

# ASSESSMENT OF THE PREVALENCE OF URINARY INCONTINENCE AMONG ELDERLY PATIENTS ATTENDING THE PRIMARY HEALTH CARE CENTRES IN MAKKAH AL-MUKARRAMAH

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## Abstract

**Background:** Lower urinary tract symptoms and urinary incontinence are very common in the general population and increase in prevalence in association with age. Urinary incontinence in particular is still seldom discussed by patients, many of whom delay seeking healthcare for the condition. Urinary symptoms have a considerable impact on morbidity and quality of life. Older people encounter multiple barriers in gaining treatment for their problem and are unfortunately less likely to be given evidence-based treatment than younger people. Urinary incontinence means a person leaks urine by accident. While it may happen to anyone, urinary incontinence is more common in older people, especially women. Incontinence can often be cured or controlled. The body stores urine in the bladder. During urination, muscles in the bladder tighten to move urine into a tube called the urethra. At the same time, the muscles around the urethra relax and let the urine pass out of the body. When the muscles in and around the bladder don't work the way they should, urine can leak. Incontinence typically occurs if the muscles relax without warning.

**Aim of the study:** This study aims to assessment the prevalence of urinary incontinence among elderly patients attending the primary health care centers in Makkah Al-Mukarramah, KSA.

**Method:** A cross-sectional study will be conducted to estimate the prevalence of self-reported UI among elderly patients attending primary health care centers in Makkah Al-Mukarramah in date collection period. Our total of simple is (400) elderly patients

**Results :** A total of is (400) elderly patients .The majority of the respondents were females (57.14% ), Malays (42.86 %), The age of the respondents ranged from 25-65 years, with a mean of  $37.87 \pm 12.088$  years showed positive correlations between degree of symptoms and signs of diagnosis of incontinence and degree the Frequency of symptoms Where ( $r = 0.578$ ) and have statistical a significant relation where  $p < 0.001$ ).

**Conclusion:**Urinary incontinence is common and often disturbing Saudi elderly, our study found that the prevalence was it adversely impaired their quality of life (QOL). Elderly age and parity were significantly related to impaired QOL. We acknowledge the fact that urinary incontinence is a common and poorly understood problem in our community. Another problem in the elderly age group is cognitive impairment, which also contributes to urinary incontinence. Prevalence of urinary incontinence is most likely underestimated.

**Keywords:**Assessment, Prevalence, urinary incontinence, elderly, primary health care centers.

## 1. Introduction:

Urinary incontinence (UI), defined as the complaint of involuntary loss of urine, is a common and undertreated problem in older adults. Epidemiological studies show a positive association between age and both the accumulation of symptoms and the prevalence of UI and other lower urinary tract symptoms (LUTS). In the EPIC study, the prevalence of incontinence increased in men from 2.4% in those <39 years to 10.4% in those >60, and in women from 7.3% to 19.3%, respectively.[1] With individuals living longer and older adults making up an increasing portion of the population, the impact of UI on society and on the healthcare system continues to increase. As with all the 'geriatric giants', UI is often the result of multiple risk factors and modifiers . Physiological, pathological and

functional changes can result in a loss of continence.[2] Older adults tend to not seek help from healthcare providers for a variety of reasons, including perceived stigma and social embarrassment, belief that UI is a normal part of ageing and an several disorders result in urinary incontinence, but the majority is accounted for by stress UI (involuntary loss of urine on effort or physical exertion, or on sneezing/coughing) and urgency incontinence (involuntary loss of urine associated with urgency).[3]

Urinary incontinence (UI) is defined by the International Continence Society and the International Urogynecological Association as any involuntary leakage of urine. Urinary incontinence will have an effect on the patient's life in some ways, some miss the flexibility to follow their favorite sports, some are fazed by having to wear hygienic protection,[4] their sex life and intimate relationship are abundant plagued by the negative impact of incontinence. Several studies have indicated that Male UI happens most often among women of advanced age and Multiparity. The development of feminine UI could influence the decision to place an elderly woman into a geriatric home. [5] A selected downside for Muslim ladies with UI is that the inability to perform daily prayers (Salat) . Distinguishing misconceptions regarding UI and reasons for delay in seeking medical recommendation would possibly facilitate to spot areas wherever a desire exists for educating the general public and healthcare employees. Prevalence of enuresis among Saudi ladies.[6] While incontinence doesn't cause death, it will have a profound impact on quality of life comparable to of stroke, sickness} and chronic-obstructive pneumonic disease. additionally, incontinence accounts for over \$20 billion in annual expenditures within the u. s., an amount greater than the annual direct cost of breast, ovarian, cervical, and uterine cancers. [7]

One of the main risk factors for stress incontinence, is vaginal child birth, it absolutely was according that one third of feminine tough enuresis five years once their initial canal delivery [8]. The term Quality of life is employed typically to point 'happiness', except for each patient it's going to have totally different meaning: high financial gain and cash, sensible family life and relationship with others, job satisfaction, sensible physical and psychological state [9]. Several recent publications have demonstrated, using functional magnetic resonance imaging, that OAB is associated with changes in cerebral blood flow to certain areas of the brain. The amount of white matter changes (seen as areas of hyper intensity on MRI) may link several geriatric syndromes, including decline in cognition, mobility and continence. There is also increasing evidence that suppression of urinary urgency may require more subconscious effort in older persons, and that this may be related to the amount of white matter hyper intensities[10]

The term enuresis is usually used to consult with incontinency primarily in kids, like nocturnal incontinence (bed wetting).[11] Pelvic surgery, pregnancy, childbirth, and menopause are major risk factor.[12] Urinary incontinence is usually a results of AN underlying medical condition however is under-reported to medical practitioners. There are four main types of incontinence. Urge incontinence , Stress incontinence , Overflow incontinence , Functional incontinence.[13]

## 1.2. Literature review

In a study in Qatar found that, twenty first of ladies have UI, however asthma was a major risk issue influencing the incidence of UI. Social and religious factors have a major impact on the QoL of leaky ladies.[14] Ghafouri etal found Urinary Incontinence can seriously affect the social and personal life of patients, and ultimately their quality of life . [15] elderly with urine incontinence avoid social gatherings, as they are afraid that sudden loss of urine will put them in an embarrassing situation[16].

In a study in Egypt a complete of one,652 elderly were enclosed. The prevalence of UI among study subjects is 54.8%. Aging, low instructional level, menopause, higher parity, vaginal delivery, and previous multiple abortions were found to be significantly associated with UI. The prevalence of urge, stress and mixed incontinence, reciprocally exclusive of every different, was 15%, 14.8%, and 25%, severally. The prevalence of severe incontinence is 8.4%. Relating to the standard of life, the foremost distressing problems for sufferers were their inability to pray (90%).[17]

In a local study done out 2008 at a medical aid center in Jeddah found that the prevalence of UI was 41.4 % . [18] This local research studied the prevalence of UI, the chance factors and also the barriers to seek health advices however not relating UI to quality of life. incontinence remains a silent downside as a major variety of ladies don't ask for treatment, even once their symptoms cause major distress and hinder their daily activities [9].

In Hong Kong Study impaired QOL, as assessed by IIQ-7, was reported at 11.7%, while in Iran elderly with mixed incontinence reported significantly lower QOL and mental health ( $P < 0.001$ ) compared to those with stress and urge incontinence.[19]

A study in Kuwait, 54.5% of elderly and twenty two.4% of men according having involuntary loss of urine. Age on top of forty five years ( $p < 0.001$ ) , BMI bigger than 25kg/m<sup>2</sup> ( $p = 0.001$ ), drinking over one-cup of a caffeinated drink per day ( $p = 0.041$ ), and a history of diabetes ( $p = 0.002$ ) were associated with UI in girls. A history of diabetes ( $p = 0.044$ ), and BMI bigger than thirty kg/m<sup>2</sup> ( $p = 0.041$ ) were associated with UI in men. Obesity was the foremost governable risk issue for UI [20]

A cross-sectional study of ladies attending Ministry of Health primary healthcare centers in Saudi Arabia, the stress UI, urgency UI, and mixed UI were reported by 36.4% (95% CI, 31.7–41.4), 27.4% (95% CI, 23.2–32.1), and 22.2% (95% CI, 18.3–26.6), severally. Urinary leakage was reported daily by 17.2%, and 25.5% experienced leakage more than once a week. Risk factors for UI enclosed increased age ( $P < 0.001$ ); parity greater than five ( $P < 0.001$ ); biological time ( $P = 0.004$ ); and history of epithelial duct medicine surgery, chronic cough, or constipation ( $P \leq 0.001$ ). Medical recommendation wasn't wanted by eighty five.5% of ladies with UI. Several of the ladies with UI reported adverse effects on their daily activities.[21]

### 1.3 Rationale

The researcher is interested in urinary incontinence because it is a common problem among elderly people. Urinary incontinence remains a silent problem as a significant number of patients do not seek treatment, even when their symptoms cause major distress and hinder their daily activities hence there is a lake of enough information and studies about the exact prevalence of UI and its risk factors among male elderly patients attending primary health care centers in Makkah Al-Mukarramah , KSA.

### 1.4 Aim of the study

This study aims to assessment the prevalence of urinary incontinence among elderly patients attending the primary health care centers in Makkah Al-Mukarramah 2019

### 1.5 OBJECTIVES

To assessment the prevalence of urinary incontinence among elders attending Al-Adl primary health care center in Makkah Al-Mukarramah, 2019.

## 2 METHODOLOGY

### 2.1 Study Design

A cross-sectional study was be conducted to assessment the prevalence of self-reported UI among elderly patients attend to primary health care centers in Makkah Al-Mukarramah in date collection period.

### 2.2 Study Population

Elderly patients (60 years old or older) attending Al-Adl primary health care center in Makkah Al-Mukarramah

### 2.3 Study Area

Makkah Al-Mukarramh is the holy city of every Muslim in the world. It is the main place of the pilgrims to perform Umrah and Hajj. Makkah is a modern city and there is a continuous working to improve the infrastructure of Makkah for the sake of both Makkah citizens and pilgrims. Makkah Al-Mukarramah has many schools in every educational level in addition to Umm Al-Qura University which has medical college.

Makkah has many hospitals in addition to King Abdullah Medical city which is tertiary center. Also, it has 85 PHC centers under supervision of Directorate of Health Affairs of Makkah Al-Mukarramah. These centers distributed under 7 health care sectors and each sector contains around 10 – 14 primary health care centers. Three health care sectors inside Makkah Al-Mukarramah city (urban) with 37 primary health care centers underneath and four sectors are outside Makkah (rural) with 48 primary health care centers. The three healthcare sectors inside Makkah Al-Mukarramah are Al-Ka'akya with 11 primary healthcare centers, Al-Adl with 12 primary healthcare centers and Al-Zahir with 14 primary healthcare centers.

### 2.4 Eligibility criteria

#### Inclusion criteria

- All Saudi elderly patients (males and females) attending Al-Adl primary health care center in Makkah Al-Mukarramah.
- Patients who can write and read in Arabic Language

#### Exclusion criteria

- Patients who refuse to participate in the study
- Persons who have reported severe mental disabilities.

### 2.6 Sample size

The total number of elderly patients attending Al-Adl primary health care center (under Al-Adl health care sector) in one month is 2500. Based on this information sample size was calculated using a website (raosoft.com). The resulted estimated sample size is 300 elderly patients including 10% piloting. The confidence interval is 95% and margin of error is 5%. The estimated prevalence used is 50% to calculate maximum sample size.

## 2.6. Sampling technique

Regarding health care center selection, there are three health care sectors inside Makkah Al-Mukarramah which are Al-Ka'akya, Al-Zahir and Al-Adl. By using simple random sample technique (by using randomizer.org), Al-Adl health care sector was selected. There are 12 primary health care centers under Al-Adl health care sector which was enumerated from 1 to 12. Again, by using simple random sample technique Al-Adl primary health care center was selected (by using randomizer.org website). Regarding patients' selection, the total number visiting Al-Adl PHC is 2500 per month and the sample size is 300. The data collection period is 20 days (four weeks minus weekends). Every day there are nearly 85 patients attending in Al-Adl PHC in both section (male and female sections). To collect data from sample size, the researcher needs nearly 16 patients per day to collect desired sample size. The researcher has been selecting every 3rd patient to cover the sample size during data collection period.

## 3. Data collection tool (instrument) Questionnaire:

- The validated international Self Urinary Incontinence , including Medical, Epidemiologic, and Social aspects of Aging questionnaire (MESA, questionnaire), was be used in collecting data , categorizing type of urine leakage and perception.
- A dichotomous question determined whether respondents had reported UI to a doctor; open- and closed-ended questions explored their reasons was be added .

## Data Collection technique

The researcher has used Arabic version of the questionnaire since the target population are Saudi elderly. The questionnaire was being distributed to all patients attending Al-Adl primary health care center during the data collection period (which is 20 days initially). The questionnaire was distributed equally between male and female section because it is separate departments. The researcher has be train 2 nurses on how to fulfill the questionnaire in order to optimize the interpreter reliability. The researcher was distribute the questionnaire in the waiting area in male section while in female section, has be trained nurse was be distribute the questionnaire in female waiting area. After that, the researcher was being collected the paper daily from the nurse for data entry and analysis after thanking the participants for their precious time and effort.

The services: the researcher has been providing the participants with a simple gift as an appreciation for their participation in the study, after collecting questionnaire from them.

## 3.1 Study variables:

- Dependent variables: Prevalence of depression among elderly patients
- Independent variable:
- Age, Gender, Marital status , Educational level , Monthly income , Occupation , Presence of chronic disease , Presence of disabilities (cognitive, motor).

## 3.2 Data entry and analysis

Statistical analysis has be performed using SPSS software program (Statistical Package for Social Sciences), version 24.0. descriptive using listing and frequency and analytic statistics using chi-square test to analyses the association and the difference between two qualitative categorical variables or t test for two quantitative categorical variables or using other statistical tests if needed.

Significance: P value less than 0.05 is considered statistically significant

## 3.3 Pilot study/pretesting

A pilot study on 35 participants representing 10% of study sample size (out of study area) was be conducted to explore applicability, acceptance and obstacles and plan to overcome these problems.

## 3.4. ETHICAL CONSIDERATIONS:

- Permission from research committee in the joint program of family medicine in Makkah Al-Mukarramah has be obtained
- Permission from the Makkah joint program of family medicine has be obtained.
- Permission from the Directorate of Health Affairs of the Holy Capital Primary Health Care has been obtained.
- Permission from administration of public health in Makkah Al-Mukarramah has been obtained.

- Permission from health care center administrator has been obtained.
- All information will be confidential, and a result has been submitted to the department.

### 3.5 Strengths and limitations

Possible limitations: Time limitation.

### 3.6 Budget:

The research has been self-budgeted

## 4. Result

Table (1) descriptions of Socio-demographic data (n-300)

<b>Age</b>		
<25		
25-35		
35-45	2	
>45		
Range	23-69	
Mean±SD	41.112±14.234	
<b>Gender</b>		
Female	153	
Male	147	
<b>Level of education</b>		
Primary		
Intermediate		
Secondary	108	
High education		
<b>Occupation</b>		
Yes	177	
No	123	
<b>Economic level</b>		
Low		
Average	126	
High		
<b>How often do you get up at night to urinate?</b>		
1		
2		
3		
more than 3	120	
<b>How often do you urinate during the day?</b>		
less than 5		
5-10.	120	
more than 10	177	

The majority of the respondents were females (51.0% ), Male (49.0 %), The age of the respondents ranged from 23-69 years, with a mean of 41.112±14.234 years . had Secondary education (36.0%), were working (59.0%) and economic level Average income is (42.0%) but Low income ( 30.0 % ) .while How often do you get up at night to urinate the majority more than 3 were (40.0%) and How often do you urinate during the day majority 5 to 10 were (40.0%

**Table (3) descriptions Urinary Incontinence Assessment in Older Adults**

Items	Urinary Incontinence Assessment		Rank	One sample T-test (test value=2)	
	Mean	SD		T-value	P-value
Do you face frequent urination?	226	807		20.746	0.000
Frequency of urine leak	3034	933		17.565	0.000
Repeated the Leakage	3089	984		15.261	0.000
Small amounts of leakage (drops)	3703	862		23.019	0.000
Difficulty emptying bladder	3066	904		22.044	0.000
Do you have to rush to the bathroom because you get a sudden, strong need to urinate?	3857	913		25.181	0.000
Leakage related to physical activity	3289	957		28.422	0.000
Leakage related to physical activity, coughing, or sneezing	3777	210		12.020	0.000
Pain or discomfort in lower abdominal or genital area	3163	945		20.686	0.000

Table 3 shows Face frequent urination more than one time. There was a statistically significant were P-value (0.000), T=20.746 while Rank 2%. The majority Their proportions of frequency of urine leak There was a statistically significant were P-value (0.000), T=17.565 while Rank 6%, Mean(3.034%) of respondents were reported the Small amounts of leakage (drops) There was a statistically significant were P-value (0.000), T=23.019 while Rank 9, Mean(2.703%) while Frequency of urine leak. There was a statistically significant P-value (0.000) T=15.261 while Rank 4, Mean(3.089%) but Difficulty emptying bladder. There was a statistically significant P-value (0.000) T=22.044 while Rank 5, Mean(3.089%), regarding Do you have to rush to the bathroom because you get a sudden, strong need to urinate there was a statistically significant P-value (0.000) T=25.181 while Rank 7, Mean(2.857%), regarding Leakage related to physical activity there was a statistically significant P-value (0.000) T=28.422 while Rank 1, Mean(3.289%) also Leakage related to physical activity, coughing, or sneezing there was a statistically significant P-value (0.000) T=12.020 while Rank 8, Mean(2.777%), regarding Pain or discomfort in lower abdominal or genital area there was a statistically significant P-value (0.000) T=20.686 while Rank 8, Mean(3.163%),

**Table (4) descriptions the Impact of Urinary Incontinence on Participant's Perceived Quality of Life**

Impact of Urinary Incontinence on Participant's Perceived Quality of Life	Urinary leakage effect		Rank	One sample T-test (test value=2)	
	Mean	SD		T-value	P-value
Ability to do household chores (cooking, Housecleaning, laundry)?	817	151		13.283	0.001*
Physical recreation such as walking, Swimming, or other exercise?	451	191		7.094	0.001*
Ability to travel by car or bus more than 30 minutes from home?	809	057		14.307	0.001*
Participation in social activities outside our home?	366	907		14.166	0.001*
Emotional health (nervousness, depression, etc.)?	940	995		17.669	0.001*

Table 4 show Ability to do household chores (cooking, Housecleaning, laundry). There was a statistically significant were P-value (0.001), T=13.283 while Rank 1% with mean 2.817. regarding the Physical recreation such as walking, Swimming, or other There was a statistically significant were P-value (0.001), T=7.094 while Rank 2, Mean(2.451%) while Ability to travel by car or bus more than 30 minutes from home There was a statistically significant were P-value (0.001), T=14.307 while Rank 3, Mean(2.809%) Participation in social activities outside Your

home There was a statistically significant P-value (0.001) T=15.261 while Rank 4, Mean(3.089%) but Difficulty emptying bladder. There was a statistically significant P-value (0.000) T=28.166 while Rank 4, Mean(3.366%), regarding Emotional health (nervousness, Depression, etc. there was a statistically significant P-value (0.001) T=17.669 while Rank 5, Mean(2.940%),

**Table (5) descriptions the Signs and symptoms of diagnosis of incontinence**

Urinary Incontinence Questionnaire	Yes		No		Chi-square	
	n	%	n	%	p	value
Do you usually have a strong sense of urgency to urinate?	10	80.0%	2	16.0%	108.000	0.001*
Are there times when you don't make it to the bathroom and leak urine?	11	85.0%	2	15.0%	34.680	0.001*
Does the sight, sound, or feel of running water cause you to lose urine?	5	37.7%	8	59.3%	48.000	0.083
Do you ever lose urine when lying down?	7	52.3%	6	45.4%	120.000	0.729
Do you ever pass blood in your urine?	1	7.7%	12	90.3%	5.880	0.015*
Do you ever accidentally wet the bed while sleeping?	0	0.0%	13	100.0%	100.920	0.001*
Do you dribble urine after voiding?	0	0.0%	13	100.0%	122.880	0.001*
Were you ever catheterized because you were unable to void?	0	0.0%	13	100.0%	122.880	0.001*
When urinating, can you usually stop your stream?	1	7.7%	12	90.3%	100.280	0.001*
Have you ever passed sand, gravel, or stones?	0	0.0%	13	100.0%	102.920	0.001*
<b>For female: When urinary difficulty began</b>						
begin During a pregnancy	0	0.0%	13	100.0%	178.88	0.001*
Following a delivery	0	0.0%	13	100.0%		
Following an abdominal or vaginal operation	0	0.0%	13	100.0%		
After menopause	3	23.1%	10	76.9%		

Table 5 show All Questions have a statistically significant except 3,4 The testing tool included 5 questions about Signs and symptoms of diagnosis of incontinence the 5 questions had answers limited to Yes, No . These questions were analyzed using the Chi square analysis. The most of question addressed the signs and symptoms of diagnosis of incontinence there was high percentage answer “yes “ were respectively (80.0% , 67.0%, 57.0%, 30.0% 21.0% ,18.0%37%,29%)There were a statistically significant in respondents answering .The other tests, which, when combined with the results of Chi square test, were respectively (108.000 , 34.680, 5.880, 48.000, 100.920, 122.880, 52.920 )

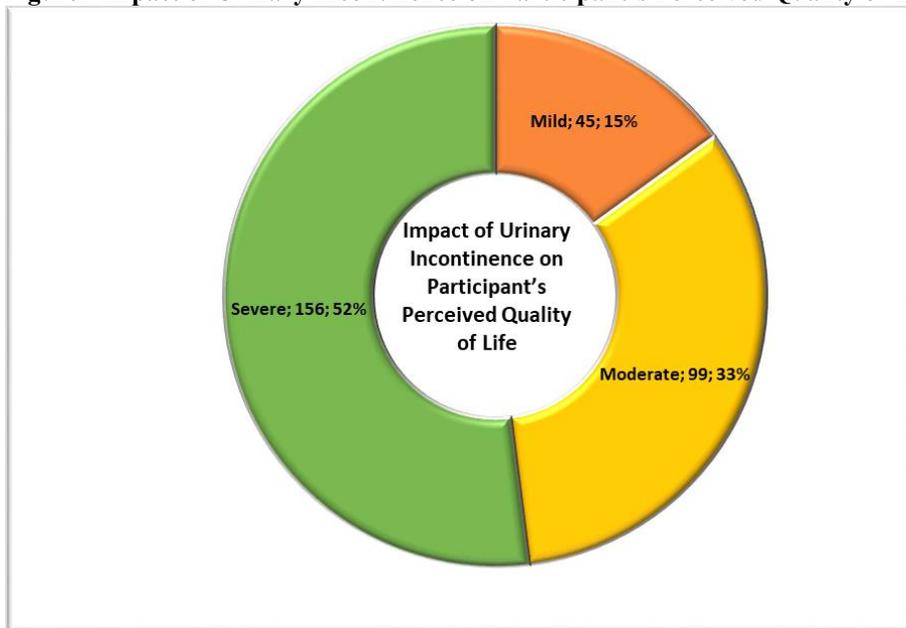
Question 11 the testing tool included 4 questions about Signs and symptoms of diagnosis of incontinence for female when urinary difficulty began the 4 questions had answers limited to Yes, No. These questions were analyzed using the Chi square analysis. The most of question addressed the signs and symptoms of diagnosis of incontinence for female there was high percentage answer “NO “ were respectively (87,72,92,42 )There were a statistically significant in respondents answering P-value (0.000) .The other tests, which, when combined with the results of Chi square test, were respectively (178.88) indicate the signs and symptoms of diagnosis of incontinence for female .

**Table (6) descriptions of Impact of Urinary Incontinence on Participant's Perceived Quality of Life**

Impact of Urinary Incontinence on Participant's Perceived Quality of Life		
Mild	4	30.8%
Moderate	5	35.7%
Severe	6	42.3%
Total	10	100.0%
Chi-square	p	0.080
	value	0.001*

Regarding the Impact of Urinary Incontinence on Participant's Perceived Quality of Life the majority of our study proportions (52.0%) answer severely but moderately and mild their proportions were respectively (33.0%, 15.0% ) while There were a statistically significant in respondents answering P-value (0.000) .The Chi square test 41.080

**Figure1 Impact of Urinary Incontinence on Participant’s Perceived Quality of Life**

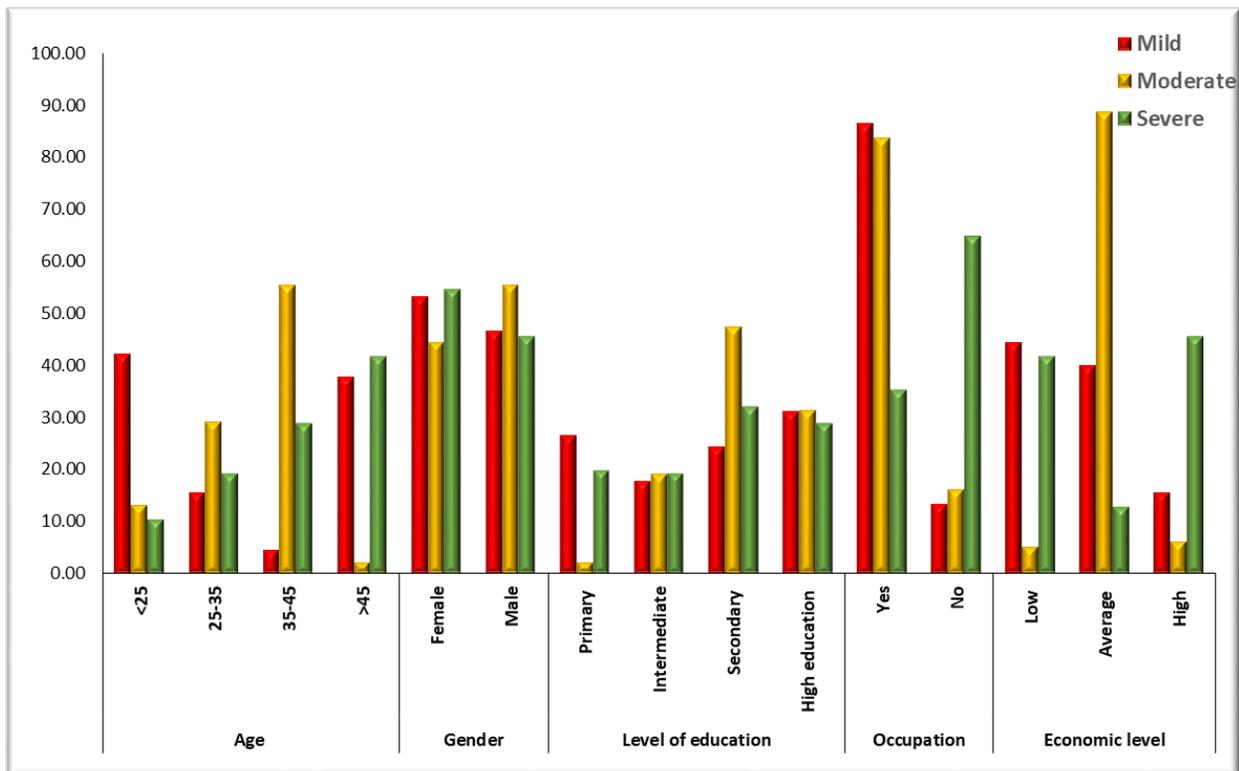


**Table (6) distribute of the relation between the Impact of Urinary Incontinence on Participant’s Perceived Quality of Life and demographic data**

		Impact of Urinary Incontinence			Total	Chi-square	
		Mild	Moderate	Severe		Chi-square	P-value
Age	≤25	.22	.13	.26	12	.968	.001*
	26-35	.56	.29	.23			
	36-45	.44	.56	.85			
	≥45	.78	.02	.67			
Gender	Female	.33	.44	.49	3	.56	.278
	Male	.67	.56	.51	7		
Level of Education	Primary	.67	.02	.87	18	.823	.006
	Intermediate	.78	.19	.23			
	Secondary	.44	.47	.05			
	High education	.11	.31	.85			
Occupation	Unemployed	.67	.84	.26	7	.845	.001*
	Employed	.33	.16	.74	3		
Economic level	Low	.44	.05	.67	16	0.836	.001*
	Average	.00	.89	.82			
	High	.56	.06	.51			

In our study show that is a significant relation between The Impact of Urinary Incontinence on Participant’s Perceived Quality of Life and age, occupation ,economic level were p-value <0.000 and in between mild and moderate regarding gender and level of education no significant relation between The Impact of Urinary Incontinence on Participant’s Perceived Quality of Life and gender and level of education

**Figure (6)distribute of the relation between the Impact of Urinary Incontinence on Participant’s Perceived Quality of Life and demographic data**



## 5. Discussion

Urinary incontinence can affect the patient's life in many ways. The objective of this study was to assess the prevalence of urinary incontinence among elderly patients attending the primary health care centers in Makkah Al-Mukarramah, KSA. This study focused on only incontinent in the primary health care centers in Makkah Al-Mukarramah, among elderly patients with. The findings of the study that urinary incontinence was more common among females, as compared to males. In other study found that males had a higher risk of urinary incontinence compared to females. This contrasted with our studies. [16,22]

Age was to be associated with urinary incontinence. The odds of the elderly aged 35 - 45 years and above having urinary incontinence were ranged from years, in this study, urinary incontinence may be related also with difficulty in mobility and transferring and ability to do household chores (cooking, Housecleaning, laundry) see Table (4). Many studies have shown very high prevalence rates of urinary incontinence in those aged 85 and older. Other studies have shown that in addition to changes of normal aging, diseases such as dementia and cognitive impairment, which are commonly experienced by the elderly, may contribute to the problem of urinary incontinence. Urinary tract infections, diabetes mellitus, benign prostatic hyperplasia, and immobility are also typical examples of conditions that may impact urinary incontinence. Higher age group being a risk factor for developing incontinence was reported by many researchers. [21,23]

Sinclair and Ramsey [24,25] reported emotional impact of incontinence to include emotional health (nervousness, Depression, etc.) social and recreational isolation from anxiety and fear of being incontinent in public. [26,27] the majority their proportions (66.28%) of respondents were reported the (moderately and followed by greatly emotional health). The findings of an earlier study in Kuwait, were comparable with our study as 75% of their female participants said they did not perceive their urinary incontinence as a health challenge and therefore did not seek medical care. Reports from other Arab countries were contradictory to the Kuwaiti findings; the Qatari study reported that 79% of his Qatari women participants reported moderate to severe negative impact on their lives. [28]

The Jordanian women felt it had a negative impact on their psychosocial well-being, and the Emirati women felt urinary incontinence was cumbersome, disrupting their social and religious activities. The Saudi women in both Jeddah and Riyadh reported adverse effect on their lives yet majority of them did not seek medical care. [7,29] Woman had both during a pregnancy, a delivery, an abdominal or vaginal operation but after menopause increased the percentage the testing tool included 4 questions about Signs and symptoms of diagnosis of incontinence for female when urinary difficulty began the 4 questions had answers limited to Yes, No. These questions were analyzed using the

Chi square analysis. The most of question addressed the signs and symptoms of diagnosis of incontinence for female there was high percentage answer "NO" There were not statistically significant in respondents answering P-value (0.001). The other tests, which, when combined with the results of Chi square test, were respectively indicate the signs and symptoms of diagnosis of incontinence for female.

In the present study, Regarding the degree the Frequency of symptoms the majority of our study proportions answer severely degree. regarding daily activity affected the majority of our study proportions high were affected negative on the daily lives of those affected Important social activities such as work, driving a car and shopping can be interrupted

## 6. Conclusion

The prevalence of urinary incontinence in this study is most likely underestimated due to the study's limitation in determining the presence of urinary incontinence by a self-report method based on the BI. It is possible that mobility problems contributed to the presence of urinary incontinence among the respondents in this study, we acknowledge the fact that urinary incontinence is a common and poorly understood problem in our community. Another problem in the elderly age group is cognitive impairment, which also contributes to urinary incontinence. Prevalence of urinary incontinence is most likely underestimated. Detection of this problem is essential for preventing complications and improving the quality of life of the elderly.

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