The impact of overactive bladder on health related quality of life.

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ABSTRACT... Objective: To determine the impact of overactive bladder on health related quality of life (HRQOL). Study Design: Cross Sectional study. Setting: Department of Obstetrics and Gynaecology, Gambat Institute of Medical Sciences Gambat, Khairpur Sindh. Period: 1st November 2018 to 30th June 2019. Material & Methods: One Hundred forty nine women included who fulfilled inclusion criteria after taking inform consent. The questionnaire consisting of domain of general health perception, urinary incontinence, role limitation on physical, social & personal relationship, emotion with score was analyzed. Each question was carry 1 point as score. Score was analyzed further on percentage basis. Those who gain >33% were be labeled as impact of overactive bladder –ve patients. Finally data was analyzed on SPSS version 21. Results: The present study consisted of 145 subjects presented to the Department of Psychiatry, Services Hospital Lahore (both in and Out-patients). Over reactive bladder were matched on age, sex and socio-economic status & educational status. The age range of the total sample was 23-60 years. Mean age was 42.53 + 11.69. The duration of symptoms range of the total sample was 09-20 years. Mean duration was 16.7 + 5.6. The prevalence of over reactive bladder (OAB) syndrome were found 21%, respectively. The age were divided in to four classification age groups 17(11.7%) under the age of <30years, 31(21.4%) under the age of 31-40 years, 85(58.6%) found under the age of 58.6% & 41-50 Years of age 85(58.6%) Women constitute the largest age groups. Out of 145 Women 68(46.9%) were Illiterate, 48(33.1%) were literate up to intermediate, 29(20%), took graduation education. The distribution of income classes of women 61(42.06%) belong to low class, 65(44.84%) belong to middle class and only 19(13.10%) belong to upper class. The parity distributions were revealed that most of the 78(53.7%) women had multiparty. Stratification of confounding variable for effect modifier Age & parity were found to be significantly associated with over reactive bladder syndrome. Again Stratification of confounding variable for effect modifier socio economic status & education status are not found significantly associated with over reactive bladder syndrome & P –Value were not found significantly associated with OAB P>0.05. Conclusion: We concluded incidence of overactive bladder in the female is almost similar and associated with increasing your age. Patients of OAB are under-diagnosed and under-treated. This patient can benefit from standard tests.

Key words: Epidemiology, Overactive Bladder, Quality of Life.

INTRODUCTION
Current international continence society ICS over active bladder is defined as urinary urgency with or without urge incontinence usually with frequency and nocturia if there is no infection or proven pathology; its diagnosis is based on symptoms alone rather than aerodynamic findings.¹ It can be classified as over active bladder (OAB) wet with incontinence or (OAB) dry without incontinence. Urinary incontinence (U.I) is most common chronic problem affecting the women, although it is not a life threatening condition, but it can severely affect quality of life of women.²

World health organization (WHO) defined as not merely the absence of disease but complete physical mental and social well-being. Quality of life has been used to mean a combination of patient assessed measure of health, including physical function, role function, social function, emotional
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or mental state, burden of symptoms and sense of well-being.\(^3\) Urinary incontinence is known to have profound impact on quality of life (Q.O.L) affecting all domains including physical, social, psychological, occupational activities of daily and sexual function.\(^4\) Approximately 200 million people worldwide suffer urinary incontinence and less than 20% received treatment. The WHO Conservative estimates are that worldwide direct and indirect cost of urinary incontinence exceeds $ 60 million annually.\(^5\) According to female sexual function index questioners (FSFI) four domain desire arousal organism and satisfaction were significantly decreased in over active bladder group.\(^6\)

In us study found 900 women treated for over active bladder 23% were not able to go short outing,12% stayed at home more than often then they would have perfect for sexual life, nearly half women experienced sexual dysfunction.\(^7\) Increased enjoyment don’t feeling to urinate and anxiety. These issues strained relationships with their spouse. OAB has also has impact on mental health, increased depression and anxiety, worse quality of slip. In Korean study 37% participant with OAB reported moderate to severe difficulties to their daily life this made house work more difficult.\(^8\) European study by Milson & coworkers 65% men, 67% women with OAB reported that their symptom. Liberman & associate recently conducted a large US community based survey on effect of OAB on HRQOL, reported women urge incontinence 26% greater risk of fall, 34% risk fracture.\(^9\)

### MATERIAL & METHODS

This observational study was conducted at Department of Obstetrics and Gynaecology, after the ethical approval of Gambat Institute of Medical Sciences Gambat, Khairpur Sindh, from 1st November 2018 to 30th June 2019. Non-Probability consecutive sampling technique was used. Data were collected through outdoor patients with detailed history and thoroughly examination. Patients with OAB who fulfill the criteria were married women of age between 18-60 years, Nulliparous, Multiparous and Grand Multiparous women. While exclusion criteria were diabetes, Abdominal / Pelvic “Mass, pregnancy, current & recurrent Urinary tract Infections, pelvic organ descent and any neurological disorder that effect bladder normal function such as multiple sclerosis, spinal cord injuries. The questionnaire consisting of domain of general health perception, urinary incontinence, role limitation on physical, social & personal relationship, emotion with score was analyzed. Each question was carry 1 point as score .Score was analyzed further on percentage basis. Those who gain >33% were be labeled as impact of OAB -ve patients."

Data were entered and analyzed in SPSS version 20, through filled proforma and were analyzed statistically for mean, frequency and percentage were calculated for all quantitative variable. Mean+SD were calculated for age & duration of symptoms. Frequency & percentages were calculated for Impact of OAB on HRQOL, Parity, and socioeconomic status. To see the effect on OAB, Post stratification chi-square test were applied<0.05 were taken as significant.

### RESULTS

Over reactive bladder were matched on age, sex and socio-economic status & educational status. The age range of the total sample was 23-60 years. Mean age was 42.53 + 11.69 years. The prevalence of over reactive bladder (OAB) syndrome 21% (Figure-1). The age were divided in to four classification age groups 17(11.7%) under the age of <30 years, 31(21.4%) under the age of 31-40 years, 85(58.6%) found under the age of (58.6%) & 41-50 Years of age 85(58.6%) Women constitute the largest age groups (Table-I). Out of 145 Women 68(46.9%) were Illiterate, 48(33.1%) were literate up to intermediate, 29(20%), took graduation education (Table-I). The distribution of monthly income of women were 61(42.06%) belong to low class, 65(44.84%) belong to middle class and only 19(13.10%) belong to upper class. The parity distribution were revealed that most of the 78(53.7%) women had multiparity. Stratification of confounding variable for effect modifier Age were found to be significantly associated with over reactive bladder syndrome (Table-II). Stratification of confounding variable for effect modifier socio economic status &
education status are not significantly associated with over reactive bladder syndrome (Table-II).

| Variable               | Frequency | Percentages |
|------------------------|-----------|-------------|
| **Age Groups**         |           |             |
| <30 Years              | 17        | 11.7%       |
| 31-40 Years            | 31        | 21.4%       |
| 41-50 Years            | 85        | 58.6%       |
| >50 Years              | 12        | 8.2%        |
| **Education Status**   |           |             |
| Illiterate             | 68        | 46.9%       |
| Literate up to intermediate | 48      | 33.1%       |
| Graduate               | 29        | 20%         |
| **Social Economic Status** |       |             |
| Lower Class            | 61        | 42.06%      |
| Middle Class           | 65        | 44.84%      |
| Upper Class            | 19        | 13.10%      |

Table-I. Demographic variable (N=145)

| Variable               | Overactive Bladder Positive (%) | Overactive Bladder Negative (%) |
|------------------------|---------------------------------|---------------------------------|
| **Parity Distribution**|                                 |                                 |
| Nulli Parity           | 18(12.4%)                       | 32(22.1%)                       |
| Multi Parity           | 12(8.8%)                        | 66(45.5%)                       |
| Grand Multiparty       | 1(0.7%)                         | 16(11%)                         |
| **Age Distribution**   |                                 |                                 |
| Age <30 Years          | 03(2.1%)                        | 14(9.7%)                        |
| Age 31-40 Years        | 6(4.1%)                         | 25(17.2%)                       |
| Age 41-50 Years        | 15(10.3%)                       | 70(48.3%)                       |
| Age >50 Years          | 7(4.8%)                         | 05(3.4%)                        |
| **Education Distribution** |                              |                                 |
| Illiterate             | 15(2.1%)                        | 53(9.7%)                        |
| Literate up to intermediate | 12(4.1%)                     | 36(17.2%)                       |
| Graduate               | 04(10.3%)                       | 25(48.3%)                       |
| **Social Status**      |                                 |                                 |
| Lower class            | 09(6.2%)                        | 52(35.9%)                       |
| Middle Class           | 17(11.7%)                       | 48(33.1%)                       |
| Upper Class            | 05(3.4%)                        | 14(9.7%)                        |

Table-II. Comparison of overactive bladder with multiple variable of patients (N=145)

**DISCUSSION**

The study revealed that out of the 145 patients which we measured the prevalence of over reactive bladder syndrome (OAB) status in a well-defined population of women which was based on quality of life questionnaire. We found that over reactive bladder is found only in 31(21%) out of 145 total number of patients is relatively common in women.

Overactive bladder (OAB) is a frequent disabling situation that impacts health-related best of lifestyles. Estimates of the occurrence and have an effect of OAB on quality of life vary widely, in phase due to variation in the evaluation of symptoms, the populations surveyed, the techniques used to collect data, and the standards used to outline OAB.

Overactive bladder is a subset of storage lower urinary tract symptoms (LUTS) defined as ‘urgency, with or without urge incontinence, usually with frequency and nocturia’. The European Prospective Investigation into Cancer and Nutrition (EPIC) study was reported previously estimated the overall incidence of OAB in Europe and Canada to be 12.8% amongst women and 10.8% amongst men, whereas the overall incidence of any LUTS used to be estimated to be 62.5% in men and 66.6% in women. Studies show that people with OAB often delay seeking help and wait an average of three years before consulting a physician. Therefore; it is challenging to estimate the occurrence and, greater generally, the societal influence of OAB based totally on medical encounter data. To date, two major epidemiological research have appeared at the occurrence of OAB. However, neither of them included symptom bother in their analysis, and consequently can also overestimate the incidence of the situation.

We understand that the incidence of OAB syndrome will increase with age, there is a lack of information regarding the impact of OAB syndrome on sexual lifestyles yet. The prevalence of OAB is probable to be over 16% in United States and 6% to 35% in Europe. Korean continence society conducted study on OAB and
reported the prevalence of OAB syndrome over age of forty was found in 30.5% cases.14

Prevalence the overactive bladder syndrome increased with age and have a major effect on quality of life ranging 12–17% of the population.15,16 In our study observed mean age was 42.53 ± 11.69 years (Age range was 23 to 60 years). however the study conducted by Saleem A et al in 2010 in national journal and reported mean ages of women were 46.53 ± 11.94 years (range 21-74 years) with overactive bladder syndrome.17 Our results demonstrated age groups of women between 41-50 years of age of women patients that is more aged population & carries significance association after review of literature. Overactive bladder syndrome can have a significant effect on quality of life and prevalence increases with their age. However the Study of Milsom I reported prevalence of overactive bladder varied between 7.7 and 31.3%.18

CONCLUSION
We concluded incidence of overactive bladder in the female is almost similar and associated with increasing your age. Patients of OAB are under-diagnosed and under-treated. This patient can benefit from standard tests.

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