

EFFECTIVENESS OF PELVIC FLOOR EXERCISE (KEGEL'S EXERCISE) IN IMPROVING QUALITY OF LIFE AMONG WOMEN PELVIC FLOOR EXERCISE ON QUALITY OF LIFE AMONG WOMEN WITH URINARY INCONTINENCE: A QUASI EXPERIMENTAL STUDY

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ABSTRACT

To find the effectiveness of Pelvic Floor Exercise (Kegel's exercise) in improving the Quality of Life of persons with Urinary Incontinence. 9 persons with Urinary Incontinence were selected for the study based on inclusion criteria and they were screened using International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form was the pretest and posttest measurement tools. Intervention was given for 19 persons. These are a marked reduction of posttest values after the intervention which suggests there is improvement in ICIQ-UI. These are a marked reduction of posttest values after the intervention which suggests there is improvement in all 10 areas of KHQ. The result of this study shows that there is a significant improvement in Quality of Life and social participants. Hence, this study concludes that Pelvic Floor Exercise (Kegel's exercise) has an effect improvement of Urinary Incontinence in women.

Keywords: Pelvic Floor Exercise, Kegel's Exercise, Urinary Incontinence, Quality Of Life, Occupational Therapy.

INTRODUCTION

Urinary incontinence is normal and can range from a periodic break when you snicker, hack, wheeze or exercise, to the complete failure to control your bladder. Urinary incontinence happens all the more frequently in ladies than in men. Pelvic floor practices are an extraordinary method for reinforcing your pelvic muscles. Kegel's activities are basic hold and delivery practices that you can do to make the muscles of your pelvic floor more grounded. Stress Urinary Incontinence (SUI) is a typical issue experienced by numerous ladies. SUI can have a critical adverse consequence on the Quality of Life (QOL) of not just the people who experience the ill effects of the condition, yet in addition possibly on those companions what's more, relatives whose lives and exercises may likewise be restricted.

Methodology: The exercises will be taught to the clients and then the exercise videos were sent to the clients through email. The project design is experimental research. Sampling selection is a convenient method of selection. The duration of the project is 6 weeks –5 sessions per week, totally 30 sessions. The intervention program schedule includes pelvic floor exercises & Kegel exercises (Kegel's Exercises 1 & 2, squats, bridge, split tabletop, bird dog). The study was conducted at the Faculty of occupational therapy-OPD, MAHER and online method (Google meet). The duration of each session was 45 minutes.

Procedure: 22 participants were selected based on the inclusion criteria hence I also took the participants with mild Urinary Incontinence and moderate Urinary Incontinence. All 22 participants were asked to complete the screening tool ICIQ-UI. 3 participants dropped out of the study. The remaining 19 participants completed KHQ and received the intervention of pelvic floor exercise & Kegel's exercises (Kegel's Exercise 1 & 2, squats, bridge, split tabletop, bird dog) for 8 weeks. And posttest of the ICIQ-UI and KHQ scales are collected to find the improvement.

Screening Criteria: Women with urinary incontinence, ICIQ-UI SF, score ranges were 6–12. Women between 30 and 50 were included in this study. Pregnant women and women below 30 were excluded in this study.

International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form

This short survey can be utilized by clinicians to evaluate for incontinence, to get a brief yet far reaching synopsis of the level, influence and saw reason for side effects of incontinence and to work with patient-clinician conversations. Cronbach's alpha coefficient was determined 0.75, which shows the high dependability of this survey in assurance of UI. The got Weighted Kappa List in deciding the worth of the test-retest was 0.70, and Pearson Relationship Coefficient was determined 0.93 and intra-class connection coefficient was 0.84. Content legitimacy: Things in the ICIQ-UI Short structure have been viewed as effectively deciphered by patients and seem to cover extremely significant spaces of incontinence with great reaction rates from local area volunteers. Build legitimacy: The ICIQ-UI has been found to separate among guys and females, with females announcing more incontinence than guys (58.9% and 25.2% individually, $p < 0.001$). Convergent legitimacy: There as of now is no "highest quality level" survey for incontinence, yet understanding between reactions to ICIQ-UI and Bristol Female Lower Urinary Lot Side effects (BFLUTS) has been explored. Inquiries on the 'recurrence' and 'normal measure' of spillage went from moderate areas of strength for to (0.86), questions surveying the apparent reasons for incontinence went from powerless to direct ($r=0.29-0.55$).

King's Health Questionnaire (KHQ)

To evaluate the effect of lower urinary plot side effects remembering urinary incontinence for wellbeing-related personal satisfaction. The KHQ's great dependability was confirmed by Cronbach's alpha coefficients of >0.60 , showing sensible consistency aside from the individual relationship area in guys (0.47) and seriousness (adapting) measure space in females (0.59). LDL score, MH score and the all-out score showed a profoundly critical relationship to the clinical change during treatment. Responsiveness of score change to an adjustment of patient's impression of bladder condition from pattern to the furthest limit of treatment was magnificent with all $p < 0.001$.

Statistical Analysis

GRAPH 1: COMPARISON BETWEEN PRETEST AND POSTTEST VALUES OF ICIQ-UI SCALE OF 19 PARTICIPANTS (MILD & MODERATE URINARY INCONTINENCE).

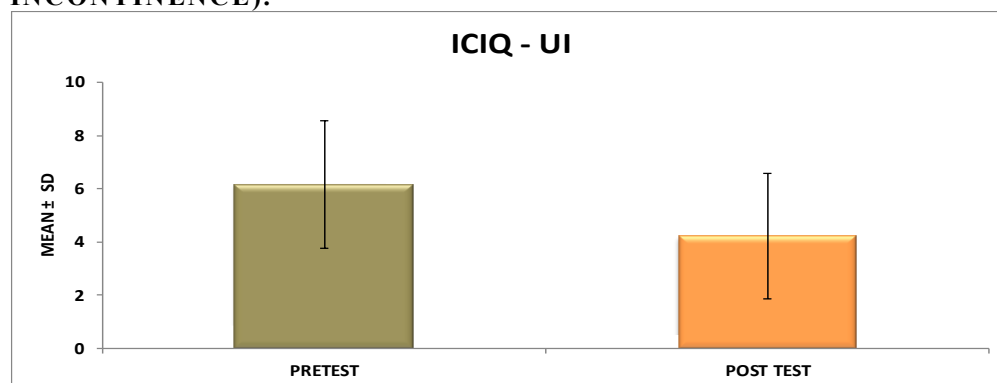


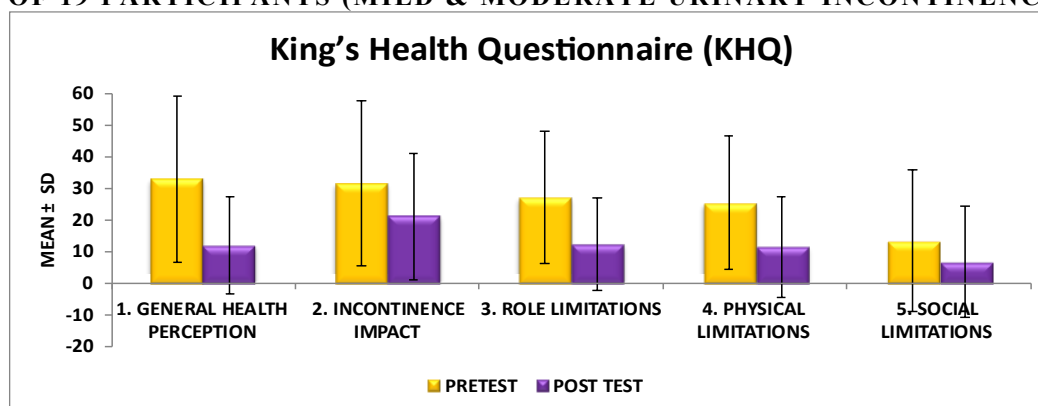
Table 1 and Graph 1 shows that there is a marked reduction in the values of ICIQ-UI. The calculated paired-t value is 6.474 and p value 0.00 which shows that is statistically significant.

TABLE 2: COMPARISON BETWEEN PRETEST AND POSTTEST VALUES OF KHQ SCALE OF 19 PARTICIPANTS (MILD & MODERATE URINARY INCONTINENCE).

	Mean	N	Std. Deviation	t	Sig. (2-tailed)	Asymp. Sig. (2-tailed)
1. GENERAL HEALTH PERCEPTION - PRETEST	32.89	19	26.422	4.800	.000	.001
1. GENERAL HEALTH PERCEPTION - POST TEST	11.84	19	15.294			
2. INCONTINENCE IMPACT - PRETEST	31.58	19	25.995	2.882	.010	.289
2. INCONTINENCE IMPACT - POST TEST	21.0526	19	19.90882			
3. ROLE LIMITATIONS- PRETEST	27.1930	19	20.94270	3.923	.001	.004

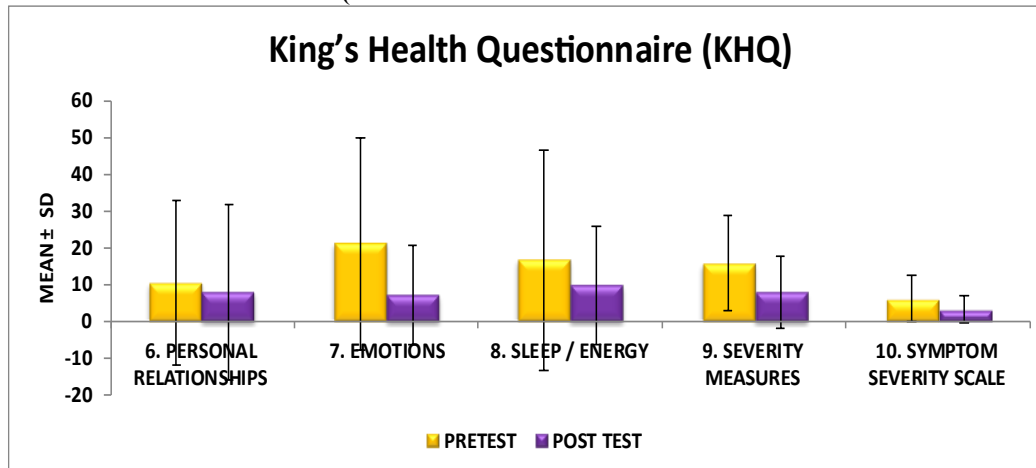
3. ROLE LIMITATIONS - POST TEST	12.2807	19	14.53190			
4. PHYSICAL LIMITATIONS - PRETEST	25.4386	19	21.05872	5.333	.000	.001
4. PHYSICAL LIMITATIONS - POST TEST	11.4035	19	15.76509			
5. SOCIAL LIMITATIONS - PRETEST	13.4503	19	22.40020	2.143	.046	.067
5. SOCIAL LIMITATIONS- POST TEST	6.7251	19	17.62462			
6. PERSONAL RELATIONSHIPS - PRETEST	10.5263	19	22.36794	.825	.420	.450
6. PERSONAL RELATIONSHIPS- POST TEST	7.8947	19	23.81022			
7. EMOTIONS - PRETEST	21.0526	19	28.90188	3.076	.007	.008
7. EMOTIONS- POST TEST	7.0175	19	13.46159			
8. SLEEP / ENERGY - PRETEST	16.6667	19	29.91758	1.455	.163	.176
8. SLEEP / ENERGY- POST TEST	9.6491	19	16.02062			
9. SEVERITY MEASURES - PRETEST	15.7895	19	12.99773	3.828	.001	.003
9. SEVERITY MEASURES - POST TEST	7.8947	19	9.81058			
10. SYMPTOM SEVERITY SCALE - PRETEST	6.2105	19	6.25015	4.369	.000	.000
10. SYMPTOM SEVERITY SCALE- POST TEST	3.1579	19	3.77511			

GRAPH 2 A: COMPARISON BETWEEN PRETEST AND POSTTEST VALUES OF KHQ OF 19 PARTICIPANTS (MILD & MODERATE URINARY INCONTINENCE)



Graph 2 A show that these are a marked reduction of posttest values after the intervention which suggests there is improvement in all 5 area of KHQ.

GRAPH 2 B: COMPARISON BETWEEN PRETEST AND POSTTEST VALUES OF KHQ OF 19 PARTICIPANTS (MILD & MODERATE URINARY INCONTINENCE).



Graph 2 B show that these are a marked reduction of posttest values after the intervention which suggests there is improvement in all 5 area of KHQ.

Results and Discussion: The aim of this study is to survey the impact of Pelvic Floor Exercise (Kegel's Exercise) in Urinary Incontinence persons. Through the 8 weeks of intervention there was a significant difference between pre-test and post-test of ICIQ-UI and KHQ. Table 1 And Graph 1 shows that these is a marked reduction in the values of ICIQ-UI. The calculated paired-t value is 6.474 and p value 0.00 which shows that is statistically significant. Graph 2 A show that these are a marked reduction of posttest values after the intervention which suggests there is improvement in all 5 area of KHQ & Graph 2 B show that these are a marked reduction of posttest values after the intervention which suggests there is improvement in all 5 area of KHQ. This is supported in the research done by Hebbar et al 2015. The study by Hebbar et al provides evidence that the KHQ scale effect tool to measures the quality of life of person with Urinary Incontinence. These findings from this study show in the short term, Pelvic Floor Exercise (Kegel's Exercise). Hence this study provides evidence supporting the effectiveness of this intervention program on improving Urinary Incontinence and Quality of Life. The major limitation of this program is online intervention due to COVID situation and short duration of intervention and significant change is found in the moderate stress Urinary Incontinence. Hence a longitudinal study is recommended to find the effect of this exercise on Urinary Incontinence. Since the study was conducted during the covid-19 lockdown period, getting enough sample size was the problem faced, so that the study didn't have a control and experimental group. Pelvic Floor Exercise (Kegel's Exercise) is an effective intervention for Urinary Incontinence when urine leaks or urgency of urination etc. is present. Thus, this can be an efficient strategy to improve Quality of Life and Social Participants.

Conclusion: This study improves the Quality of Life and Social Participants by doing Pelvic Floor Exercise (Kegel's Exercise) on regular basics with proper guidance. It will reduce Urinary Incontinence to the extent where they can be carefree about Urinary Incontinence. Hence, this study concludes that the Pelvic Floor Exercise (Kegel's Exercise) has a positive effect on the improvement of Urinary Incontinence in women.

Limitation and Recommendation: The duration of the exercise was shorter. The study was done with a small sample size. The study was done during the COVID-19 period, hence the difficulty in finding patients. Due to stigma, many people say that there isn't a problem with urinary incontinence. A larger sample size could be considered. A longer duration of intervention could be considered. A longitudinal study is recommended to find the effect of pelvic floor exercise and Kegel's exercise on Quality of life in urinary incontinence.

Statement of Interest: That's what all creators pronounce we have no irreconcilable situations in the creation or distribution of this commitment.

DECLARATION: The authors have no conflict of interest

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