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Orignal Article

Relation of Hysterectomy with Urinary Incontinence

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ABSTRACT

Urinary incontinence refers to the involuntary leakage of urine that can be associated with a systemic complication. Its prevalence is higher in women than in men though it can affect men and women equally. **Objective:** To determine the frequency of urinary incontinence in women with hysterectomy and to assess the impact of urinary incontinence on quality of life of women undergoing hysterectomy. **Methods:** An observational survey from different hospitals in Rawalpindi and Islamabad was conducted to collect relevant information. Standard questionnaire tools (UDI-6) and (KHQ) were used to collect data from 100 women using a convenient random sampling technique in different hospitals in Rawalpindi and Islamabad. **Results:** The result revealed that urinary incontinence in women with hysterectomies is strongly associated with altered quality of life causing loss of self-esteem leading to impairment. Furthermore, this study highlighted the presence of pain, discomfort, alteration of Quality of life and functional limitation due to incontinence of urine associated with Hysterectomy. **Conclusions:** Urinary incontinence was observed to be associated with hysterectomy and had pronounced effects on quality of life of women causing physical, social and psychological role limitations and participation restriction.

INTRODUCTION

Urinary incontinence occurs due to an increase in abdominal pressure due to coughing sneezing and laughing [1]. Bodily conditions that predispose urinary incontinence more likely include pregnancy, Hysterectomy, weight problems, antique age, Urethral stones, Obstruction of bladder, persistent bladder infections, Medicinal capsules that grow urine output consist of Diuretics, Anticholinergic, Antidepressants [2]. The risk of infectious factors for urinary incontinence includes physical conditions such as hysterectomy, hyperglycemia, older age, urethral stones, anatomical changes in urinary tract, pregnancy, bladder obstruction, recurrence of bladder infections [3]. Hysterectomy is the low-risk surgical procedure of uterus removal. Complications can occur due to hysterectomy and urinary incontinence is one of the major complications [4]. There are many variables involved which affect women's reactions and decisions towards hysterectomy include age, vocational, a vocational involvement, children, monthly periods, socioeconomic class [5]. The problems encountered after hysterectomy may negatively affect the quality of life and can develop psycho-sexual health problems. Although many hysterectomies are performed unnecessarily, minimum positive effects occur and the major complication that occurs is urinary incontinence [6]. Regardless of the reason, sufferers with urinary incontinence after vaginal

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hysterectomy should are seeking for the attention in their gynecologist or urologist or any other physician who specializes in the assessment and remedy of incontinence that can improve their quality of life [7]. Complications of urinary incontinence are as Skin infections, Urinary tract infections, Impacts on daily activities [18]. María Merino et al in their study "Women with urinary incontinence "showed that urinary incontinence has a strong impact on both health-related quality of life and healthcare in women who are aged 60 and over [9]. Prof Jeanette S Brown et al reported in their study that the precise estimate was consistent with accelerated odds for incontinence in women with hysterectomy. Because incontinence do not develop for decades after hysterectomy, we stratified the findings with the age at assessment of incontinence. Among ladies who were 60 years or older, the summary odds ratio for urinary incontinence turned into expanded by 60% (1.6 [95% CI 1.4–1.8]) however odds were not increased for women younger than 60 years [10]. Karim saadoun et al in their study demonstrated that the sample concluded 21% of women with UI. QoI alterations associated with intensity of incontinence were observed for all dimensions. Incontinence in its severity should be reasoned as an impairment because it demonstrated the destructive effect on the attribute of life [11]. Gudrun Astrid Neumann et al in their study (2007) stress incontinence was reportable by 30% of the hysterectomies in women. Prevalence of urge incontinence was from 13% – 15%. Women with subtotal hysterectomy had more stress incontinence [12]. Hysterectomy did not significantly affect the long-term quality of life in general, but vaginal hysterectomy was more likely to affect sexual function and increase the risk of incontinence when compared with abdominal hysterectomy [13]. The aim of this study is to conduct the ratio of urinary incontinence in women following hysterectomy and the second aim is to find the relation between urinary incontinence and its association with their quality of life [19]. The reduction in mobility associated with overactive bladder symptoms may be depressing and distressing among those women [20].

METHODS

An observational study was conducted post-hysterectomy. The study duration was 6months. Standard tools to obtain data were used. Data was collected from different outpatient clinics and hospitals in Rawalpindi and Islamabad. By using Convenient Sampling, a random sample of 100 patients was collected. Data was collected by informed consent through structured and standard questionnaires and standard tools. The direct method was used for data collection i.e. by hand. It consisted of 2 sections: Demographic data, urinary incontinence, and its impact on quality of life questions. UDI and KHQ questioners were used. Females who had hysterectomy were included in this study and patients taking hormone replacement therapy, with neurological disease or psychiatric diseases were excluded from this study. Data was analyzed using the (SPSS) version 21. The Chi-square test was used for the signification of the association between UI and characteristics of women.

RESULTS

The demographic data of the participants was analyzed and the results are shown in table 1.

Marital Status	Married	97%
	Unmarried	3%
Occupation	Housewife	84%
	Working	16%
Education	Educated	54%
	Not educated	46%
Deliveries	0-5	72%
	6-10	28%
Mode of Delivery	No delivery	11%
	Vaginal	67%
	Caeserian	22%
Type of hysterectomy procedures	Abdominal	39%
	Vaginal	61%

Table 1: Demographic Data and Its Percentages

Table 2 has shown the urogenital inventory distress scale

Questions	Not at all	Somewhat	Moderately	Alot
Frequent urination	2%	28%	63%	7%
Feeling of urgency	1%	25%	66%	8%
Related to coughing, sneezing	7%	27%	58%	8%
Small amount of urine leakage	2%	19%	55%	24%
Difficulty emptying bladder	2%	25%	58%	18%
Pain & discomfort	1%	31%	47%	17%

Table 2: Urogenital Inventory Distress Scale -6

The frequency of urine had mild effect on 13 percent patients' physical and social role limitations and it moderately affected 40 percent and severely affected 47%. Stress incontinence had a mild effect on 22 percent of patients' physical and social role limitations and it moderately affected 40 percent and severely affected 38%. Urge incontinence had a mild effect on 14 percent of patient's physical and social role limitations and it moderately affected 36 percent and severely affected 50%. Bladder pain had a mild effect on 15 percent patients' physical and social role limitations and it moderately affected 32 percent and severely affected 53% (Table 3).

Physical /Social Limitations				
Variables	**Mild**	**Moderate**	**Severe**	**P-value**
Frequency effect of urine	13	40	47	0.000
Stress incontinence effect	22	40	38	0.006
Urge incontinence	14	36	50	0.000
Bladder pain	15	32	53	0.000

Table 3: Physical /Social Limitations

Table 4 demonstrates that the Frequency effect of urine had a mild effect on 13% of patient's personal relations and it moderately affected 40% and severely affected 46%. Urge incontinence had mild effect on 14 % patients' personal relations and it moderately affected 36 percent and severely affected 50%.

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Stress incontinence had mild effect on 22 % patients' personal relations and it moderately affected 40 percent and severely affected 28%. Bladder pain had a mild effect on 15 percent patients' personal relations and it moderately affected 32 percent and severely affected 53%.

Personal relationship				
Variables	**Mild**	**Moderate**	**Severe**	**P-value**
Frequency Effect of Urine	13	40	46	0.003
Urge Incontinence	14	36	50	0.002
Stress Incontinence	22	40	28	0.0001
Bladder Pain	15	32	53	0.003

Table 4: Effect of UI on patient's personal relations.

Table 5 showed that Frequency of urine had mild effect on 13 % of patient's Emotional disruptions and it moderately affected 40% and severely affected 46%. Urge incontinence had mild effect on 14% patients' Emotional disruptions and it moderately affected 36 % and severely affected 50%. Stress incontinence had mild effect on 22 % patient's Emotional disruptions and it moderately affected 40 % and severely affected 28%. Bladder pain had mild

Emotions				
Variables	**Mild**	**Moderate**	**Severe**	**P-Value**
Frequency Effect of Urine	13	40	46	0.000
Urge Incontinence	14	36	50	0.000
Stress Incontinence	22	40	28	0.010
Bladder Pain	15	32	38	0.000

Table 5: Effect UI on patient's Emotional disruptions

DISCUSSION

Hysterectomy whether it's vaginal or abdominal has affected the social esteem of patients causing severe incontinence of urine. Mostly the women who have multiple deliveries or with no deliveries have undergone this procedure of hysterectomies due to multiple causes like tumor of endometrium , complications following delivery, or birth control strategies. Our study results showed that urinary incontinence remained the major side effect of hysterectomy among women of this debilitating situation leading to impairment. UI was more prevailing in those who had hysterectomy (p <0.05) [14]. But this study shows no relevance for UI to the number of deliveries and type of delivery. Our findings are consistent with the results of the study which showed that in mild UI 35 % to 40% were having role limitations 35% women were with sleep and emotional disruption. Less than 95% has social and physical role limitation. In severe UI, greater than 90% had role restrictions and have had role limitations in every aspect of life [15]. Our study shows different forms of UI affecting physical and social activities of daily life causing role limitation thus our significant results p value =0.000 (p<0.05) supporting the results of Azuma et al., study that revealed stress UI was presented in women causing urine leakage during physical daily activities. It was found that the various forms of UI were related with significant variation in the scores of health perceptions causing physical and social role limitations (p<0.0001) [16]. Sculphur study which explained that large differences in scores are apparent in role limitations due to emotional issues (P=0.12) but its results do not indicate significant differences [17].

CONCLUSIONS

This study concluded that urinary incontinence associated with hysterectomy had pronounced effects on quality of life of women causing physical, social and psychological role limitations and participation restriction. It also caused sleep disturbances leading women to a depressed state of mind. Women with UI associated with hysterectomy had problems regarding their personal relationships and family life though causing women to feel dissatisfied with their life. QOL following this condition caused women to be at the risk of poor health perceptions.

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