



A STUDY TO ASSESS THE EFFECTIVENESS OF THE KNACK EXERCISE ON STRESS URINARY INCONTINENCE AMONG WORKING WOMEN IN JKKN ARTS AND SCIENCE COLLEGE AT NAMAKKAL DISTRICT

Vennila A, Mrs.Gowri.B, Dr.jamunarani

MSc Nursing, HOD Cum Professor, Principal in JKKN CON

The Tamil Nadu Dr. M.G.R. Medical University

ABSTRACT

Title: “A Study to assess the effectiveness of the knack exercise on stress urinary incontinence among working women in JKKN Arts and Science college at Namakkal Objectives: To assess the level of stress urinary incontinence among working women in experimental and control group.To evaluate the effectiveness of Knack exercise on stress urinary incontinence among working women in experimental and control group.To find out the association between the pretest level of stress urinary incontinence among working women with their selected demographic variables.Hypotheses: H1 – There is a significant difference between pre-test level and post-test level of stress urinary incontinence. H2 – There is a significant association between pre-test post-test level stress urinary incontinence with their selected demographic variables. Conceptual Framework: Wiedenbach’s helping art of clinical nursing theory (1969). Methodology: Quantitative approach True experimental, pre-test and post-test control group design was used. 40 samples were selected by simple Random sampling technique. Pre test was assessed with the help of Modified International Consultation on Incontinence Questionnaire (ICIQ)-UI-SF to be observed by the investigator .

The Knack exercise was given to stress urinary incontinence among working women was given to the experimental Group Patients. After the 7th day of intervention, to assess the effectiveness Knack exercise in stress urinary incontinence among working women result with the help of Modified International Consultation on Incontinence Questionnaire (ICIQ)-UI-SF Parameter for urinary incontinence, and the investigator observed the Reduce the of Stress urinary incontinence . Results: In Experimental Group pretest score was 3.1(SD±0.6) and post-test mean score was 1.6(SD ±0.8) respectively. The mean difference was 1.5. The paired 't' value was 6.8 which was significant at P <0.05 level. In Control Group pretest score was 3.3 (SD±0.7) and post-test mean score was 2.9(SD ±0.9) respectively. The mean difference was 0.4. The paired 't' value was 1.2 which was significant at P <0.05 level. Conclusion: The statistical evidence proved that the The result of the study showed that there was higher incidence of stress urinary incontinence among working women

BACKGROUND OF THE STUDY

Urinary incontinence in females can result from various factors including pregnancy, childbirth, menopause, and the structure of the female urinary tract. Pregnancy and childbirth can weaken the pelvic floor muscles that support bladder control, leading to stress incontinence. Menopause can decrease estrogen levels, which may deteriorate the lining of the bladder and urethra, increasing the risk of incontinence. Additionally, the female urethra is shorter than the male's, making it easier for urine to leak out. Other contributing factors may include urinary tract infections, obesity, and neurological disorders that affect bladder control.

NEED FOR STUDY:

The prevalence of urinary incontinence among older women has been reported in different studies, with an overall prevalence of 14% in US studies. In studies conducted in European countries, the prevalence of urinary incontinence has been estimated at 37%. In studies conducted in different regions of Asia, the prevalence of urinary incontinence in older adults was estimated at 13% and in Africa 45.3% . In the study conducted in Middle Eastern countries, the prevalence of urinary incontinence was reported to be 52%.

The World Health Organization (WHO) finds citizens 65 years of age to be older adults and the United Nations deems people with 60 years or above to be older adults . The world's population is aging rapidly, with 703 million people now over the age of 65, and this number is projected to reach 1.5 billion by 2050 . Urinary incontinence is a common condition in the general population, especially the older adults, which reduces the quality of life so that ten to 20 % of all women and 77% of women living in nursing homes have urinary incontinence . According to the International Association of Urinary Incontinence (ICS), any involuntary leakage of urine is called urinary incontinence (UI) .

OBJECTIVES

1. To assess the level of stress urinary incontinence among working women in experimental and control group.
2. To evaluate the effectiveness of Knack exercise on stress urinary incontinence among working women in experimental and control group.
3. To find out the association between the pretest level of stress urinary incontinence among working women with their selected demographic variables.

HYPOTHESES

- H1 – There is a significant difference between pre-test level and posttest level of stress urinary incontinence.
- H2 – There is a significant association between pre-test post-test level stress urinary incontinence with their selected demographic variables.

ASSUMPTIONS

- 1.Knack exercise can strengthen the pelvic floor muscles.
- 2.Working women can be easily adopted the knack exercise.
- 3.Knack exercises will enhance the over all quality of life, work , productivity and psychological well being reducing stigma and discomfort.

RESEARCH APPROACH:

The research approach used for this study was quantitative approach. Hence the quantitative approach was considered best to evaluate the effectiveness of knack exercise on the female stress urinary incontinence among working women.

RESEARCH DESIGN:

The research design employed for the study was a true experimental, pre-test and post-test design, incorporating both an experimental group and a control group.

SETTING OF THE STUDY:

This study was conducted in the JKKN Arts and Science college at Namakkal, Tamilnadu.

VARIABLES OF THE STUDY:

Independent variable: In this study, independent variables refers to knack exercise

Dependent variable: In this study, dependent variable refers to stress urinary incontinence among working women .

POPULATION:

Women aged 30-60 years with stress urinary incontinence were considered the population for this study.

TARGET POPULATION:

The target population for this study were the stress urinary incontinence among working women.

ACCESSIBLE POPULATION:

The accessible population for this study comprises stress urinary incontinence among working women in jkkn arts and science college at namakkal.

SAMPLE:

The sample selected for the present study were working women experiencing stress urinary incontinence in jkkn arts and science college at namakkal, and they fulfilled the inclusion criteria."

SAMPLE SIZE:

The sample size for this study consists of 40 working women .In that 20 samples were in experimental and 20 in control group

SAMPLING TECHNIQUE:

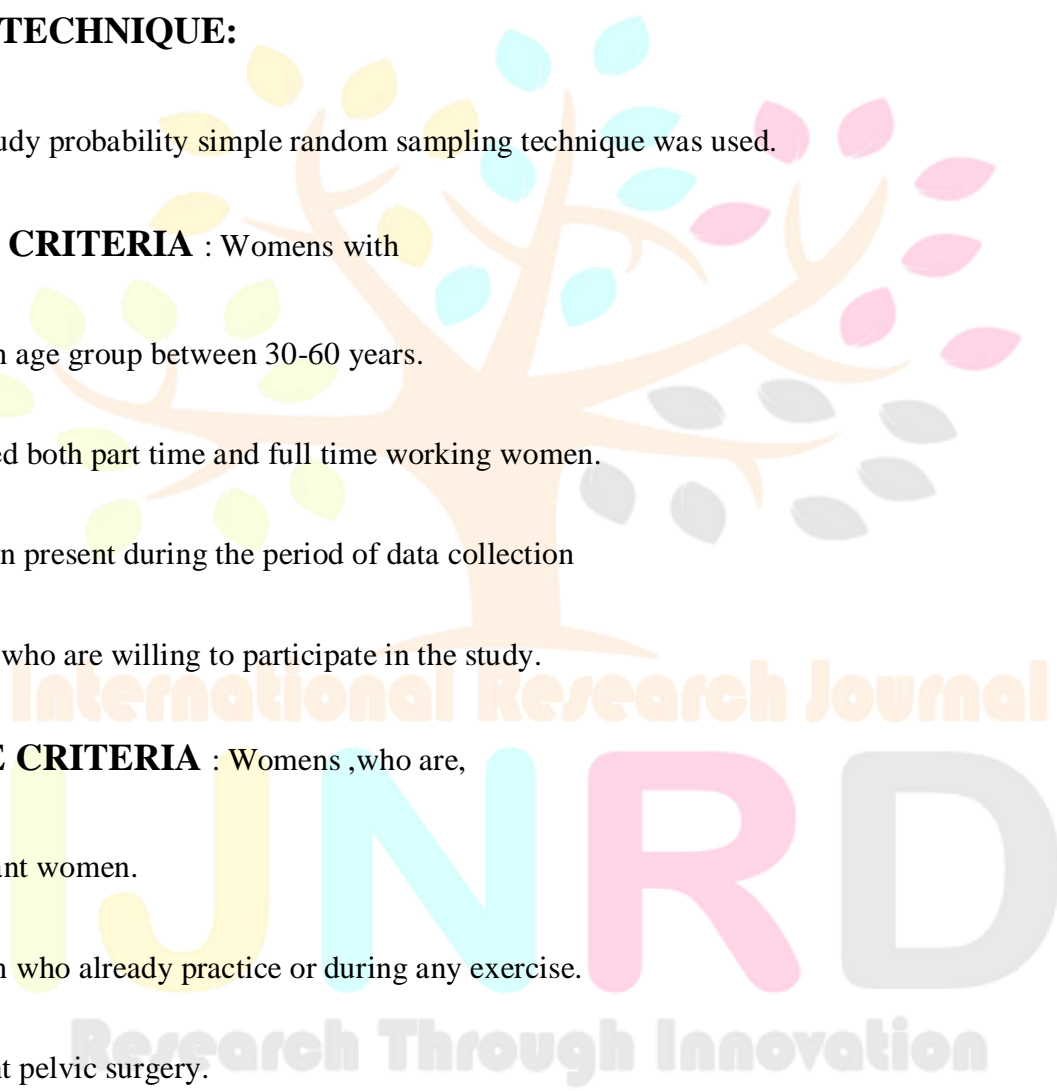
In this study probability simple random sampling technique was used.

INCLUSION CRITERIA : Womens with

- 1.Women age group between 30-60 years.
- 2.Included both part time and full time working women.
- 3.Women present during the period of data collection
4. Those who are willing to participate in the study.

EXCLUSIVE CRITERIA : Womens ,who are,

1. Pregnant women.
- 2.Women who already practice or during any exercise.
- 3.. Recent pelvic surgery.
4. Those who participated in pilot study.
5. Those who are not willing to participate in the study



Development of the tool:

Section A: Demographic variables .

The investigator constructed this tool to collect the demographic data of the study subjects and identify the influence of sample characteristics with the stress urinary incontinence among working women. It comprises fifteen questions such as , Age, Marital status, ,Religion Education , Type of Occupation ,weight, dietary pattern, Economical status, Regular exercise, Age at marriage , Age at menarche

Section B: Modified International Consultation on Incontinence Questionnaire (ICIQ) –UI-SF.

Modified International Consultation on Incontinence Questionnaire (ICIQ)- UI-SF consist of 20 statements related to stress urinary incontinence among working women. The five questions consist of 5 options . The 20 questions are mainly focusing on stress urinary incontinence among working women helps to find out the urine leakage related to stress urinary incontinence. The scoring system was categorized based on the percentage of score obtained

SCORING SYSTEM

Scoring	Percentage	Remarks
1-20	1%-20%	Normal
21-40	21%-40%	Mild
41-60	41%-60%	Moderate
61-80	61%-80%	Severe
81-100	81%-100%	Very Severe

DATA COLLECTION PROCEDURE:

Formal permission was obtained from the Dean of the JKKN arts and science college at namakkal to conduct a study on the efficacy of knack exercises for managing stress urinary incontinence among working women age between 30 - 60 years .Womens who fulfilled the sample selection criteria were selected by using

[probability]simple random sampling technique. The investigator initially established rapport with the working women. The purpose of the study and type of intervention, data collection method were explained to them and written permission was obtained from the working women who are interested and willing to participate. Each women was interviewed to gather demographic and before going for Knack exercise.

Totally 40 samples were selected for the study. Pretest was assessed with the help of Modified International Consultation on Incontinence Questionnaire (ICIQ)-UI-SF to be observed by the investigator. The duration of Knack exercise was given 10-15 minutes. The post test was assessed after 7 days of intervention by using the same tool.

DATA ANALYSIS PLAN :

The data analysis was done according to the objectives of the study. Both descriptive and inferential statistics were used.

DESCRIPTIVE STATISTICS

Frequency, percentage, and mean were used for analysis of pre and posttest assessment

INFERENCE STATISTICS:

Paired t-test was used to determine the difference between pre and posttest values in terms of effectiveness of Knack exercise on stress urinary incontinence among working women.

The Chi square test was used to determine the association between the pretest levels of the effectiveness of Knack exercise on stress urinary incontinence among working women with their selected demographic variables.

SECTION-A

Table-4.3: Distribution of samples according to their demographic variables:-

S.No	Demographic variables	N=40(20+20)			
		Control Group n=20		Experimental Group n=20	
		Frequency f	Percentage %	Frequency f	Percentage %
1	Age(in years)				
	a)30-40 years	4	20%	3	15%
	b) 41– 50 years	10	50%	13	65%
	c)51-60 years	6	30%	4	20%
2	Marital status				
	a)Married	15	75%	16	80%
	b) Unmarried	2	10%	1	5%
	c)Divorced	1	5%	2	10%
	d) Widow	2	10%	1	5%
3	Religion				
	a) Hindu	12	60%	14	70%

	b) Christian	6	30%	4	20%
	c) Muslim	2	10%	2	10%
4	Education				
	a) Professional	2	10%	1	5%
	b) Postgraduate	4	20%	3	15%
	c) Undergraduate	12	60%	13	65%
	d) Schooling	2	10%	3	15%
5	Type of occupation				
	a) Teaching staff	13	65%	15	75%
	b) Non-teaching staff	2	10%	3	15%
	c) Administrative officer	2	10%	1	5%
	d) House keeping	3	15%	1	5%
6	Monthly income				
	a) <10000	1	5%	1	5%
	b) 10001 – 15000	2	10%	4	20%
	c) 15001– 20000	11	55%	13	65%
	d) >20000	6	30%	2	10%
7	Weight				
	a) 45– 55 kg	1	5%	2	10%
	b) 56– 65 kg	2	10%	5	25%
	c) 66– 70 kg	5	25%	3	15%
	d) 70 or above	12	60%	10	50%
8	Dietary pattern				
	a) Vegetarian	4	20%	6	30%
	b) Nonvegetarian	16	80%	14	70%
9	Are you doing exercise regularly, if yes means the time duration of doing exercise				
	a) 10 minutes/day	14	70%	16	80%
	b) 20 minutes/day	3	15%	2	10%
	c) 30 minutes/day	2	10%	1	5%

	d) 60minutes/day	1	5%	1	5%
10	Ageat marriage				
	a)18 – 25 years	5	25%	3	15%
	b) 26– 30 years	12	60%	15	75%
	c)31– 35 years	1	5%	1	5%
	d)NoMarriage	2	10%	1	5%
11	Ageat menarche				
	a)Around10 - 14 yearsold	15	75%	8	40%
	b)Around15–18 yearsold	4	20%	11	55%
	c)Around19–20 yearsold	1	5%	1	5%
12	DoyousufferHealth issues?				
	a)Diabetes mellitus	10	50%	8	40%
	b) Hypertension	6	30%	6	30%
	c)UTI	3	15%	5	25%
	D) Others	1	5%	1	5%
13	Number of pregnancies?				
	a)Nopregnancies	3	15%	3	15%
	b) 1-2 pregnancies	14	70%	16	80%
	c)3andmore	3	15%	1	5%
14	Modeof delivery?				
	a)Vaginal delivery	8	40%	9	45%
	b)Caesariansection	9	45%	8	40%
	c)NoDelivery	3	15%	3	15%

Section-B

Assess the effectiveness of pretest and post-test of Knack exercise among level of stress urinary incontinence among working women in experimental and control group

S.No	Level of Stress urinaryIncontinence	Experimentalgroup				Control Group			
		Pre-Test		PostTest		Pre-Test		PostTest	
		F	%	f	%	f	%	f	%
1	VerySevere	5	25%	-	-	8	40%	6	30%
2	Severe	11	55%	3	15%	8	40%	5	25%
3	Moderate	4	20%	5	25%	4	20%	9	45%
4	Mild	-	-	12	60%	-	-	-	-
5	Normal	-	-	-	-	-	-	-	-

Comparison of pre- and post- test level of stress urinary incontinence among working women in the Control group and Experimental group

	Variable	Mean	Standard deviation	Mean difference	Paired 't' value
Experimental Group	Pre-Test	3.1	0.6	1.5	6.8
	Post-Test	1.6	0.8		
Control Group	Pre-Test	3.3	0.7	0.4	1.2
	Post-Test	2.9	0.9		

Association between the pre-test level of stress urinary incontinence among working women and their demographic variables in experimental group.

Association between the pre-test level of **stress urinary incontinence among working women** and their demographic variables in experimental group. The result that calculated value is less than the tabulated value (at 0.05 level-significant). So, it is concluded that there is a no significant association between the above-mentioned demographic variables

SUMMARY

Simple random technique was used in this study. After the ethical approval as per the criteria, on the first day, a survey was conducted in the JKKN arts and science college in namakkal,Tamilnadu. 40 members fulfilled the inclusion criteria and were willing to participate in the study. The knack exercise on reduction in stress urinary incontinence. Demographic variables were collected through questionnaires, Pre-test was conducted on the first day of study followed by knack exercise. After the pre-test, the knack exercise as intervention was given. post test was conducted on the 7thday.

Using descriptive and inferential statistics to analyses the data. Paired tests are used to evaluate the effectiveness of knack exercise. Chi-square was used to find out the association between pre-test stress urinary incontinence among working women in JKKN Arts and Science college. calculated r value used to find out the relation between posttest of control group and experimental group for stress urinary incontinence among working women in JKKN Arts and Science college.

CONCLUSION

The result of the study showed that there was higher incidence of stress urinary incontinence among working women. The present study was intended to assess the effectiveness of Knack exercise was stress urinary incontinence among working women in JKKN Arts and Science college at Namakkal. The participant's involvement is also mandatory.