

Prevalence and Effects of Urinary Incontinence Among Women in V.O.C Colony

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Abstract

Urinary incontinence is the involuntary loss of urine that results in a social problem. Urinary Incontinence is a condition in which there is uncontrollable leakage of urine causing a social or hygienic problem. Objectives: 1.Assessment of prevalence of urinary incontinence among women.2. Identification of the effects of urinary incontinence. Design: Survey design Setting: V.O.C colony.Population and Sampling: All married women residing in V.O.C colony. Among the 85 women who were assessed for symptoms of urinary incontinence, 28 women had urinary incontinence. Major Findings:1. The overall prevalence was 32% and were above 35 years .3.Majority,18 women had leakage of urine on laughing, 15 women had leakage of urine on coughing, 8 women often had leakage of urine on sneezing. 4.Majority,12 women had urge incontinence,10 women had stress, 5 women had mixed incontinence. 5.The present study revealed that, 14 women were affected in their social behavior, 18 women were affected in their emotional health . Only 4 women not experienced frustration, 23 women experienced frustration.6.Association was found between mode of delivery and prevalence of urinary incontinence among women.

Key words: Urinary incontinence, unintentional leakage, urge incontinence

INTRODUCTION

Urinary incontinence is the involuntary loss of urine that results in a social problem. Urinary incontinence can lead to decreased physical and psychological well-being. The prevalence of urinary incontinence ranges from 10 to 60%, depending on the countries and populations studied. Women are much more susceptible urinary incontinence to than men. Anatomical and physiological differences, such as reproductive and hormonal changes associated with pregnancy and menopause, explain the differences prevailing between male and female

Urinary Incontinence is a condition in which there is uncontrollable leakage of urine

causing a social or hygienic problem. Most women with this problem withdraw from social life and try to hide the problem from their families, friends and even their doctors.

1.1 Need for the study:

The inability to control urine is one of the most unpleasant and distressing problem which a person can suffer.

Urinary Incontinence is increasingly widespread in later life, especially among women. During their lifetime nearly half of women suffer from some degree of urinary Incontinence.

1.2 Statement of the Problem:

PREVALENCE AND EFFECTS OF URINARY INCONTINENCE AMONG WOMEN IN V.O.C COLONY

1.3 Objectives:

1.3.1 Assessment of prevalence of urinary incontinence among women.

1.3.2 Identification of the effects of urinary incontinence.

1.4 Assumptions:

1.4.1 Urinary incontinence is a common problem among women.

1.4.2 Urinary incontinence has greater impact on the quality of life of women

1.5 Operational Definition:

Urinary Incontinence: Urinary incontinence refers to the unintentional leakage of urine during normal physical activities like coughing, sneezing, laughing, walking, bending, heavy lifting.

LITERATURE REVIEW

A study was conducted to determine the frequency and risk factors of urinary incontinence in women aged 20 years or older, as well as to examine its effects on women's quality of life. Among 1,585 women aged 20 years and above included in the study, the prevalence of urinary incontinence among the women was 49.5%. The QOL of the women with and without urinary incontinence was evaluated; the scores for women without urinary incontinence were higher than those with mild, moderate or severe urinary incontinence [15].

A study was conducted on the prevalence of urinary incontinence and its effects on the quality of life in working women. Among 109 women included in the study, 27.5% reported symptoms of urinary incontinence. Seventy-five per cent of the affected women rated their symptoms as light to moderate. Incontinence occurred mostly during physical exertion, for example, coughing or sneezing (53.3%) and physical activity/exercise (16.7%). Also, 50% indicated that urinary leakage occurred before

they could reach the toilet, while 6.7% ascribed it to having no obvious reason that leakage occurred all the time [12].

A population-based cross-sectional study was conducted at Turkey to determine the prevalence and risk factors of urinary incontinence in women aged 20 years or older and to assess its influence on the quality of life. The study group comprised of 625 women and the prevalence of urinary incontinence was 25.8%, urinary incontinence was associated with body mass index, diabetes mellitus, neurological disorders, recurrent urinary tract infections. Impairment of quality of life was related with the type of urinary incontinence, frequency of urinary incontinence episodes, amount of leakage and urinary incontinence during sexual intercourse. The quality of life of women was either mildly and moderately affected by urinary incontinence [8].

The prevalence of urinary incontinence ranges from 10 to 60%, depending on the countries and populations studied. Women are much more susceptible to urinary incontinence than men. Anatomical and physiological differences, such as reproductive and hormonal changes associated with pregnancy and menopause, explain the differences prevailing between male and female.

MATERIALS AND METHODS

3.1 Study Design : Survey design

3.2 Setting: V.O.C colony.

3.3 Population and Sampling:

All married women residing in V.O.C colony.

3.4 Inclusion Criteria:

Married women irrespective of age .

3.5 Exclusion Criteria:

Un- married women, irrespective of age.

3.6 Instruments and Tool for Data Collection:

3.6.1 Questionnaire to assess the base line data: Contents included in this section are demographic variables, number of children, birth weight of the child, mode of delivery, history of medical illness, treatment and any history of pelvic surgery.

3.6.2 Questionnaire to assess the symptoms of urinary incontinence: This section includes fifteen questions with rating scale for the symptoms of urinary incontinence.

3.6.2 Questionnaire to assess the history of urinary incontinence: This section includes questions on duration of incontinence, time of onset and treatment measures for incontinence.

3.6.3 Questionnaire to assess the impact on quality of life of women with urinary incontinence: This section includes incontinence impact questionnaire Short form IIQ-7 a standardized questionnaire to assess the impact on quality of life of women with urinary incontinence.

3.6.4 Questionnaire to assess the impact on physical health of women with urinary incontinence: This section includes three questions related to pattern of micturation and history of urinary tract infection.

DATA ANALYSIS AND INTERPRETATION

In this study prevalence and effect of urinary incontinence among women was assessed. The data was collected, analysed and described. The findings based on statistical analysis is presented in this chapter.

4.1 Demographic Status of Women: Among 85 women the age of women ranged from 20 years to above 60 years. 4 women were in the

age group of 20-25 years, 10 women were in the age group of 25-30 years, 8 women were in the age group of 30-35 years, 13 women were in the age group of 35-40 years, 11 women were in the age group of 40-45 years, 11 women were in the age group of 45-50 years, 7 women were in the age group of 50-55 years, 9 women were in the age group of 55-60 years and 12 were above >60 years.

With regard to education status, 16 women were uneducated, 24 women had primary education, 26 women had high school education, 9 women had higher secondary education and 10 were graduates. With regard to occupation women, majority 80 women were housewives, 3 were millworkers and 2 were house maids.

4.2 Risk Factors for Urinary Incontinence among Women:

4.2.1 Number of Children: Among 85 women, 22 women had one child, 35 had 2 children, 17 women had 3 children, 6 women had 4 children and 5 had no child.

4.2.3 Birth Weight of Children: 12 women had children with birth weight 2-2.5kg, 24 women had children with birth weight 2.5-3.0kg, 23 women had children with birth weight 3-3.5kg, 14 women had children with birth weight 3.5-4kg, 7 women had children with birth weight ≥ 4 kg.

4.2.4 Mode of Delivery: Majority 38 women had normal vaginal delivery, 27 women had episiotomy, only 3 had perineal tear, one had forceps delivery and 12 had cesarean section.

4.2.5 Age at Menopause: 10 women attained menopause at 35-40 years of age, 8 women attained menopause at 40-45 years of age, 11 women attained menopause at 45-50 years of age, 3 women attained menopause at 50-55 years of age, 54 women had not attained menopause.

4.2.6 Medical Illness: 10 women had history of diabetes mellitus, 11 women had history of

hypertension, 1 woman had history of hypothyroidism, 1 had asthma and 63 women had no history of medical illness.

4.2.7 Under Medication for Medical Illness:

10 women are under treatment with hypoglycemic agents, 11 are on treatment with antihypertensives, one woman is on thyroid hormone.

4.2.8 Pelvic Surgery: 3 women had undergone pelvic surgery, one had undergone abdominal hysterectomy and one had vaginal hysterectomy.

4.3 Symptoms of Urinary Incontinence among Women:

4.3.1 Involuntary Leakage of Urine: 57 women never had involuntary leakage of urine, 14 women rarely had involuntary leakage of urine, 5 women sometimes had involuntary leakage of urine, 2 women often had involuntary leakage of urine, 7 women always had involuntary leakage of urine.

4.3.2 Pain and discomfort in Genital Area: 84 women never had pain /discomfort in genital area, only one rarely had pain/discomfort in genital area.

4.3.3 Inability to Control Midstream Urine: 84 women never had inability to control midstream urine, only one sometimes had inability to control midstream urine.

4.3.4 Leakage of Urine when Changing Position: 84 women never had leakage of urine when changing position, only one had rarely leakage of urine when changing position.

4.3.6 Leakage of Urine on Sneezing: 77 women never had leakage of urine on sneezing, one woman rarely had leakage of urine on sneezing, 6 women sometimes had leakage of urine on sneezing, one woman often had leakage of urine on sneezing.

4.3.7 Leakage of Urine on Coughing: 80 women never had leakage of urine on

coughing, one woman rarely had leakage of urine on coughing, 8 women sometimes had leakage of urine on coughing, 2 women often had leakage of urine on coughing, 4 women always had leakage of urine on coughing.

4.3.8 Leakage of Urine on Laughing: 57 women never had leakage of urine on laughing, 14 women rarely had leakage of urine on laughing, one woman sometimes had leakage of urine on laughing, one woman often had leakage of urine on laughing, 2 women always had leakage of urine on laughing.

4.3.9 Leakage of Urine on Lifting: 83 women never had leakage of urine on lifting, 2 women rarely had leakage of urine on lifting.

4.3.10 Leakage of Urine on Bending : 84 women never had leakage of urine on bending, one woman sometimes had leakage of urine on bending.

4.3.11 Leakage of Urine during Sexual Activity: 84 women never had leakage of urine during sexual activity, one woman rarely had leakage of urine during sexual activity.

4.3.12 Change of Panties/Inskirts: 83 women never change panties/inskins, one woman rarely change panties/inskins, one woman often change panties/inskins.

4.3.13 Urge Incontinence: 73 women never had urge incontinence, one woman rarely had urge incontinence, one woman sometimes had urge incontinence, 3 women often had urge incontinence, 7 women always had urge incontinence.

4.3.14 Mixed Incontinence: 80 women never had mixed incontinence, one woman often had mixed incontinence, 4 women always had urge incontinence.

4.4 Type of Incontinence among Women: 12 women had urge incontinence, 10 women had stress, 5 women had mixed incontinence.

4.5 History of Incontinence:

4.5.1 Duration of Incontinence: 5 women had history of incontinence for <1year, 9 women had history of incontinence for 1-2 years, 7 women had history of incontinence for 2-3 years, 3 women had history of incontinence for 3-4 years, 3 women had history of incontinence for 4-5 years.

4.5.2 Time of Onset: Only 1 woman had incontinence before delivery, 26 women had incontinence onset after delivery.

4.5.3 Treatment for Urinary Incontinence: Only 2 women had underwent treatment for urinary incontinence, 23 women had not undergone any treatment for urinary incontinence.

4.6 Quality of Life of Women with Urinary Incontinence:

4.6.1 Household Activity: 22 women were not at all affected in doing household activities, 4 women were slightly affected in doing household activities, one women was greatly affected in doing household activities .

4.6.2 Physical Activity: 24 women were not at all affected in doing physical activity, 2 slightly affected in doing physical activity, one women was moderately affected in doing physical activity .

4.6.3 Participation in Entertainment Activities: 20 women were not at all affected from participating in entertainment activities, 2 women were slightly affected from participating in entertainment activities, 5 women were greatly affected from participating in entertainment activities.

4.6.4 Travelling: 18 women were not at all affected in travelling for more than 30 minutes, 2 women were moderately affected in travelling for more than 30 minutes, 7 women were greatly affected in travelling for more than 30 minutes.

4.6.5 Social Behaviour: 13 women were not at all affected in their social behaviour, 4

women were slightly affected in their social behaviour, 3 women were moderately affected in their social behaviour, 7 women were greatly affected in their social behaviour.

4.6.6 Emotional Health: 9 women were not at all affected in their emotional health, one women was slightly affected in their emotional health, 7 women were moderately affected in their emotional health, 10 women greatly affected in their emotional health.

4.6.7 Frustration: 4 women not at all experienced frustration, 3 women slightly experienced frustration, 9 women moderately experienced frustration, 11 women greatly experienced frustration .

4.7 Effect of Urinary Incontinence on Physical Health:

4.7.1 Burning Micturation: 5 women had burning micturation and 22 women had no burning micturatio.

4.7.2 Frequency of Micturation: 7 women had increased frequency of micturation and 20 had normal flow .

4.7.3 History of Urinary Tract Infection: 6 women had previous history of urinary tract infection and 21 women had no history of urinary tract infection .

4.8 Association between Number of Children and Prevalence of Incontinence among Women: Chi-square test was used to find out the relationship between the number of children and prevalence of urinary incontinence among women.

Hypothesis: There is no significant association between number of children and prevalence of urinary incontinence among women.

$$X^2=2.43$$

The calculated value of x^2 is lesser than the tabulated value at $p<0.05$. This shows that there is no association between number of

children and prevalence of urinary incontinence among women.

4.9 Association between Birth Weight of Children and Prevalence of Incontinence among Women:

Chi-square test was used to find out the relationship between the birth weight of children and prevalence of urinary incontinence among women.

Hypothesis: There is no significant association between birth weight of children and prevalence of urinary incontinence among women.

$$X^2=4.1$$

The calculated value of x^2 is lesser than the tabulated value at $p<0.05$. This shows that there is no association between birth weight of children and prevalence of urinary incontinence among women.

4.8 Association between Mode of Delivery and Prevalence of Incontinence among Women:

Chi-square test was used to find out the relationship between the mode of delivery and prevalence of urinary incontinence among women.

Hypothesis: There is no significant association between the mode of delivery and prevalence of urinary incontinence among women.

$$X^2=8.1$$

The calculated value of x^2 is greater than the tabulated value at $p<0.05$. This shows that there is association between mode of delivery and prevalence of urinary incontinence among women.

RESULTS AND DISCUSSION

Urinary incontinence may be more distressing to younger than older women.. The impact on quality of life seems to vary due to difficulties in self- management because of lack of control resulting from the inability to regulate urge incontinence.

5.1 Demographic Status of Women: Among 85 women the age of women ranged from 20 years to above 60 years. Only 4 women were in the age group of 20-25 years, majority 13 women were in the age group of 35-40 years, 10 women were in the age group of 25-30 years, 8 women were in the age group of 30-35 years, 11 women were in the age group of 40-45 years, 11 women were in the age group of 45-50 years, 7 women were in the age group of 50-55 years, 9 women were in the age group of 55-60 years and 12 were above >60 years.

An age related increase is reported in urinary incontinence from 45% in women aged 35-44 years to 60% in women aged 45-54 years.

With regard to education status, majority 26 women had high school education 16 women were uneducated, only 10 were graduates. With regard to occupation women, majority 80 women were housewives.

5.2 Risk Factors for Urinary Incontinence among Women:

5.2.1 Number of Children: Among 85 women, majority 35 had 2 children, 22 women had one child, 17 women had 3 children ,6 women had 4 children and 5 had no child.

In the present study it was observed that, among the 27 women who had urinary incontinence, 6 women had 2 children, 8 women had 3 children, 3 had 4 children and 10 women had one child. But statistically no association was found between the number of children and the prevalence of urinary incontinence in this study.

5.2.3 Birth Weight of Children: 12 women had children with birth weight 2-2.5kg, 24 women had children with birth weight 2.5-3.0kg, 23 women had children with birth weight 3-3.5kg, 14 women had children with birth weight 3.5-4kg, 7 women had children with birth weight ≥ 4 kg.

Among the 27 women who had urinary incontinence, majority 10 women had children with birth weight 3-3.5kg, 9 women had children with birth weight 2.5-3.0kg, 5 women had children with birth weight 3.5-4kg, only 2 women had children with birth weight 2-2.5kg.

5.2.4 Mode of Delivery: Majority 38 women had normal vaginal delivery, 27 women had episiotomy, only 3 had perineal tear, one had forceps delivery and 12 had cesarean section.

The present study revealed that, among the 27 women who had urinary incontinence, majority 17 women had normal vaginal delivery, 5 had episiotomy, one woman had perineal tear and 3 women had cesarean section. Chi-square analysis showed that there is association between mode of delivery and prevalence of urinary incontinence.

5.2.5 Age at Menopause: 10 women attained menopause at 35-40 years of age, 8 women attained menopause at 40-45 years of age, 11 women attained menopause at 45-50 years of age, 3 women attained menopause at 50-55 years of age, 54 women had not attained menopause.

5.2.6 Medical Illness: 10 women had history of diabetes mellitus, 11 women had history of hypertension, 1 woman had history of hypothyroidism, 1 had asthma and 63 women had no history of medical illness. Urinary incontinence was associated with body mass index, diabetes mellitus, neurological disorders, recurrent urinary tract infections [8].

5.2.7 Under Medication for Medical Illness: 10 women are under treatment with hypoglycemic agents, 11 are on treatment with antihypertensives, one woman is on thyroid hormone.

5.2.8 Pelvic Surgery: 3 women had undergone pelvic surgery, one had undergone abdominal hysterectomy and one had vaginal hysterectomy. Women report the onset urinary

incontinence of immediately following hysterectomy. The development of post hysterectomy urinary incontinence might be caused by nerve damage during the procedure and disturbances of musculofascial attachments of the bladder to the surrounding pelvic [4].

5.3 Prevalence of Urinary Incontinence among Women: Among the 85 women who were assessed for symptoms of urinary incontinence, 28 women had urinary incontinence. The overall prevalence was 32%. A study was conducted to determine the frequency and risk factors of urinary incontinence in women aged 20 years or older, as well as to examine its effects on women's quality of life. Among 1,585 women aged 20 years and above included in the study, the prevalence of urinary incontinence among the women was 49.5% [15].

5.4 Symptoms of Urinary Incontinence among Women: 57 women had no involuntary leakage of urine and 28 women had involuntary leakage of urine. 84 women had no pain/discomfort in genital area, only one rarely had pain/discomfort in genital area. 84 women had ability to control midstream urine, only one sometimes had inability to control midstream urine. 84 women had no leakage of urine when changing position, only one had rarely leakage of urine when changing position.

77 women never had leakage of urine on sneezing, 8 women often had leakage of urine on sneezing. 70 women never had leakage of urine on coughing, 15 women had leakage of urine on coughing. 57 women never had leakage of urine on laughing, 18 women had leakage of urine on laughing. 83 women never had leakage of urine on lifting, 2 women rarely had leakage of urine on lifting. 84 women never had leakage of urine on bending, one woman sometime had leakage of urine on

bending. 84 women never had leakage of urine during sexual activity, one woman rarely had leakage of urine during sexual activity. 83 women never change panties/inskirts, two women changed panties/inskirts.

.5 Type of Incontinence among Women: 12 women had urge incontinence, 10 women had stress, 5 women had mixed incontinence. Incontinence occurred mostly during physical exertion, for example, coughing or sneezing (53.3%) and physical activity/exercise (16.7%). Also, 50% indicated that urinary leakage occurred before they could reach the toilet, while 6.7% ascribed it to having no obvious reason that leakage occurred all the time.

5.6 History of Incontinence:

5.6.1 Duration of Incontinence: 5 women had history of incontinence for <1 year, 9 women had history of incontinence for 1-2 years, 7 women had history of incontinence for 2-3 years, 3 women had history of incontinence for 3-4 years, 3 women had history of incontinence for 4-5 years.

5.6.2 Time of Onset: Only 1 woman had incontinence before delivery, 26 women had incontinence onset after delivery.

5.6.3 Treatment for Urinary Incontinence: Only 2 women had undergone treatment for urinary incontinence, 23 women had not undergone any treatment for urinary incontinence. The majority of women with stress incontinence do not seek professional help for their conditions and are too often talk about it even with their friends^[12].

5.7 Quality of Life of Women with Urinary Incontinence: It was observed in this study, 22 women were not affected in doing household activities, 5 women were affected in doing household activities. 3 were affected in doing physical activities. 20 women were not affected from participating in entertainment activities, 7 women were

affected from participating in entertainment activities. 9 women were affected in travelling for more than 30 minutes.

The present study revealed that, 14 women were affected in their social behavior. 9 women were not affected in their emotional health, 18 women were affected in their emotional health. Only 4 women not experienced frustration, 23 women experienced frustration. Urinary incontinence may be more distressing to younger than older women.

5.8 Effect of Urinary Incontinence on Physical Health: 5 women had burning micturation and 22 women had no burning micturation. 7 women had increased frequency of micturation and 20 had normal. 6 women had previous history of urinary tract infection and 21 women had no history of urinary tract infection.

SUMMARY AND CONCLUSION

Urinary incontinence affects 30% of women by the time they reach 50 years of age and continues to increase thereafter. Symptoms vary in severity and adversely impact on the physical and psychosocial wellbeing of affected individuals.

The present study was conducted to assess the prevalence and effects of urinary incontinence among women. Literature was reviewed regarding the prevalence and effects of urinary incontinence among women and the impact on quality of life.

The research design adopted for the study was survey design. The study was conducted at V.O.C colony. Based on the objectives the questionnaire was prepared to obtain the base line information, symptoms of incontinence, questions to assess the quality of life and effects on physical health.

Data was collected from 85 women and among them 27 women who had urinary

incontinence were assessed for the impact of urinary incontinence in their quality of life.

Collected data were tabulated and analyzed by using descriptive and analytical statistics.

6.1 Major Findings of the Study:

1. Among the 85 women who were assessed for symptoms of urinary incontinence, 28 women had urinary incontinence. The overall prevalence was 32%.
2. Majority 20 women who had incontinence were above 35 years .
3. Majority 17 women had more than one child.
4. Majority 10 women had children with birth weight 3-3.5kg, 9 women had children with birth weight 2.5-3.0kg.
5. Majority 17 women had normal vaginal delivery, 5 had episiotomy, one women had perineal tear and 3 women had cesarean section.
6. Majority, 18 women had leakage of urine on laughing, 15 women had leakage of urine on coughing, 8 women often had leakage of urine on sneezing.
7. Only 2 women rarely had leakage of urine on lifting one women sometime had leakage of urine on bending.
8. Majority, 12 women had urge incontinence, 10 women had stress, 5 women had mixed incontinence.
9. Only 1 women had incontinence before delivery, 26 women had incontinence onset after delivery .
10. Only 2 women had underwent treatment for urinary incontinence, 23 women had not underwent any treatment for urinary incontinence
11. Among 27 women, 5 women were affected in doing household activities, 3 were affected in doing physical activities

12. Among 27 women, 7 women were affected from participating in entertainment activities. 9 women were affected in travelling for more than 30 minutes
13. The present study revealed that, 14 women were affected in their social behavior, 18 women were affected in their emotional health . Only 4 women not experienced frustration, 23 women experienced frustration.
14. No association was found between number of children and prevalence of urinary incontinence among women.
15. No association was found between birth weight of children and prevalence of urinary incontinence among women.
16. Association was found between mode of delivery and prevalence of urinary incontinence among women.

6.2 Conclusion:

Urinary incontinence is a common health problem among women that negatively impacts quality of life. Therefore, it is important that primary care physicians have an understanding of how to manage urinary incontinence effectively. The present study showed that the prevalence of this problem is high among women and also affects the emotional and physical health of women. But women are mostly undiagnosed and do not approach the treatment modalities, Hence there is a high need to educate the women on the problem and the treatment measures.

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