	0	0.0	56.79	<0.001**
-During coughing and sneezing	11	100.0	0	0.0	0	0.0		
Frequency urinary incontinence (day)								
1-2 times	0	0.0	7	41.2	10	58.8		
3-4 times	70	100.0	0	0.0	0	0.0	88.74	<0.001**
5times or more	0	0.0	13	100.0	0	0.0		

**<0.001 a highly statistically significant

Table (7): Correlation between mean scores of total Goldberg's psychological well-being scale and total Incontinence-related quality of life scale among the studied patients (n=100).

**<0.01 a highly statistical significant difference

Correlation	Total Incontinence-Related Quality of Life Scale	
	r	P-Value
Total Goldberg's Psychological Well-being Scale	0.97	<0.01**

Discussion:

Urinary incontinence is common health problem among elderly people. Although it is not a life-threatening condition, it has many physical and psychological effects on the patients. Urinary incontinence is perceived as a lack of health which generates feelings of anger and sadness, as well as embarrassment and depression. Patients avoid social gatherings and lose self-confidence, which has a proportional impact on their social interactions, their sexual life and emotional health so this study aimed to assess the impact of urinary incontinence on psychological well-being and quality of life among elderly people.

The results of the present study reveals that, more than half of studied sample within age group 60-65 years old with a mean age 64.41 ± 6.64 years. This may be due to urinary incontinence more common disorder that affecting old age people. This result is inconsistent with a study carried out by **Nelasa et al., (2016)** who found that the average mean age of their study sample was 50 years. Also this result inconsistent with **Mazyak, et al., (2015)** who founded that the mean age of participants was 70.17 years in this study.

Concerning sex, the results of the present study reported that more than half of the studied sample was females. This can be due to urinary incontinence is common health problem among elderly people that affecting women more than men. This result goes in the same line with the study done by **Kwak et al., (2016)** who found that the majority of his studied patients were females. Also, this result goes in agreement with a study carried by **Reigota et al., (2016)** who reported that three quarters of the total sample were females.

Concerning to the marital status, the present study reveals that nearly three quarters of the total sample were married. This result goes in agreement with a study carried by **Wieder-Huszla et al., (2015)** who founded that a vast majority of his studied sample were married. On other hand the result was contradicted with a study carried by **Gehlot et al., (2017)**who founded that majority of the patients having urinary incontinence were widowed.

The results of the present study regarding occupation proved that nearly three quarters of the total sample were on retirement. This might be due to the majority of studied sample was above 60 years old and this the age for retirement. This result is consistent with study carried by **William & Adrian (2016)** that represented that the majority of his studied patients were on retirement. Also this result is incongruent with result of **Koyanagi et al., (2017)** who founded that more than half of his study samples were employed.

As regard residence, the result of the present study showed that, more than

half of the studied patients were from rural areas. This could be due to the sample was collected from Benha University Hospital that serves many rural areas. These findings were in agreement with the study of **Goepel et al., (2015)** who found that, the majority of his studied sample was from rural areas. In this study, the results demonstrated that, more than half of the studied patients didn`t have sufficient income. This might be due to the cost of treatment and follow up is expensive in addition, the majority of studied sample was on retirement. These findings were similar to the study done by **Reigota et al., (2016)** who reported that, three quarters of the patients, economic status were not enough.

Concerning cohabitation, the majority of studied patients lived with their families. This could be explained as the majority of studied patients were married and hence lived with their families. These findings were in disagreement with **Collard et al., (2015)** found in their study that a highest percentage of the studied subjects were lived alone.

The study result also showed that, as regard duration of illness, more than half of the studied patients had urinary incontinence from one to three years. This might be justified by urinary incontinence is a chronic condition that require long time for treatment and follow up. These findings on the same line with **Abrams et al., (2016)** who represented that, most of the patients regarding duration of illness were 2 years ago. On other hand, these findings were in disagreement with **Heintz et al., (2017)** who reported that in their study that the majority of the studied subjects had illness from five years.

The result of the present study shows that, more than half of studied sample visit doctors about 4-5 visits per year. From the researcher's point of view this could be due to urinary incontinence is chronic disease that require continuous follow up and it negatively affects on performing daily activities, social, sexual life and psychological status of patients. This result is in disagreement with **El-mowafy et al.,(2015)** who stated that, despite the availability of numerous treatments which their effectiveness are well investigated worldwide, nearly half of his studied sample living with urinary incontinence do not seek professional treatment.

The result of the present study illustrates that the more than two thirds of the studied sample had a frequency of 3-4 times per day. This result disagreement with a study carried out by **Patrick et al.,(2015)**his result showed that one third of the sample with urinary incontinence had a frequency of 1–2 times (per day).

The result of the current study illustrates that, nearly two thirds of the studied sample had low level of psychological well-being. This could be justified by urinary incontinence had many negative impact on psychological, physical and social health of affected elderly people as it starts gradually over time and increases often to the point of causing patients to stop doing many of their normal activities, which cause wetness, odour, discomfort, and skin irritation; it can also damage self-esteem as a result of shame and embarrassment. Additionally emotional and sexual life is negatively affected as there are many studies showing the association between involuntary urine loss and indicators of psychological distress which can even represent a motive of social isolation, low self-esteem, social embarrassment vulnerability to stress and depression.

The result of present study was consistent with **Hillary et al., (2016)** his study showed that urinary incontinence can

affect many aspects of patient's lives and the majority of them were most likely to have associated psychological problems as anxiety, stress, and depression. Also, this result goes in the same line with the study done by **Abiola et al., (2018)** who stated that this study showed that having urinary incontinence was associated with an increased risk for loneliness, depression or anxiety and worsening mental and psychological health among the majority of his studied sample.

Moreover, the result of the current study goes in agreement with a study carried by **Molinuevo et al., (2017)** who founded that urinary incontinence associated with the feeling of shame that interferes with social life and well-being and can be associated with psychological and emotional problems, such as: fear, nervousness and depression among the majority of his studied sample. Also, this result goes in the same line with the study done by **Tomasi et al., (2017)**who found that nearly two thirds of his studied patients with urinary incontinence reported many psychological complaints such as major depression and panic disorders.

The result of the present study illustrates that more than two thirds of the studied sample had low level of quality of life. From view point of researcher this might be justified by urinary incontinence cause bad odor for affected patients and also get their clothes wet so this make them socially isolated and affect their physical and emotional health and hence all domains of quality of life that negatively impacts on their abilities of performing daily activities, social life, psychological well-being, social interactions, activities, sexual and interpersonal relationships resulting in restrictions regarding going to public places, travelling, sleeping out and even visiting friends.

The result was consistent with **Neki (2016)** his study showed that nearly two thirds reported poor quality of life. More ever, this goes in the same line with the study done by **Bogner et al.,(2016)** who stated that the quality of life of elderly people with urinary incontinence is significantly lower than the quality of life of elderly without urinary incontinence. The result of current study is consistent with **Luo et al., (2018)** who stated that urinary incontinence have negative effects on quality of life, especially on the medical, physical, social, psychological, economical and sexual aspects.

The result of the present study is parallel with a study done by **Amy et al., (2017)** which highlighted that there is a link between patient who have urinary incontinence and lower quality of life. Also, **Kumari et al., (2016)** who founded that the connection between urinary incontinence and quality of life identifying three problematic areas: daily life, recreational activities, and sex life. In addition, research has shown a decrease in social participation, physical health, emotional health, and lower scores on quality of life measures.

The result of the present study reflects that there was a highly statistically significant positive correlation between mean score of total psychological well-being and total incontinence-related quality of life among studied sample. From view point of researcher this could be due to that urinary incontinence may be a cause of great discomfort, shame, anxiety, irritability and depression that may cause patients to withdraw from social life, which in turn affect on the health related quality of life. This result consistent with **Borges et al., (2016)** who reported that psychological problems such as anxiety and depression has been shown to be more common among elderly people that

ultimately cause a reduction in their quality of life.

Conclusion:

In the light of present study, it could be concluded that urinary incontinence is common health problem among elderly people who are a very important group that they require our special attention and care continuously to improve their psychological well-being and hence their health related quality of life as nearly two thirds of the studied sample had low level of psychological well-being while more than two thirds of them had low level of health related quality of life which indicates that urinary incontinence is a chronic disease that has a negative impact on psychological well-being of elderly people which subsequently impacts negatively on patients quality of life in the form of performing activities of daily living and enjoying their normal life.

Recommendations:

Based on the findings of the current study, the following recommendations are suggested:

(1) Recurrent assessment for psychological status and all quality of life domains for elderly people should be a part of the nursing care.

(2) Designing and implementing psycho-educational programs for elderly people with urinary incontinence to increase their psychological well-being and improve their quality of life.

(3) Further studies are needed on large sample of elderly people in different geographical areas to generalize the results.

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