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RESEARCH ARTICLE

Quality of Life and Health-seeking behaviour of women with Postpartum Urinary Incontinence

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ABSTRACT:

Background. The aims of the present study were to assess the prevalence of postpartum urinary incontinence (PUI), and to assess the quality of life (QOL) and health seeking behavior (HSB) of women with postpartum urinary incontinence. Methods. A descriptive study, including 624 women who were 6 to 37 weeks' post-childbirth formed the study population. Data were collected using Questionnaires for the Urinary Incontinence Diagnosis (QUID) to assess the prevalence of PUI, King's Health Questionnaire (KHQ) to assess the quality of life and Health seeking behaviors questionnaire to assess the health seeking behaviour of women with postpartum urinary incontinence. Results. The findings revealed that 16.67% (104 women) had symptoms of postpartum urinary incontinence. Majority of the women with PUI (84%) were either mildly, moderately or severely affected and of those affected only 23% had good health seeking behavior. Conclusion. Postpartum urinary incontinence is an important but often overlooked form of morbidity in obstetrics. It is a common symptom among postnatal women which need to be addressed and reinforced by the health workers as most women suffering from it may not consider it as a disease or may not even seek for consultation due to poor or lack of knowledge.

KEYWORDS: Prevalence, postpartum urinary incontinence, QUID, KHQ, Quality of life and Health seeking behaviour of women with postpartum urinary incontinence.

INTRODUCTION:

Urinary incontinence is an involuntary loss of bladder control, affecting young and middle age women. The prevalence increases as the women ages and although nulliparous women can have urinary incontinence, the incidence is higher in women who have given birth¹. Globally the reported prevalence of urinary incontinence varies widely in different studies, according to the population studies from various countries, the report showed that the prevalence ranged from approximately 5% to 70%, with most studies reporting a prevalence of any UI in the range of 25-45%². The prevalence of UI among women in a selected states and district of India range from 11.6% to 33.8%.^{3,4}

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postpartum incontinence during the first three months of postpartum was 33%⁷. The incidence of postpartum stress urinary incontinence was reported to be 23.42% in a study done in Kolkata, India⁸.

Incontinence can have far reaching effects on the lives of women. As a result of their condition some women can experience feelings of frustration, embarrassment and shame and will sometimes reduce/avoid social contacts and activities in order to control UI and its effects which

may lead to increased social isolation and feelings of

loneliness^{9,10}. Symptoms of UI was associated with

Urinary incontinence (UI) after delivery may affect

women for the rest of their lives. Several studies have reported data on the long term prognosis of postpartum

urinary incontinence. A long-term prospective study

showed that the onset of UI in pregnancy or postpartum

increased the risk for UI twelve years later^{5,6}. A

systematic review showed the pooled prevalence of any



moderate to severe form of depressives symptoms¹¹, and women with UI are shown to have higher rates of depression and social isolation than those without UI¹² and UI may also contribute to sexual dysfunction due to urinary leakage during intercourse¹³

Most women who suffer from UI may not consider it a disease or may not seek a consultation due to poor knowledge or negative attitude regarding UI³ thus it may lead to a reduction in their Quality of Life (QoL). Globally, urinary incontinence (UI) affects the quality of life of at least one third of women⁴. Many women are too embarrassed to talk about it and some believe it to be untreatable even in Western countries¹⁴ This problem is more pronounced in India, where women usually do not seek treatment for their reproductive health problems and do not talk about their symptoms. There is a "culture of silence" and a low consultation rate among Indian women regarding such problems⁴.

The researcher in her observation of patient visiting the OPD, has found that minimal postnatal women come for follow up and little or no emphasis is made regarding PUI and adding to this most women are often discharged within 24 hours of delivery, therefore, it becomes difficult to ensure if the information regarding PUI, kegel's exercise and other postpartum morbidity have been adequately provided. Most nurses are unaware of the magnitude of the effects of urinary incontinence on women, thereby leading to lack of empowerment of women to seek help and also though host of studies have been conducted on urinary incontinence, very few studies have been done regarding postpartum urinary incontinence and limited literature is available that applies to an Indian population. Hence this study aimed to assess the prevalence of PUI, QoL and health-seeking behaviour of women with postpartum urinary incontinence.

METHODOLOGY:

A quantitative approach with descriptive design was undertaken to assess the prevalence of PUI and to assess the QoL and health-seeking behaviour of women with PUI.

The number of participants needed for screening PUI was calculated based on the 23.42% prevalence study by Bal Runa⁸ and colleagues in Kolkata1. The minimum number of participants needed to be screened based on 23.42% prevalence of PUI was 300. The researcher was able to recruit 624 participants in a six-weeks period of data collection.

DATA COLLECTION METHOD:

The data was collected from women attending the Well baby clinic who were 6 to 37 weeks post-childbirth. Women who met the inclusion criteria were selected using total enumerative sampling technique. The

researcher explained the purpose of the study and received the verbal and written consent. Self-administered standardized questionnaire QUID was given. When the participant scored more than 4 in the QUID, then King's health questionnaire, health seeking behavior questionnaire and the information regarding selected demographic and clinical variables were administered.

Ethical clearance for the conduction of the study was obtained from the Dissertation and research Committee. Administrative permission was obtained from the Nursing Superintendent, Head of Department of Maternity Nursing and Paediatric Nursing. Written informed consent was obtained from individual participants. Confidentiality and anonymity of the information was maintained.

INSTRUMENTS:

The Questionnaire for Urinary Incontinence Diagnosis (QUID) is a short, validated and standardized instrument that measures the presence of stress and urge UI symptoms. The Cronbach's α values of stress UI was .64 and .87 for urge UI. The questionnaire consists of six items, each item scores 0 (None of the time), 1 (Rarely), 2 (Once in a while), 3 (Often), 4 (Most of the time) or 5 (All of the time). A total score of >4 indicated the presence of UI. 15

The King's Health Questionnaire (KHQ) was used to assess the QOL. It is a standardized tool with Cronbach's alpha of 0.93 (20,21). The KHQ contains 14 items each measured on a four-point Likert Scale- indicating role limitation, physical limitation, social limitation, disturbances in personal relationships, emotions, sleep and energy. The possible responses is never- (score=1), sometimes/slightly – (2), moderately/often (3), all the time (4). The total score is calculated and interpreted as, not affected (14), mildly affected (15-19), moderately affected (20-24) and severely affected (>25).

A questionnaire about health-seeking behaviour was developed by the investigator. It consists of two sets of questions. The first set consisted of eight questions to assess health- seeking behaviour and the second set consisted of seven reasons for not seeking help. The content validity of the questionnaire was assessed by medical and nursing experts in the field of obstetrics and gynecology resulting in a content validity index (CVI) of 0.93. The reliability of the instrument using Cronbach's alpha coefficient was 0.821 (p< 0.002).

DATA ANALYSIS AND RESULTS:

The data were collected from 624 women who attended a well-baby clinic. Descriptive statistics were used to summarized the demographic and clinical variables. Association between variables of interest were tested with a chi-square statistic and Pearson correlation coefficient.

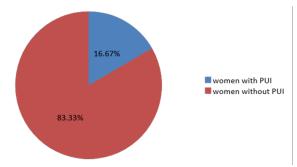


Figure 1. Prevalence of Postpartum Urinary Incontinence

Figure 1. Depicts that out of 624 women that were screened for PUI, 104(16.67%) had symptoms of PUI. Data was collected from 624 women, out of which 104 women were found to have PUI (according to QUID Score). 100 women completed the other questionnaires (demographic variable, QOL and health seeking behaviour Questionnaires) while four women refused to complete the other questionnaires

Table 1 Distribution of women with PUI based on selected demographic and clinical variables (n=100)

| Sl. No. | Variables | n | (%) |
|---------|---------------------------|-----|-----|
| 1 | Age | | |
| | <24 | 19 | 19 |
| | 25-29 | 61 | 61 |
| | >30 | 20 | 20 |
| 2 | Educational status | | |
| | Below | | |
| | Preuniversity (11- 12) | 12 | 12 |
| | Graduate | 50 | 50 |
| | Post Graduate | 38 | 38 |
| 3 | Occupation | | |
| | Home maker | 82 | 82 |
| | Employed | 18 | 18 |
| 4 | Family income | | |
| | ≤ 5000 | 10 | 10 |
| | 5001- 8000 | 21 | 21 |
| | 8001 – 10,000 | 31 | 31 |
| | ≥ 10,001 | 38 | 38 |
| 5 | Residence | | |
| | Urban | 83 | 83 |
| | Rural | 17 | 17 |
| 6 | Months of delivery | | |
| | ≤ 3 | 32 | 32 |
| | 3.1-6 | 34 | 34 |
| | 6.1- 9 | 17 | 17 |
| | 9.1 - 12 | 17 | 17 |
| 7 | BMI (kg/m²) | | |
| | <24.9 | 38 | 38 |
| | >25 | 62 | 62 |
| 8 | No. of deliveries | | |
| | Primi | 75 | 75 |
| | Multi | 25 | 25 |
| 9 | Mode of delivery | | |
| | CS | 29 | 29 |
| | VD | 71 | 71 |
| 10 | Episiotomy/ perineal tear | | |
| | no | 36 | 36 |
| | | C 1 | C 1 |

| 11 | Associated disorder No disorder DM/HTN | 71 29 | 71 29 |
|----|--|----------|----------|
| 12 | UI during pregnancy No Yes | 71 29 | 71 29 |
| 13 | Performing Kegel's exercise No Yes | 92 8 | 92 8 |

Table 1. Shows that majority of the women with PUI were between the age group of 25-29 years (61%), graduates (50%) and homemakers (82%), family income ≥ 10,001(38%), majority of the women lived in the urban area (83%). Higher prevalence of PUI is seen in women within 3 - 6 months of delivery (34%), majority of women with PUI had BMI more than 25 kg/m2 (62%) 75% of the women were primi paras and 71% had vaginal delivery, 64% of the women with PUI had episiotomy, majority of the women did not have any associated medical/obstetric disorders (86%), 29% of women had urinary incontinence during pregnancy and 92% of women did not perform Kegel's exercise.

Figure 2: Quality of life in women with postpartum urinary incontinence

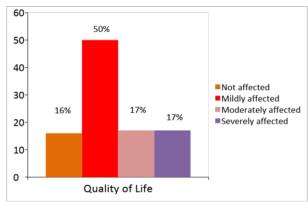


Figure 2. Shows that 50% (50) of the women had a mildly affected quality of life.

Table 2: Distribution of women with PUI under the domains of Quality of life.

| Quanty of me. | | | | | | | |
|---------------|----------------------------|-------|-----------------------|--|--|--|--|
| Sl No. | Domains of Quality of life | Mean | Standard Deviation | | | | |
| 1 | Role limitation | 35.5 | 14.62 | | | | |
| 2 | Social limitation | 35.31 | 14.30 | | | | |
| 3 | Personal limitation | 32.83 | 15.57 | | | | |
| 4 | Emotional disturbance | 34.33 | 13.87 | | | | |
| 5 | Sleep/rest disturbance | 35.62 | 13.91 | | | | |

Table 2. Shows the mean and standard deviation of each domain of the quality of life, and there is no specific domain that is most affected.

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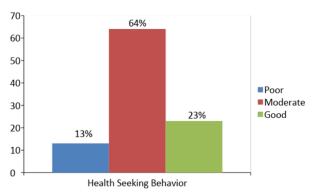


Figure 3: Health seeking behavior of women with PUI. (n=100)

Figure 3. Shows that majority (64%) of the women with PUI had moderate health seeking behavior

Table 3: Distribution of sample according to the reasons for not consulting the doctor/health personnel

| Sl.No. | Reasons | Frequency | Percentage | | |
|--------|---|-----------|------------|--|--|
| | | (n) | (%) | | |
| 1 | UI is a normal process and it will heal naturally | 35 | (35) | | |
| 2 | Embarrassed to consult the doctor or discuss with others | 15 | (15) | | |
| 3 | Lack of time | 22 | (22) | | |
| 4 | Lack of support | 7 | (7) | | |
| 5 | Financial problems | 11 | (11) | | |
| 6 | Not aware of available treatment | 24 | (24) | | |
| 7 | Fear of hospitalization, investigation, and invasive procedures that will be carried out | 11 | (11) | | |

Table 3. Shows that the most frequent reason for not consulting the doctor was that PUI is a normal Process and that it will heal naturally (35), followed by lack of awareness of available treatment (24) and lack of time (22)

Table 4: Correlation of quality of life and health seeking behavior of women with PUI.

| Variables | Correlation(r) | p-value |
|--------------------------------|----------------|---------|
| Over all QOL v/s HSB | .245 | .014* |
| Role limitation v/s HSB | .215 | .032* |
| Social limitation v/s HSB | .177 | .079 |
| Personal limitation v/s HSB | .205 | .040* |
| Emotional disturbance v/s HSB | .263 | .008* |
| Sleep/rest disturbance v/s HSB | .158 | .118 |

Table 3. Shows the correlation of quality of life and health seeking behavior of women with PUI which was statistically significant (p- value <0.005) and a positive correlation between role limitation, personal limitation and emotional disturbance of quality of life and health seeking behavior (p value <0.005).

Table 4. Shows a statistical significant association between health seeking behavior of women with PUI and performing Kegel's exercise.

Table 5. Shows that there is statistical significant association in the area of residence (p=0.020) and UI during pregnancy (p=.003) in women with postpartum urinary incontinence (p<0.050).

Table 4: Association of health seeking behavior of women with postpartum urinary incontinence and selected demographic and clinical variables.

| Sl. No | Variables | Healt | Health Seeking Behavior | | | | | Total | Chi- | p- |
|--------|-----------------------------|-------|-------------------------|-------------|--------|------|--------|----------|--------|-------|
| | | Poor | | Moderate Go | | Good | | (n= 100) | square | value |
| | | n | (%) | n | (%) | n | (%) | | | |
| 1. | Performing Kegel's exercise | | | | | | | | | |
| | No | 13 | (100) | 61 | (95.3) | 18 | (78.3) | 92 | 7.983 | .018* |
| | Yes | 0 | (0) | 3 | (4.7) | 5 | (21.7) | 8 | | |

Table 5: Association of selected demographic and clinical variables of women with and without postpartum urinary incontinence

| Sl.no. | Variables | without PUI | | With PU | With PUI | | Chi- square | p-value |
|--------|---------------------|-------------|------|---------|----------|---------|-------------|---------|
| | | N | (%) | n | (%) | (n=200) | | |
| 1 | Residence | | | | | | | |
| | Urban | 69 | (69) | 83 | (83) | 152 | 5.373 | 0.020* |
| | Rural | 31 | (31) | 17 | (17) | 48 | | |
| 2. | UI during pregnancy | | | | | | | |
| | No | 88 | (88) | 71 | (71) | 159 | 8.866 | 0.003* |
| | Yes | 12 | (12) | 29 | (29) | 41 | | |

DISCUSSION:

The data was collected from 624 women, 104 women were identified with postpartum urinary incontinence., demographic variables, clinical information, quality of life and health seeking behavior was available from 100 women because 4 women declined to respond due to

lack of time. Demographic and clinical variables were also administered to 100 women without PUI to enable the researcher to find the association between the demographic and clinical variables of women who have PUI and who did not have PUI.



The first objective was to assess the prevalence of postpartum urinary incontinence (figure- 1), out of 624 women screened for PUI, 104(16.67%) women had symptoms of PUI. Other research studies also showed similar findings with the prevalence of PUI immediately after birth as 23.4% and 2.7% at 6 months 16 and The prevalence of self-reported postpartum UI among women between 30 to 90 postpartum days in selected districts of India was 24.6% 17. There is a wide range of reported prevalence of urinary incontinence in the postpartum period ranging from 6-67% in primiparous women and 3-45% among parous women. According to ICI epidemiology report, the prevalence of PUI among one year postpartum women was 15-30% 18.

The second objective was to assess the quality of life (figure -2), the study showed 17% of the women who had postpartum urinary incontinence were moderately and severely affected, while 50% were mildly affected and 16% were not affected which is supported by Ashley in her study showing that only 10% had good quality of life (not affected), 12% poor quality and majority 78% with an average quality of life¹⁹. The domains of quality of life, which included limitation and disturbances in role, social, personal, emotional and sleep/rest were equally affected (table -2) whereas other studies reportshowed that personal and emotional domains were the most effected domains^{20,21}. The contradiction in the finding could be due to the influence of personal and cultural values and beliefs, the roles of the woman at home and in the society and the support from the family.

The third objective was to assess the heath seeking behaviour of the women with PUI (figure -3). Though the study findings showed that 64% had moderate and 23% had good health seeking behavior, only 5% had consulted the doctor. Similar findings were shown by Samiah et al²² who reported that 11.6% had sought medical services to treat their problem22 and according to Kumari S et al only one fifth of those with UI had consulted someone.²³

Although stress incontinence can have a profound impact on daily routine and can result in psychological effects, there are still many women who do not seek help. The reasons for not consulting the doctor in this present study were (table -3), UI is a normal process and that it will heal naturally (35%), not aware of available treatment (24%), lack of time (22%), embarrassment (15%), lack of support (7%), financial problems (11%) and fear of hospitalization, investigation and invasive procedures that will be carried out (11%). This is supported by the studies^{4,12} which showed reasons why UI was not discussed with a primary care provider, majority (45%) viewed it as 'not a big problem', and (19%) as normal process as age progress (19%), other reasons were embarrassment, unaware of the treatment

options, viewed it as a consequences of childbirth normal part of being a woman^{12,23}. Other reported reasons for women in India not to seek help are lack of female doctors in the peripheral areas, women being depend on the husbands for their treatment and having a higher tolerance threshold.²⁴

The fourth objective was to correlate the health seeking behaviour and quality of life of women with PUI (table 3). There was a significant correlation between quality of life and health seeking behavior (p=0.014) and it is supported by Shaw et al²⁵ who stated the two main reasons for help seeking,one was the fear of serious underlying disease such as cancer, and the other was the presence of significant distress or impact on quality of life. Koch ²⁶also reported that lower quality of life score was one factor that influence the help seeking behavior

The fifth objective was to associate the health seeking behaviour and the quality of life with the selected demographic and clinical variables, the study findings are supported by Ashly¹⁹ and Kocaoz et al ²⁷, who reported no significant association between the quality of life and the selected demographic and clinical variables. But the study showed that there was a significant association between the health seeking behaviour and the clinical variables (table 4) – performing Kegel's Exercise (p=0.018). Different studies have showed the benefits of pelvic floor exercise in strengthening the pelvic floor muscles²⁸⁻²⁹.

The last objective was to associate the demographic and clinical variables of women with and without PUI (table 5). For this particular objective, 100 women without PUI were conveniently selected and administered the demographic and clinical variables. The present study showed a significant association between postpartum urinary incontinence and residence area (0.020) and with urinary incontinence during pregnancy (p=0.003). this finding is consistent with the study done by Kocaoz et al (2010) which reported that there was a statistically significant relationship between having experienced UI in a preceding pregnancy and the presence of UI in the present pregnancy. There was also a significant relationship between the presence of UI in the previous postpartum period and its presence during the present pregnancy, and it significantly increased the chances of having UI later in life³⁰.

LIMITATION:

- Time constraint- four women did not complete the other questionnaires.
- Other factors may have affected the quality of life.
- Participants may have provided socially accepted responses.



 Practices of the subject were not checked, instead only self-reported practices regarding QOL and health seeking behaviour were assessed.

NURSING IMPLICATION:

This study reveals that there is prevalence of urinary incontinence during post delivery period and that there is a need to educate and motivate women regarding PUI, its prevention and treatment.

Nursing Service:

The study findings will help increase the awareness of health care workers involved in the care of pregnant and postnatal women about urinary incontinence and aid the design of more intensive education programmes directed towards the prevention of urinary incontinence. It also facilitates the nurses to identify the distressing symptoms of PUI and with knowledge and empathy, nurses can reduce the discomfort and fear and help those who are not open to share their problems due to embarrassment or shame or ignorance to seek medical guidance.

Nursing Education:

The findings generated from this study will contribute to student's knowledge regarding the prevalence of postpartum urinary incontinence, its impact in the lives of the women suffering with it and to promote the health seeking behavior among postnatal women.

Nursing Research:

The findings of the study will enable wider avenue for future studies that can be conducted in relation to factors contributing to postpartum urinary incontinence and other postpartum morbidities.

CONCLUSION:

Urinary incontinence is a common, distressing condition, which interferes with the work, social and sexual lives of the women and can have a negative impact on the health related quality of life, and to an extent, affects the lives of the family. The study that though most women had a reduced quality of life only a few had good health seeking behavior due to many reasons such as embarrassment, natural process, fear of treatment, lack of support and time. Therefore, assessment of postpartum urinary incontinence must be included in routine assessments and nurses must be encouraged to teach and educate women about urinary incontinence and to reinforce the importance of personal hygiene and pelvic floor exercise

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CONFLICTS OF INTEREST:

The author have declared no conflicts of interest.

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