

ORIGINAL ARTICLE

Prevalence of urinary incontinence after vaginal delivery among females in Lahore

Hafiza Atiba Saeed^{1*}, Hafiza Wajihah Saeed², Mehak Bushra³, Aneela Amjad⁴, Muhammad Usama Sohail⁵

^{1,3,4,5}PSRD college of Rehabilitation Science Lahore

²Maryam Hospital

*Corresponding Author: Name: Hafiza Atiba Saeed Email: atibasaeed889@gmail.com Contact: 0305-3563480

ABSTRACT:

The urinary incontinence is designated as the any slight spontaneous urine drip illness. Urinary incontinence (UI) is a common complaint in most of the females after delivery rather it was vaginal or c section delivery. Epidemiological researches show that there are many factors involve which cause the urinary incontinence all over gestation and after delivery. **Methods:** This cross sectional study was conducted by Non probability convenient sampling technique. The study data was collected from Shadra Teaching Hospital Lahore. Sample size of 186 was calculated. Standardize QUID and SRUI are used for data collection. Prevalence of UI was measured, data was gathered and SPSS was used to analyze the results. **Results:** Prevalence of UI was measured, data was gathered and SPSS was used to analyze the results. Results showed that the 54.3% were felt no and mild UI 31.7% showed moderate UI and 14% responds severe UI in our study. Age, Weight and Constipation were associative variables in our study. The prevalence of mild and moderately UI are observed and associated with risk factors. UI symptoms can vary with age and weight. Pelvic floor muscle training can prevent the risk of UI. **Conclusion:** Our study concluded that the prevalence of urinary incontinence after vaginal delivery was high like 45% in overall assessed females and stress incontinence is seen in most of the females. Body weight and constipation backed as major risk influences as we seen in our study. Consequently, assessment of urinary incontinence results and risk factors given that consultancy services may potentially help avoidance and management of these complaints. The consequences of our study may be beneficial to intensification responsiveness in females in the post-delivery tenure, by providing health training and consultancy services about urinary incontinence protection and the reduction of risk factors. **Key Words: Urinary incontinence, Pelvic floor muscle training, QUID and SRUI**

INTRODUCTION:

The urinary incontinence is designated as the any slight spontaneous urine drip illness. Urinary incontinence (UI) is a common complaint in most of the females after delivery rather it was vaginal or c section delivery. Epidemiological researches show that there are many factors involve which cause the urinary incontinence all over gestation and after delivery (1). It may not be as significant in some settings or in little quantities, but it can cause disappointment and worry, especially among women. Because the ailment is more frequent in girls than in males due to differences in their physical structures and, in particular, pregnancy issues, this disease has received special attention in females (2). Specific vulnerability characteristics similar to race, sustained illnesses or complicated pregnancy, and some of the factors which are baby weight and size in womb and these factors cannot fixed. Contrariwise, more than a few threat features are changeable and may be encouraged to inhibit urinary incontinence in linked through post delivery period (3). According to demographically research, UI is much more frequent in women than in males, and roughly 10 percent among all adult women experience with UI. The disease's incidence rises with age, and more than 40 percent of women over the age of 70 are afflicted. Prevalence is considerably higher in the aged and nursing facility populations. (4) SUI is the maximum reciprocated types of urinary incontinence amongst females and this type or UI are involuntary urine discharge which transpires throughout a physical movement or accomplishment for example heavy lifting, coughing, running, sneezing, childbirth motives an upsurge in the heaviness in abdominal. Females' life

quality is greatly impacted by stress urine incontinence. Many women don't really look for treatment for this serious and perhaps potentially lethal condition. Females should receive not just treatments, and also information, awareness, and lifestyle changes from medical professionals. (7) Often, it is pretentious by a damage of structural maintenance of the urethra vesicle junction for example insufficiency of the urethral sphincter, urethral hypermobility and is the most recurrently associated with pregnancy and postpartum period; the second type of UI is urge urinary incontinence which is unintentional urine dripping regularly supplementary through a unexpected, strong essential to discharge which may not be on hold. Overactive urinary bladder is a cause of this type of UI. There is also a third type of UI which is called mix urinary incontinence, in which patient experiences urge and stress UI symptoms and mimic both of them (8). The pathophysiology of urinary incontinence all through gestation, delivery and post-partum are multi influence and quiet not entirely unstructured. It incorporates hormonal discrepancies, pelvic floor muscle training and connective tissue modifications, bladder neck broadening in reoccurrence to the weightiness of together the uterus and the increasing baby size and functional damages throughout time of birth (12). There is a hormone which is called RELAXIN; it's a nucleic acid nature hormone that is formed throughout gestation. This hormone recognized to simplify the hemodynamic differences and to soften and reduce pelvic muscles strength and ligaments to formulate for vaginal birth. Subsequently, with the growth and development of fetus, the

uterus increases in weight, pelvic floor muscles worsens. Another thing, constipation, that is a common illness throughout gravidness, might be also intensification the pressure on pelvic muscles and these are all the factors which causes incontinence after delivery(13) For the duration of labor pain, pelvic floor muscles experiences significant pulling of the levator ani muscle and that is the paramount muscle of the pelvic floor that enlarge minimum five spell from its already size and to broaden from fifteen to twenty five cm to sixty to eighty cm, countenancing the levator hiatus to broaden through crowning stage of labor(14). Additionally, when damaged, it might be easier to retrain as the neural adaptation and the motor learning has already been assimilated (17). (18). PFMT may be brought to females for both inhibition and management of urinary incontinence and might be happening both throughout gestation and after childbirth (19).

METHODS:

Descriptive cross-sectional study design was used. The sampling technique used was non-probability convenient sampling. The study’s duration was 3 months after the approval of the synopsis. The study was conducted at the Shadara Teaching Hospital Lahore. The sample size of the study was 186 with 5% precision level. Sample size is calculated by the formula. The female age 25-45 with vaginal delivery was included in this study. Demographic information such as age and height of participants has been collected by patients who can give detail about themselves; otherwise guardians who came with them give data on the individuals included in the study. UI in females was quantified using the QUID and SRUI. The Shadara Teaching Hospital Lahore’s Institutional Review Board (IRB) has approved an ethical request. The patients signed a permission form and a standardized technique was used to measure the urinary incontinence then the data was entered into the QUID and SRUI questionnaires. Data were represented as graphs and tables, which were evaluated by using the accurate statistical data analysis approach. Statistical Package for Social Sciences (SPSS) software version 22. Age, weight, number of children, physical activity, QUID, and SRUI were all represented as Mean Standard Deviation.

RESULTS:

Demographic characteristics of the children’s age, weight, are described in (Table 1). In this study total of 186 participants were recruited, all were females, and all of them can follow commands and participate in the assessment by a QUID and SRUI. The mean and standard deviation of right and left affected handgrip in CP children shows in (Table 2). There is no greater difference in strength across the age group of 7 to 12 years. Descriptive analysis was applied to see if there was a difference in handgrip strength in children with spastic diplegic cerebral palsy.

Table 1: Descriptive Statistics for QUID

QUID	Frequency	Percent
None	70	37.6
Rare	28	15.1
Once in a while	27	14.5
Often	21	11.3
Most of the time	14	7.5
All of the time	25	14
Total	186	100

Table 2: Descriptive Statistics for UI

UI	Frequency	Percent
None	21	11.3
Rare	44.3	23.8

Once in a while	83.7	45.0
Often	37	19.9
Total	186	100

Table 2: Post-delivery time* Score of Revised urinary incontinence Cross tabulation

Time passed after delivery	Score of Revised urinary incontinence			Total
	Less than 4	9 to 12	More than 13	
Two months	47	34	6	87
Three months	54	25	20	99
Total	101	59	26	186

DISCUSSION:

Urinary incontinence is a significant complaint which disturbs the somatic, emotional, communal and financial well-being of a pregnancy and after delivery among females. In this study, the incidence of UI was observed 45%. Conversely, our research concluded that SI was a main factor of UI in post vaginal delivery, which is reliable with other researches also (10). In our study we concluded that the 31.7% of the females had mild to moderate UI, and 14% severe urinary incontinence. Demircan et al. concluded that fifty nine percent of females had mild urinary incontinence, Seven percent had moderate urinary incontinence, seven percent had severe urinary incontinence and twenty five percent of the gestational females had urinary incontinence multiple times per day (14). Wesnes et al. also said that thirty eight percent of the females had mild urinary incontinence and four percent had severe urinary incontinence at least weeks of gestation as it can be unstated from the researches, the statistics on urinary incontinence. Occurrence or harshness provided with extensive intermissions. The incidence of urinary incontinence in females described to increase with age. In our research, we also found a statistically significant association between urine incontinence and age group, by increasing age we have seen prevalence is increasing, but in other of the present researches, authors said that there was no correlation between urine incontinence and pregnant age groups. The incidence of urinary incontinence augmented in common with gestational age in our research, like the most prevalence in our study is seen in third trimester. The prevalence observed in our study is as 20% in second trimester and 24% in third trimester from total pregnant females. Research concluded urinary incontinence prevalence as 24.1% in second trimester and 27.9% in third trimester (35) The prevalence of urine incontinence rose after vaginal delivery, which is consistent with previously reported data. Conversely, dissimilar those results, there were also researches demonstrating that there was no association among post delivery period and UI. It is known that some fertility-related physiognomies of females are the factors that cause urinary incontinence (31). As in our study stated that with the increased number of birth of children urinary incontinence increased. It is proved that the women who gave birth more than three children developed incontinence greatly. It is specified in the readings that equivalence upsurges urinary incontinence causes urinary incontinence is subordinate in female who do not give birth even once and is advanced aimed at females contributed birth more than

four times (19). The defensive consequence of c section birth is reliable during the works. In our research, symptoms of urinary incontinence are seen more frequently in those who have normal and vaginal birth. A researcher concluded in their research that urinary incontinence was much conjoint in females who went through delivery without c section in the past (14). In their research, they concluded that urinary incontinence danger was seen 2.5 times superior in females who had vaginal birth (28). In older researches, it is said that weight of the baby at last delivery did not affect urinary incontinence but in our study we are not observing the baby weight as a variable. In past studies, it is extraordinary that the conclusion of researchers examining that there is no relation between overweight baby birth and incontinence. While an association was institute that there is association between heavy weight baby birth and incontinence. (20).

CONCLUSION:

Our study concluded that the prevalence of urinary incontinence after vaginal delivery was high like 45% in overall assessed females and stress incontinence is seen in most of the females. Body weight and constipation backed as major risk influences as we seen in our study. Consequently, results and risk factors of incontinence given those experts medical opinion may potentially help avoidance and management of all complaints. This study can provide benefit to females that have incontinence due to child birth, by giving them protocols and experts consultancy that teach them precaution to avoid incontinence.

Author Contributions:

Conception and design: *Hafiza Atiba Saeed*

Collection and assembly of data: *Hafiza Wajiha Saeed*

Analysis and interpretation of the data: *Mehak Bushra*

Drafting of the article: *Aneela Amjad*

Critical revision of article for intellectual content: *Muhammad Usama Sohail*

Statistical expertise: *Hafiza Wajiha Saeed*

Final approval and guarantor of the article: *Hafiza Atiba Saeed*

Conflict of Interest: *None declared*

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