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# Investigating the Prevalence of Urinary Incontinence among Women in Northern Afghanistan

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**ABSTRACT**

**Incontinence is a physical disability that is associated with social isolation and leads to anxiety, depression and reduced self-confidence. This disease is a common medical problem that may have adverse effects on their quality of life and social relationships. This descriptive-cross-sectional study was conducted in Mazar-e-Sharif in 1400-1401. The statistical population of this research consists of all women referring to Hakimi hospital. The samples included 100 women with the age of 40-60 years who had visited the hospital with various complaints including urinary incontinence. Sampling was simple random and 79 people were selected using Morgan's table. The data was collected with the help of a questionnaire and then entered into the SPSS 28 software for analysis. The findings show that among the (79) respondents, (39) respondents were between 40-50 years old, and (40) respondents were between 50-60 years old. (20) between the ages of 60-70 kg, (29) between 70-90 kg and (30) more than 90 kg. Among the patients, (12) had given birth 1-2 times, (28) had a normal birth and (34) had a non-normal birth (cesarean section). The average and standard deviation of the age of the participants was 80.5 ± 5.41 years, the average weight was 90.13 ± 12.98 kilograms, the average number of births was 4.23 ± 1.82, the average number of normal births was 3.42 ± 3.82, and the average number of non-normal or cesarean births was 29.16 ± 4.28. Urinary incontinence type was observed in (12) forte (15%), (44) combined (56%), (10) continuous (10%) and stress (13) tons (16%). The findings show that among the prevalence factors among patients, home birth (38%) and diabetes (25.4%) are among the most common causes of urinary incontinence among women. There was also a significant relationship between the use of contraceptives and incontinence. In the present study, there was a statistically significant relationship between age and suffering from administrative incontinence.**

***Keywords-*** Age, Diabetes, Normal Birth, Abnormal Birth, Urinary Incontinence.

## I. INTRODUCTION

Urinary incontinence is involuntary excretion, in such a way that it can be objectively felt by the person himself. This illness is a physical disability that is associated with social isolation and leads to anxiety, depression and a decrease in self-confidence and affects various social, mental, occupational, family, physical and sexual aspects of a person, as well as the ability of a person to It limits the enjoyment of daily activities, social relationships, travel, and personal relationships. Examining the actual prevalence of urinary incontinence is difficult due to cultural and social reasons; But it is estimated that 14 million Americans suffer from urinary incontinence, and its prevalence is 43.8% among people 65 years and older. This complication requires spending a lot of money for treatment (Mokhlesi, 2015: 967). Urinary incontinence is a complaint of loss or involuntary leakage of urine, and this condition occurs in both sexes, but is much more common in women (Aoki, et al, 2017).

In Afghanistan, urinary incontinence is considered a taboo and women are not interested in talking about this issue, even with health personnel. This can be due to shame or lack of knowledge about available treatment methods. Therefore, people with

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urinary incontinence may have a hard time talking about their problem, which indicates a desire to find a way to easily receive diagnostic care and treatment.

## II. TYPES OF URINARY INCONTINENCE IN WOMEN

***1- Urgent urinary incontinence:***

Urgent incontinence is the condition in which involuntary urination occurs with the urge to go to the bathroom. Usually, in this case, the leakage of urine occurred before the person could reach the bathroom. The prevalence of this type of incontinence is so high that about a third of all cases of urinary incontinence are of this type (Barat et al., 2013).

***2- Stress urinary incontinence:***

The complaint of involuntary urination that occurs with exercise, coughing, sneezing, or straining is called stress incontinence. This type of incontinence is more common in women and about half of urinary incontinence cases are of this type.

***3- Combined urinary incontinence:***

The combined type of urinary incontinence is a condition that is seen with both increased abdominal pressure and a sense of urgency to urinate. This type of incontinence accounts for less than half of cases (30-50%) of incontinence in terms of prevalence.

***4- Persistent urinary incontinence:***

Complaint of involuntarily urinating continuously in such a way that the person is both awake and asleep while walking, sitting without any abdominal pressure or feeling of urgency and continuously urinating. This type of incontinence is not common, it usually occurs after pelvic surgery or a history of pelvic radiation therapy and due to the creation of a fistula between the bladder and the uterus or the vaginal bladder (Derakhshan et al., 2011: 235).

## III. RISK FACTORS IN URINARY INCONTINENCE IN WOMEN

**1. Increasing age:** increasing age is considered as an important risk factor. As women enter menopause and the level of sex hormones decreases, pelvic muscles and tendons become more relaxed, which naturally increases the incidence of stress urinary incontinence. Also, in the 7th and 8th decades of life, due to tissue changes in the bladder muscle, contraction disorders in the bladder become more common and urgent urinary incontinence increases. On the other hand, concomitant diseases increase in old age such as diabetes, blood pressure, heart failure, heart attack and stroke, brain disorders such as dementia, Parkinson's. Therefore, due to the requirement to use multiple drugs for concomitant diseases, the prevalence of urinary incontinence in Old age intensifies.

**2. Pregnancy:** During pregnancy, especially with increasing gestational age, the possibility of urinary incontinence, especially stress incontinence, increases. After giving birth, during the first three months, if pelvic floor exercises are performed regularly, incontinence will decrease from 60% to 30%.

**3. Type of delivery:** Compared between cesarean section and natural delivery, cesarean section has a lower risk of urinary incontinence, especially the stress type. Of course, it should be noted that in some cases of natural childbirth, there are risk factors. These factors include long duration of labor, use of forceps for natural delivery and baby weight more than 4 kg. . In a woman with one pregnancy and childbirth, the risk of urinary incontinence increases one and a half times compared to a woman who has never been pregnant. Of course, with subsequent pregnancies, this risk increases again (Rashidi et al., 2017).

**4. Hormonal treatments:** taking oral estrogen pills with or without progesterone increases the prevalence of urinary incontinence in middle-aged women. But the use of local estrogen in the form of vaginal cream has no effect on the exacerbation of urinary incontinence and even improves vaginal atrophy and reduces frequent urinary infections.

**5. Obesity:** Obesity has an aggravating effect on the severity of all types of urinary incontinence. In fact, if the body mass index is higher than 30, it doubles the prevalence of urinary incontinence. However, with weight loss, the effects of recovery in urinary incontinence are clearly seen (Gadzhiera, 2016).

**6. Smoking:** There is a clear connection between urinary incontinence and smoking. Smoking aggravates chronic lung diseases, frequent coughs, lung infections, and as a result increases the incidence of stress incontinence.

**7. Diet:** There is a direct relationship between the consumption of caffeinated beverages (tea and coffee) and urgent urinary incontinence.

**8. Medical diseases:** diabetes and depression are two of the most important diseases that are clearly related to urinary incontinence. Diabetes in both types I and II increases the incidence of urinary incontinence. Although it is more in type II (Shih, 2017).

## IV. BACKGROUND RESEARCH

Basirt et al. (2007) investigated postpartum stress incontinence and some factors related to it in Babol, Iran. This cross-sectional study was conducted on 450 women who had given birth two months after giving birth and referred to the maternal and child health unit of Babol health centers for the first vaccination. At first, a questionnaire containing individual, social and fertility variables as well as questions about urinary stress incontinence was completed. Then all people were examined and evaluated by a gynecologist to determine the volume and severity of office stress incontinence. The results showed that the frequency of urinary stress

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incontinence after childbirth was 18% (81 people). Women with stress urinary incontinence were significantly older and had more births than women without stress urinary incontinence. Also, the occurrence of incontinence was less in women who had an episiotomy. In addition, the method of delivery had no effect on women's stress incontinence, and the birth weight of the baby, head circumference of the baby, and the mother's body mass index did not differ in the two groups (Basirt et al., 2007).

Shahnaz et al. (2013), in a study, investigated the prevalence of office incontinence in women referred to the pelvic floor disorders clinic in Iran. The present study was descriptive cross-sectional. Out of all the patients referred to the pelvic floor disorders clinic of Ayatollah Rouhani Babol educational and therapeutic center during the years 2002-2003, 200 patients who had symptoms of urinary disorders were included in the study. The study parameters included age, weight, height, number of parity, type of delivery, number of natural or cesarean births, urgency incontinence, stress incontinence and mixed incontinence. Findings: 200 female patients with an average age of 48.24±9.95 years, weight of 75.82±13.33 kg and average BMI of 29.95±5.32 were included in the study. Stress incontinence was seen in 90 people (45%), urgency in 45 people (22.5%), and mixed in 65 people (32%). 145 people (72.5%) had normal delivery, 29% of them had stress incontinence, 23.4% had urgency incontinence, and 36.6% had mixed incontinence. In people who had cesarean delivery, 56.2% had stress incontinence, 31.2% urgent incontinence and 12.5% mixed incontinence. Conclusion: Considering the high frequency of urinary incontinence in women, it is recommended that the healthcare system take necessary measures in the field of timely identification and treatment of these patients.

Mokhlesi et al. (2015) investigated the psychometrics of urinary incontinence questionnaire in married women of Qom province. This cross-sectional study was conducted with the aim of urinary incontinence in married women in Iran, and in this study, the questionnaire was first translated from English to Farsi using the reverse method. The final version of the questionnaire was completed by 150 women who referred to clinics in Qom province. The reliability of the questionnaire was checked with Cronbach's alpha coefficient and retest. Exploratory and confirmatory factor analysis was used to determine the validity of the scale. The results of exploratory factor analysis showed two factors, which included stress urinary incontinence with three questions and urgency urinary incontinence factor with three questions. The sample size adequacy test was calculated as 0.81, which was at an acceptable level, and Bartlett's sphericity test was statistically significant. The fit statistics of the confirmatory factor analysis suggested that the two-factor model provided the best fit for the data (Mokhlesi et al., 2015: 966).

Karami et al. (2001) investigated the frequency of urinary incontinence and risk factors in middle-aged women who referred to the Urology Health Center affiliated to Shahid Sadoughi University of Medical Sciences in Yazd during 2018-2019. This analytical-cross-sectional study was conducted on more than 200 women aged 40-60 who referred to the Urology Health Center who were randomly selected. A questionnaire that contains demographic information and questions related to the determination of administrative incontinence and the type of urinary incontinence and risk factors (age, weight, height, body mass index, age of onset of menstruation, age of onset of menopause, number of births, age of first birth, number of vaginal births , the number of cesarean births, diabetes, blood pressure, chronic lung diseases, use of contraceptive hormones, postmenopausal hormone therapy, smoking, obsession) were completed in the form of a face-to-face interview. The findings showed that the frequency of urinary incontinence in women aged 40-60 years visiting health centers was 54%. The highest frequency of stress incontinence was 89.2%, followed by urgency (48.6%) and mixed (47.7%). In the study of risk factors, a significant relationship was observed between the use of contraceptives and the occurrence of urinary incontinence (p=0.023) and the occurrence of stress urinary incontinence. There was also a significant relationship between the use of contraceptives and the absence of mixed administrative incontinence (Karami et al., 1401: 4740).

Betmani et al. (2021) investigated the prevalence and factors related to urinary incontinence in elderly women around the world. This study is a systematic review and comprehensive meta-analysis of research findings on urinary incontinence in older adults worldwide through Cochrane, MEDLINE, Libary Sciencedirect, Embase, ProQuest, Embase, ProQuest, Iranmedex, magiran and SID databases from 2000-2020. It was measured using 12 indicators. The findings showed that 258,456 people in the age range of 106-55 years had administrative incontinence (Betmani et al., 2021).

Saboya (2017) investigated the effect of different types of office incontinence on women's quality of life. The aim of the research was to identify the most common type of urinary incontinence in women referring to two clinics and to compare the quality of general and specific incontinence among different types of incontinence. The data were collected through valid questionnaires. The findings showed that mixed incontinence was the most common type (62.6%), stress urinary incontinence (31.1%) and urgent urinary incontinence (6.3%). All these urinary incontinence have an effect on the quality of life, but mixed urinary incontinence had the most damage on the quality of life (Saboya, 2017).

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## V. RESEARCH METHODOLOGY

This descriptive-cross-sectional study was conducted in Mazar-e-Sharif in 1400-1401. The statistical population of this research consists of all women referring to Hakimi hospital. The samples included 100 women with the age of 40-60 years who had visited the hospital with various complaints including urinary incontinence. Sampling was simple random and 79 people were selected using Morgan's table. The data was collected with the help of a questionnaire and then entered into the SPSS 28 software for analysis.

## VI. ANALYZE

**Table 1: The frequency of studied variables of incontinence in female patients**

| Variables | | Frequency | Percentage |
|---|---|---|---|
| Age | 50- 40 | 39 | 49.4 |
| | 60- 50 | 40 | 50.6 |
| Weight in Kilograms | 70- 50 | 20 | 25 |
| | 90- 70 | 29 | 37 |
| | Greater than 90 | 30 | 38 |
| Number of Births | 2- 1 times | 12 | 15 |
| | 4- 2 times | 28 | 36 |
| | More than 4 times | 39 | 49 |
| The Number of Normal Births | 45 | 42 | 53 |
| The Number of abnormal Births | 34 | 37 | 47 |

Table (1) shows the descriptive statistics of research variables in relation to female incontinence. The findings show that among the (79) respondents, (39) respondents were between 40-50 years old, and (40) respondents were between 50-60 years old. (20) between the ages of 60-70 kg, (29) between 70-90 kg and (30) more than 90 kg. Among the patients, (12) had given birth 1-2 times, (28) had a normal birth and (34) had a non-normal birth (cesarean section).

**Table 2: Investigating the relationship between the research variables and urinary incontinence in referring women**

| Variables | Standard deviation ± mean | P |
|---|---|---|
| Age | 80.5 ± 5.42 | 0.37 |
| Weight in kilograms | 90.13 ± 12.98 | 0.07 |
| Number of Births | 4.23 ± 1.82 | 0.58 |
| The Number of Normal Births | 3.42 ± 3.82 | 0.43 |
| The Number of abnormal Births | 29.16 ± 4.28 | 0.04 |

Table (2) examines the relationship between research variables and urinary incontinence in women. The average and standard deviation of the age of the participants was 80.5 ± 5.41 years, the average weight was 90.13 ± 12.98 kilograms, the average number of births was 4.23 ± 1.82, the average number of normal births was 3.42 ± 3.82, and the average number of non-normal or cesarean births was 29.16 ± 4.28.

**Table 3: Type of incontinence in women**

| | | Frequency | Percentage |
|---|---|---|---|
| **The Type of Urinary Incontinence in Referring Patients** | **Urgency** | 12 | 15 |
| | **Hybrid** | 44 | 56 |
| | **Ongoing** | 10 | 13 |
| | **Stressful** | 13 | 16 |

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The results of the descriptive statistics in table (3) show that the type of urinary incontinence in (12) tons of forte (15%), (44) combined tons (56%), (10) continuous tons (10%) and stress (13) tons (16%) has been observed.

**Table 4: Study of the prevalence of urinary incontinence among women**

| Prevalence factors | Frequency | Percentage |
|---|---|---|
| Birth at home | 30 | 38 |
| Taking contraceptives | 10 | 12.6 |
| Chronic lung diseases | 8 | 10 |
| smoking | 11 | 14 |
| diabetes | 20 | 25.4 |

Table (4) shows the prevalence of urinary incontinence among patients referred to Hakimi Hospital. The findings show that among the prevalence factors among patients, home birth (38%) and diabetes (25.4%) are among the most common causes of urinary incontinence among women.

## VII. CONCLUSION

Urinary incontinence or involuntary urination is a condition in which a person is unable to control and monitor the process of urination and urine is lost in an unwanted and uncontrollable way (O'Dowd, 1993). In this research, the prevalence of urinary incontinence among women between the ages of 60 and 60 who referred to Hakimi Hospital in Mazar-e-Sharif city was investigated.

This descriptive-cross-sectional study was conducted in Mazar-e-Sharif in 1400-1401. The statistical population of this research consists of all women referring to Hakimi hospital. The samples included 100 women with the age of 40-60 years who had visited the hospital with various complaints including urinary incontinence. Sampling was simple random and 79 people were selected using Morgan's table. The data was collected with the help of a questionnaire and then entered into the SPSS 28 software for analysis.

The findings show that among the (79) respondents, (39) respondents were between 40-50 years old, and (40) respondents were between 50-60 years old. (20) between the ages of 60-70 kg, (29) between 70-90 kg and (30) more than 90 kg. Among the patients, (12) had given birth 1-2 times, (28) had a normal birth and (34) had a non-normal birth (cesarean section). The average and standard deviation of the age of the participants was 80.5 ± 5.41 years, the average weight was 90.13 ± 12.98 kilograms, the average number of births was 4.23 ± 1.82, the average number of normal births was 3.42 ± 3.82, and the average number of non-normal or cesarean births was 29.16 ± 4.28. . Urinary incontinence type was observed in (12) forte (15%), (44) combined (56%), (10) continuous (10%) and stress (13) tons (16%). . The findings show that among the prevalence factors among patients, home birth (38%) and diabetes (25.4%) are among the most common causes of urinary incontinence among women. There was also a significant relationship between the use of contraceptives and incontinence. These findings are consistent with the findings of Alison Bandsley et al. Urinary incontinence increased with increasing age. In the present study, there was a statistically significant relationship between age and suffering from administrative incontinence.

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