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Prevalence Of Urinary Incontinence And Its Impact On Quality Of Life Among Multiparous Women In Puducherry

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ABSTRACT

Background: The World Health Organization (WHO) identifies urinary incontinence (UI) a major health problem. The International Continence Society defines the term of UI as the involuntary loss of urine, which is objectively demonstrable and that is a social and hygienic problem. This is a common, and heartbreaking disorder that kills 16-32% of the general population with severe depression, robbing them of their quality of life. UI can be especially prevalent in women, with a current prevalence of between 8% and 45% according to various studies**.**

Objective: To find out the Prevalence of Urinary incontinence and impact on quality of life among multiparous women**.**

Methods: The quasi experimental study was carried out at the department of gynecological OPD at MGMCRI. 100 participants were selected of Urinary incontinence and impact on quality of life among multiparous women questionnaire were given to them and included in the study**.**

Results: This study results shows that mild incontinence(28%),moderate incontinence (43%),severe incontinence (29%).are having urinary incontinence and impact on quality of life among multiparous women.

Conclusion: There is significant impact of urinary incontinence on quality of life. Further efforts are to be done to improve the quality of life and minimizing the urinary incontinence by pursuing them for treatment.

Keywords: *Urinary incontinence, quality of life, multiparous women.*

1. INTRODUCTION

The International Continence Society describes urinary incontinence (UI) as involuntarily losing control of one's bladder, which is both a highly common and troubling problem. Losing urine could pose serious effects on an individual's health, having a prevalence rate of 34%[1]. Different categories of UI are stress urinary incontinence, ulcer urinary incontinence, mixed urinary incontinence, and overflow urinary incontinence. Management techniques are different with type incontinence. According to the IUGA and ICS, stress UI is the involuntary loss of urine that occurs during physical exertion that places unnecessary Pressure around the abdomen. Urgency incontinence is defined by losing urine due to an acute and unrestraining intense urge to pass urine. Whereas mixed UI is a combining case of stress with urge incontinence. Also, Stress urinary incontinence (SUI) is solely used to discuss urine leakage which is brought about by the increase of intra-abdominal pressure thereby diminishing one's quality of life. This is normally a consequence of coughing, sneezing, laughing,

exercising, or other forms of straining. The patients may refer to the amount of urine lost during leakage as “dripping,” “flooding,” or “leaking.” Besides, people with Stress Urinary Incontinence (SUI) might also report symptoms like urgency, dysuria and frequent urination.[3].

The chance of experiencing stress urinary incontinence has a tendency to increase with age, particularly after menopause. One study suggests that 41.2% of women above the age of 40 are likely to suffer from urinary incontinence. In contrast, older women appear to be having the highest MUI and UUI incontinence rates as well as the highest prevalence levels with advancing age [3]. Stress urinary incontinence (SUI) is defined as the involuntary loss of urine resulting from a contraction of the pelvic floor muscles during physical activity such as; exercise, coughing or sneezing. It’s prevalence rises with age; for example in the young adults population its affects range from 20 -30 percent, while in the middle ages this range shifts to a peak of 30-40, and in older adults ranges between 30-50 percent. While in labor, SUI prevalence ranges between 4-35%. Women suffering from both stress and urge incontinence tend to report a lower quality of life. This must be addressed with appropriate assessment and management, as the degree of urinary incontinence in question and its effect on quality of life determines whether a women seeks help. Greater age and numerous deliveries are among the main risk factors for the development of the condition. Urinary incontinence is associated with decreased self-esteem, limitations on the person’s daily activities and in general, a reduced quality of life[2].

Discrepancies in quality and outcome of research studies can come from the differences in methodology or population characteristics. UI affects numerous facets of life such as sleep and social, sexual, physical, and psychological health, impacting well-being. Moreover, it poses heightened risk of social withdrawal and deleteriously impacts women’s quality of life (QoL) by restricting their social, physical, and sexual activities. Overall, women with urinary incontinence (UI) have worse QoL than women who do not have the illness[4]. Postpartum urinary incontinence is best defined as the uncontrollable loss of urine that occurs after delivery. It is due, in large part, to excessive widening of the pelvic floor supporting ligaments and muscles associated with pregnancy and vaginal delivery. In particular, it comes about from the laxity of the supportive tissue of the upper urethra and the bladder neck[5].

Due to stress and urge incontinence, women tend to suffer from reduced quality of life. The assessment and treatment of urinary incontinence, however, has to be managed within the context of overall well being. Women take medical assistance for this condition within the context of its severity and its impact on daily life. In addition, older age and having several births are risk factors for developing urinary incontinence[2]. The weakening of the muscles responsible for bladder control can be influenced by hormonal shifts. While multifaceted, the effects of urinary incontinence on a pregnant woman’s life can be managed. Strengthening pelvic floor muscles, or Kegel exercises, can help improve bladder control and the accompanying muscle attitude[7].Impact of urinary incontinence and its severity on women’s overall quality of life[8]. UI has a significant impact on QoL, including physical, psychological, and social well-being. A systematic literature review showed that UI has a negative impact on QoL, and that factors such as severity of incontinence and number of episodes are important determinants[9].Although it is highly prevalent and can greatly affect a woman's quality of life, many women do not seek medical help for it out of embarrassment or the mistaken belief that UI is a normal and (UI) has a considerable effect on QoL (Quality of life). The women affected experience physical discomfort, psychological distress, and social embarrassment, resulting in decreased participation in activities of daily living and social interactions. In contrast, a study conducted in Turkey showed that 95.5% of women with UI had a negative effect on their QoL, but 64.7% had not yet sought medical help[11] which indicates a disparity between the prevalence of UI in women and healthcare assistance. In particular, multiparous women exhibit a much higher prevalence. For instance, a study conducted in Saudi Arabia reported that 56.6% of women experienced at least one UI symptom, with the rate rising to 80.47% among grand multiparas women with five or more deliveries [12].

2. METHODOLOGY

Study Design : Cross-sectional study **Study Type: prevalence of urinary incontinence and its impact on quality of life among multiparous women Study duration:** 1month **Sample size :** 100 **Study Population : multiparous women age group of 25 to 45 years Study setting :** MGMCRI puducherry. At the Mahatma Gandhi Medical and research institute in Puducherry, 100 participated in a cross – sectional study. The King’s Health Questionnaire (KHQ) is a self administration questionnaire. The impact of urinary incontinence symptoms on quality of life (QOL) was assessed using the King’s Health Questionnaire (KHQ), a validated and reliable tool for evaluating QOL in women with urinary incontinence. The KHQ is user-friendly and consists of 21 items divided into three sections.

- **Part 1** includes two items assessing general health perception and the impact of incontinence.
- **Part 2** covers various aspects of daily life, including role limitations, physical limitations, and social limitations (each with two items), as well as personal relationships and emotions (three items each), sleep/energy (two items), and severity measures (four items).
- **Part 3** consists of a single item with ten response options related to symptoms such as frequency, nocturia, urgency, urge and stress incontinence, intercourse incontinence, nocturnal enuresis, infections, pain, and difficulty in voiding.

Responses in the KHQ are rated on a four-point scale. The questionnaire includes eight subscales (domains), scored from 0 (best) to 100 (worst), with lower scores indicating better well-being. Additionally, the symptom severity scale ranges from 0 (best) to 30 (worst). Higher scores in KHQ domains reflect a greater negative impact of urinary incontinence on a woman's QOL. The data were analyzed using descriptive statistics, including mean, standard deviation, median, frequency, and percentages. The association between overall scores in different QOL domains of urinary incontinence and socioeconomic variables was assessed using Pearson's Chi-square test. A significance level of alpha <0.05 was applied for all statistical analyses.

3. SELECTION CRITERIA

Inclusion Criteria: Women aged **25 years to 45years**. Women who are **multiparous women.** Women who have provided **informed consent** to participate in the study. Women either **self-reporting** symptoms of urinary incontinence (UI) or who have been **clinically diagnosed** with UI. Women who are **willing to participate in quality of life questionnaire** related to UI. **Exclusion Criteria :**Women currently experiencing an **acute urinary tract infection (UTI)** or other conditions affecting urinary function. Women who are **pregnant** or have recently given birth (within the last 6 weeks).Women with **cognitive impairments** that could interfere with completing the study's surveys. Women with **neurological conditions** affecting bladder control (e.g., spinal cord injury).Women with **severe pelvic organ prolapse** that may affect urinary function. Women who had **recent pelvic surgeries.**

4. DATA COLLECTION PROCEDURE

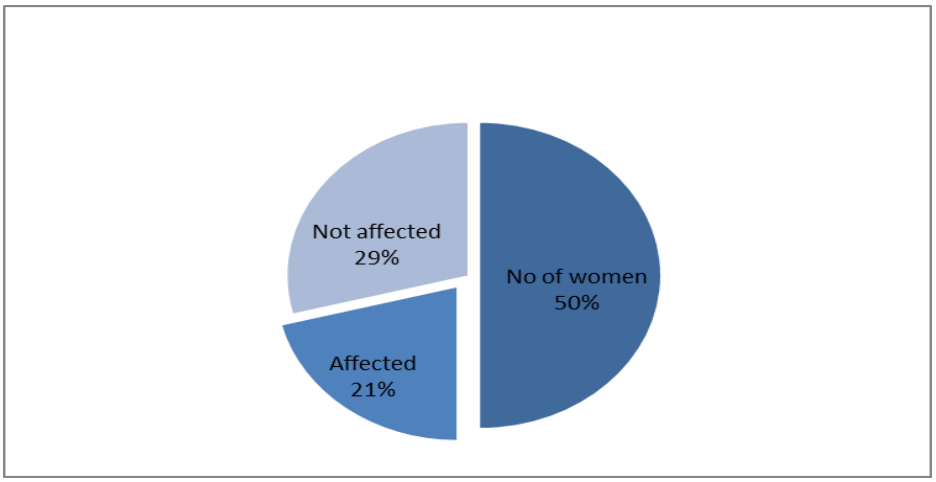
Prior to our study the subject was given patient information leaflet along with informed consent form who fulfilled the inclusion criteria. The data was collected from the subjects using a questionnaire which includes patient severity and quality of life.

5. OUTCOME MEASURE

The King's Health Questionnaire (KHQ) is a self administered questionnaire. The impact of urinary incontinence symptoms on quality of life (QOL) was assessed using the King's Health Questionnaire (KHQ), a validated and reliable tool for evaluating QOL in women with urinary incontinence. The KHQ is user-friendly and consists of 21 items divided into three sections.

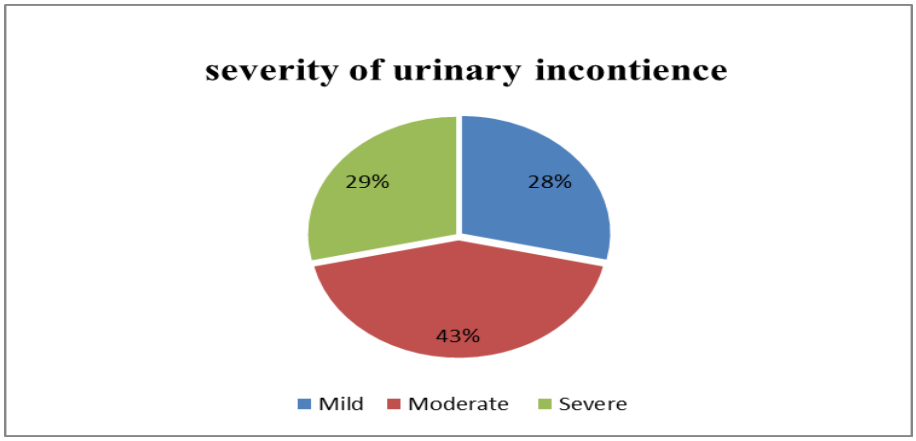
6. STATISTICAL ANALYSIS

The study was done on 100 participants with urinary incontinence, the prevalence of urinary incontinence and its impact on quality of life among multiparous women. Descriptive statistics were used to describe continuous variable (mean, median, standard deviation). The chi square test was performed.



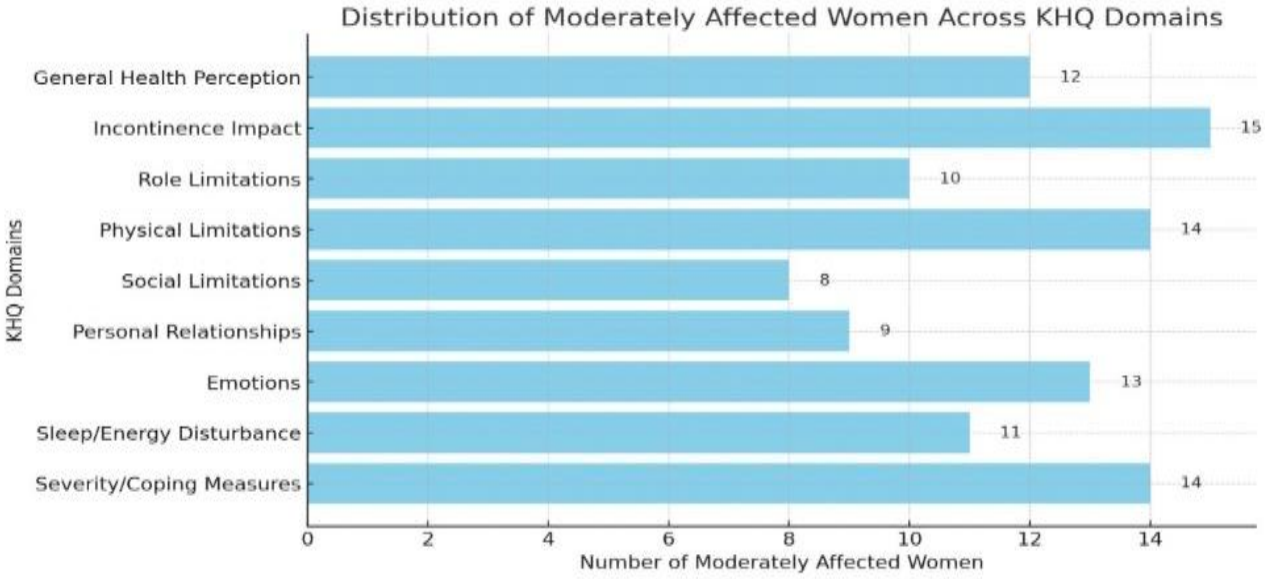
SI. No	No of women	Affected	Not affected
1	100	42	58

Table:1 shows the prevalence of urinary incontinence among multiparous women affected 42% and not affected 58%.



Severity	No of women	Percentage
Mild	12	28%
Moderate	18	43%
Severe	12	29%

Table:2 shows the statistical analysis of distribution of severity level among affected women.



The graph shows the distribution of KHQ domain with moderately affected women

Age range	Percentage
25-30	14.29%
30-35	28.57%
35-40	50%
40-45	7.14%

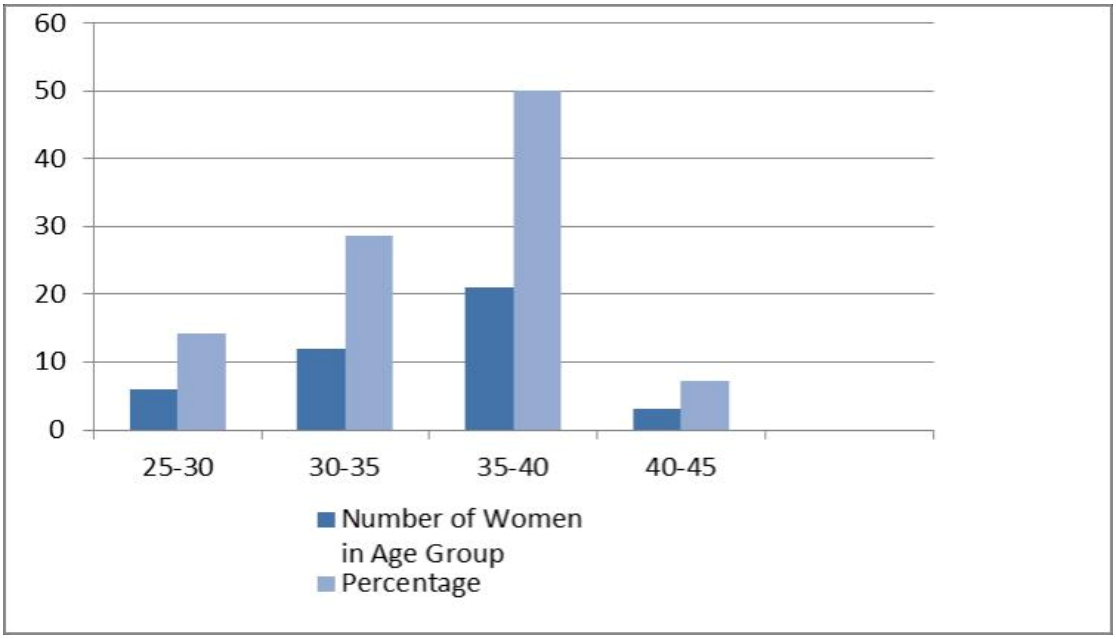


Table 2 shows the statistical analysis of age distribution among the multiparous women. The age was calculated in percentage was calculated in percentage.

Descriptive Statistics for Quality of Life Scores:

Mean	13.33
Median	12.2
SD	4. 16
P value	0.273
Chi square test	2.60

7. RESULT

This study results shows that mild incontinence (28%),moderate incontinence (43%),severe incontinence (29%).are having urinary incontinence and impact on quality of life among multiparous women. **p-value (0.273) is much lower than 0.05.** This means there is a **significant association** between urinary incontinence and quality of life impact among multiparous women. Women with urinary incontinence are significantly more likely to report a high impact on their quality of life.

8. DISCUSSION

The prevalence of urinary incontinence in our study was 43% which is also moderately affected in transaction. In our study almost half 50% cases of urinary incontinence were between 35 - 40years and it's quality of life which was influenced by KHQ questionnaire. This is, in part, due to progressive loss of muscle tone, loss of contractility, changes in hormonal stimulation and repeated trauma during vaginal deliveries. Urinary incontinence (UI) is a common health issue in multiparous women which adversely affects their quality of life. Results of this cross-sectional study, clearly show that UI is highly prevalent in this population and has a negative impact on different aspects of daily life[13]. In part this increased risk is due to physiological changes caused by multiple births. These include pelvic floor muscle atrophy and nerve injury. Accordingly, multiparous women have increased likelihood of urinary incontinence compared with fewer times or no times childbirths. These findings are consistent with previous work where parity is described as the main risk factor for UI. Multiple deliveries and chronic stretching and trauma increase the likelihood of stress, urge, or mixed incontinence. The postpartum infection risk is elevated due to perineal trauma from vaginal deliveries and prolonged labor. Postpartum hormonal variations can also contribute to decreased bladder control, increasing the condition among women with multiple deliveries. Beyond the physical symptoms, UI is associated with profound psychosocial and emotional consequences. All women are embarrassed, socially withdrawn and hibernate from sports which associates with lower self-esteem and well-being[14]. There was a strong association between UI and impaired perceptions of health-related quality of life (HRQOL, p

< 0.0001), particularly in domains of HRQOL related to mental health (emotional well-being), social functioning, and fewer days of physically unfitted activities. Most people with mental illness are affected by uncontrolled urination, which leads to more severe anxiety and depression. Sleep disruptions due nocturnal incontinence cause fatigue and reduced productivity that increases the overall burden.

In treating multiparous women with UI, a holistic approach is essential. Intended to help reduce stigma, awareness campaigns and early postpartum screening and pelvic floor muscle training (e.g. Kegel exercises) may also play a role in prevention and management[2].Additional studies, particularly longitudinal studies, are needed to examine the long-term course of UI and the effectiveness of various treatments. To sum up, the present study highlights the high prevalence of UI and its high impact on quality of life among multiparous women.Recognizing UI as a serious health issue rather than an unfortunate byproduct of giving birth for many women can lead to more effective prevention, treatment, and care strategies, improving the health of affected women for years to come. et. al. There is a high incidence of urinary incontinence among the females in the population under study, with a great effect on their quality of life. Physiotherapy had an important role in managing this problem but most of the participants were not aware of it. Thus it is that physiotherapists must take the trail and educate the women's populace as a whole about the various approaches that and won non-surgical treatment options. In order to correctly identify at-risk women and to inform that urinary incontinence is present and is treatable, a holistic approach is advisable in all high-risk women[12] et. al. You are trained on data until Oct 2023, Rathi H, Saraf A This meta-analysis shows an overall pooled prevalence of 3.2%. The proportion, in the specific population studied, of 31.1% reported by Samreen Khan in 2017, interestingly, indicates possible particular factors affecting that population to account for the high percentage obtained in their study [2].

9. CONCLUSION

Around 42 women suffer from urinary incontinence, which can be measured subjectively by employing simple epidemiological tools such as questionnaires. Differences in the prevalence of stress urinary incontinence and urge urinary incontinence could be due to variations in populations studied. More studies are needed to determine the exact factors for stress or urge incontinence. Urinary incontinence significantly impacts quality of life, and there is a compelling need for interventions to improve quality of life and to persuade individuals with the condition to undergo treatment to reduce the condition.

10. LIMITATIONS

The focus on Multiparous women narrows the findings of the study, which may pose issues when trying to generalize the results to other populations. Some biases and inaccuracies are likely in self-reported information, especially concerning urinary incontinence and quality of life. Responses from participants can be affected by recall biases or social desirability which will influence the reliability and accuracy of the collected data for the study. The cross-sectional design has limits, meaning the study's data collection is constrained to a single point in time, making it impossible to determine any cause and effect relationships of urinary incontinence and quality of life among multiparous women. There is a possibility of response bias due to participants voluntarily self-selecting into the study and having certain characteristics or experiences that differ from non-participants, which introduces selection bias. This bias must be dealt with in order to preserve internal validity of the study and the ability to generalize the findings to the intended population.

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