A STUDY TO ASSESS THE EFFECTIVENESS OF KEGEL EXERCISE ON LEVEL OF PAIN AMONG THE POST-NATAL MOTHERS AT DEEPAK HOSPITAL JALNA, MAHARASHTRA STATE.

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ABSTRACT: This study was conducted to determine Effect of Kegel Exercise on level of pain among post-natal mothers at Deepak Hospital in Jalna, Maharashtra state. 30 Patients were selected by using non-probability sampling technique. The questionnaire was prepared to obtain the demographic profile, contributing as age, education, occupation, age of Marriage, Number of Gravida, Body build, dietary pattern. Data was collected with the help of demographic profile and was done in Deepak Hospital at Jalna in Maharashtra state. Approach was made to the patient and was explained regarding the benefits of Kegels exercise. On 1st day, the intervention is given and post-test was done. For 7 consecutive days, visit was done to the samples and Kegel exercise is given. On 7th day of visit post-test was carried out by numerical pain rating scale. The result showed that there is correlation between post-test level of pain and Kegel exercise.

INTRODUCTION: Most women after giving birth, complain about low back pain, which is not a surprise given the amount of strain and pain the body goes through during labour contractions. Other than back pain, you may experience headaches, or sharp pain in the hips or lower back. She may also experience tingling hands and wrist.

Exercises to strengthen the pelvic floor muscle were popularized by Dr. Arnold Kegel, in 1948 and are often called Kegel exercises. These exercises can help to control urinary incontinence and pain. An exercise done after delivery is called post-natal exercise, post-natal exercise helps to improve the muscle tone which is stretched during pregnancy and labour. Post-natal exercises offer a whole range of benefits for the mother. Post-natal exercise will

speed up the recovery process and build valuable strength. Exercise would give energy, help to drop a few pounds. Exercise will keep the women to be fit. Specific exercises and postures can help the women to adapt to the physical changes in her body during the child bearing year.

This study shows the numerous locations and intensity variations of post-natal pain. It is important to further study the impact of the accumulated pain intensity when pain occurs in several sites simultaneously. The insidious effects of pain – such as fatigue, irritability, emotional instability, and social withdrawal- could put extra stress on the women and the dynamics of the post-natal family. Pregnancy and childbirth while are natural process, stretch the body and whole being to maximum performance. This process may help the mother to decrease the pain.

NEED FOR THE STUDY: Postpartum period is a phase which is painful for every Woman. It is important to assess the level of pain in every mother and to bring in the significance of Kegel exercises in daily practice. Kegel exercise is effective in helping the pain to come down to some extent and to resume physical activity in the mothers. These complications result in physical, psychological, and emotional problems which negatively affect women's overall health. In this context, several counter-actions have strongly been recommended ultimately aiming to accelerate the episiotomy wound healing as well as relieving the perineal pain. Most important of these counter actions is Kegel exercises which has a lot of advantages. It is not expensive, influential, appropriate to postpartum women in many situations, and safe. It is a common method that promotes and accelerates the healing and decreases the perineal pain commonly occurring after episiotomy.

Kegel exercises aim to improve muscle tone by strengthening the pubococcygeus muscles of the pelvic floor. Kegel is a popular prescribed exercise for pregnant women to prepare the pelvic floor for physiological stresses of the later stages of pregnancy and childbirth. Various advisors recommend Kegel exercises for treating vaginal prolapse and preventing uterine prolapse.

Post-natal exercises are inevitable part of postnatal care. Many women are unaware of the benefits of post-natal exercise. Also, some of the superstitions and customs existing in the society are prohibiting the post-natal women from performing exercise. As this is very beneficial for the postnatal women, the researcher felt to create awareness among the post-natal mother regarding post-natal exercises by giving health education.

STATEMENT OF PROBLEM

A study to assess the effectiveness of Kegel exercise on level of pain among the post-natal mothers at a Deepak Hospital Jalna, Maharashtra state.

OBJECTIVES

- To assess the pre-test and post-test level of pain among the post-natal mothers in the experimental group.
- To determine the effectiveness of Kegel exercise on the level of pain and among the post-natal mothers in experimental group.
- To find an association between pre-test level of pain among the post-natal mothers with selected demographic variables.

HYPOTHESES

H_1: There is significant reduction in the level of pain among the post-natal mothers after Kegel exercise.

H_2: There is significant association between the pre-test level of pain with selected demographic variables.

METHODOLOGY

This chapter comprises the methodology for the study. It comprises the approach, research design and variables of the study, research settings, population, sample, sample size, sampling techniques, criteria for sample collection development and description of tool collection procedure and plan for the data collection.

Research approach: It is defined as the approach in a general set of orderly disciplined procedure use to acquire information the quantitative approach was used in the study.

Research Design: The pre- experimental research design, one group pre-test and post-test will be used in this study.

Population: Post-natal mothers in Deepak Hospital, Jalna. Who were screened to have pain after delivery.

Target population: The target population of the study constituted the post-natal mother who were performing Kegel exercises in Hospital, Jalna.
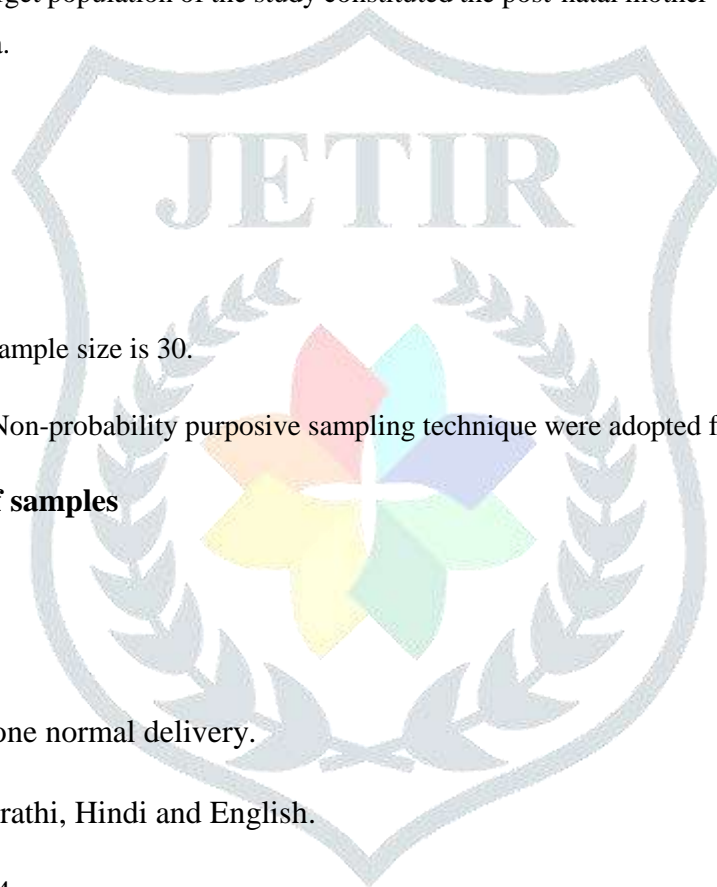
SAMPLING

Sample Size: The total sample size is 30.

Sampling Procedure: Non-probability purposive sampling technique were adopted for the selection of samples.

Criteria for selection of samples

Inclusion Criteria:

Post-natal mothers

• Those who are undergone normal delivery.

• Able to understand Marathi, Hindi and English.

• Aged between 18 to 34 years.

• Available during the study period.

• Willingness to join.

Exclusion criteria:

Post-natal mothers

• Those who were undergone Caesarean.

• Unable to understand Marathi and Hindi.

• Unavailable during the study period.

• Not willing to join the study.

Research Variables:

Independent variable: The independent variable in the study is Kegel exercise.

Dependent variable: The dependent variable in the study is post-natal mothers.

Description of the tools

The tool consists of 2 sections

Section A: Demographic variables

This section consists of questions which seek information regarding demographic data such as age, gravida, occupation, education, Residence, Educational status, episiotomy, dietary pattern.

Section B: Numerical Pain Rating Scale.

➢ The patient is asked to make three pain ratings, corresponding to current, best and worst pain experienced over the past 24 hours.

➢ The average of the 3 ratings was used to represent the post-natal mother level of pain over the previous 24 hours.

Patient Instructions (adopted from (Mc Caffery, Beebe et al. 1989) *"Please indicate the intensity of current, best, and worst pain levels over the past 24 hours on a scale of 0 (no pain) to 10 (worst pain imaginable)"*

Description of tool: The rating scale shows the level of pain in different severity that is show in below. The numerical pain rating scale is an 11-point scale scored from 0-10:

1) "0" = no pain

2) "10" = the most intense pain imaginable

Patients verbally select a value that is most in line with the intensity of pain that they have experienced in the last 24 hours.

A written form is also frequently used with the numeric values of 0-10 written out. Williamson and Hoggar (2005) reported the numerical pain rating scale has good sensitivity while producing data that can be statistically analysed.

Sr No	Severity	Number	Score
1	NO PAIN	0	0
2	MILD PAIN	1-3	1
3	MODERATE PAIN	4-6	2
4	SEVERE PAIN	7-10	3
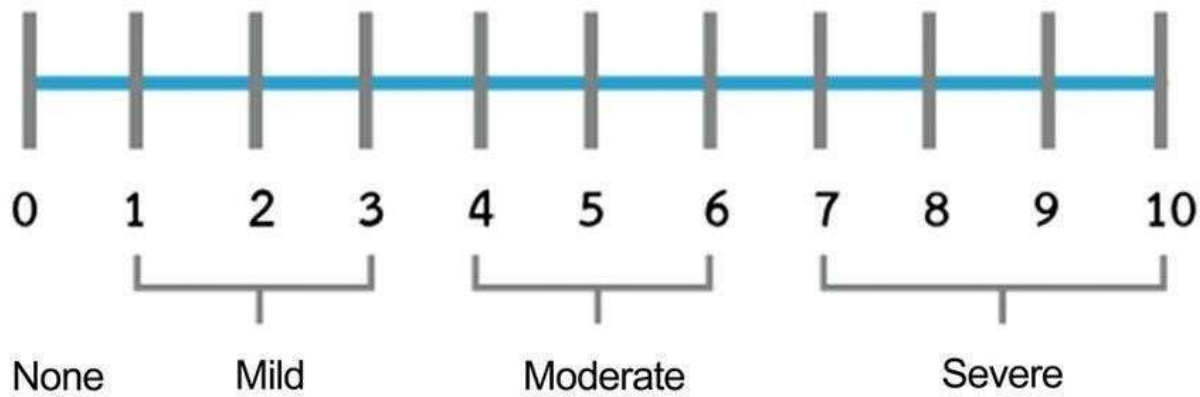
Score interpretation: In above scale the researcher gives the number between 0-10, and they give score to the rating that is 0-3,

that is the score is

0 =No pain

1 = Mild pain

2 = Moderate pain

3 = Severe pain

Researcher count the total score of the patient and after that they divide it by 4, because, they take 10 question and each question researcher give 4 options, that also the greater score is 30, that means when score is 30 then that percent will be 100%, out of that researcher give their score.

When the rating comes 0 then the pain severity is no pain, when the rating between 1-3 then severity of pain is mild, when rating between 4-6 then severity of pain is moderate, when rating between 7-10 then severity of pain is severe.

TECHNIQUE OF DATA COLLECTION

Data collection is the process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research question, test hypothesis, and evaluate outcome. The data collection method is structured interview questionary using numerical pain rating scale. sampling technique used for data collection is non-probability purposive sampling technique.

INTERVENTION

Kegel exercise performed 5 minutes for 7 days.

Kegel exercise - 1

♣ Step 1: Sit stand or lie with your knees slightly apart

♣ Step 2: slow tighten your pelvic floor muscles staring with your anus

♣ Step 3: Tighten around your vagina.

♣ Step 4: squeeze both areas and as hard as you can lift.

♣ Step 5: Hold for the 20 seconds then relax.

Kegel exercise 2:

Sit on the mat while straightening the legs in front of you and spread them a bit wider than your hips. Your arms should be behind your back and the hands are pointing out. Left your hips and left your hell fall back. Contract your pelvic muscle for 5 second while your hips are lifted and release. Lower your hip and repeat several times.

Kegel exercise 3:

Lie down on your back and place your hands alongside your body. Yours legs are bent and be aligned with your toes. Lift your hips until you reach the base of your shoulder blades. When you are this position pulse up and down. Contract your pelvic when your hips are lifted. Lower your hips and repeat several times.

METHOD OF DATA ANALYSIS:

Paired t-test: This test is used to identify the significant difference in pre-test and post-test level of pain among post-natal mothers in experimental group.

Chi-square test: This test was use to assess the association between the demographic factors and pre-test post-test level of pain among post-natal mother in experimental group

RELIABILITY: Reliability of tool tested by using paired t-test by Karl Pearson's correlation coefficient formula for estimation of reliability.

PILOT STUDY: A pilot study is a small-scale version or trial run of the major study. The main objective of the pilot study was to help the researcher to become familiar with the use of tool and find out the difficulty to conduct the main study. The pilot study was conducted at Deepak hospital Jalna Maharashtra with sample size 30 with non-probability sampling technique pre-test post-test was be conduct after intervention the data analysis with statistics. 3.8 Method of data collection. Structured interview questionnaire and observation technique are used to collect the data based on the study objectives. Data collection Procedure The data collection procedure was done for a period of 1 weeks in Gynaecology unit of Deepak Hospital at Jalna. Permission to conduct the study was obtained from the Chairman, Head of the gynaecology department and unit in-charge of gynaecology Unit. The subjects were informed by the researcher about the nature and purpose of the study. Informed written consent was obtained as per the rule on day 1st.Researcher selected 30 samples through non-probability purposive sampling technique. Total samples are 6 in the experimental group. Numerical pain rating scale is used to assess Level of pain among the patient followed by administration of Kegel exercise for experimental group. Post-test was done on 7th day. The time taken by the researcher 48 to complete the tool for each sample is 5 minutes. The samples are observed for Level of pain by using Numerical pain rating scale.

$$r_c = 2r/1+r$$

$$r_c = 0.86$$

The obtained r value was 0.86, hence it is above 0.70, and tool was found reliable.

METHOD OF DATA COLLECTION

Structured interview questionnaire and observation technique are used to collect the data based on the study objectives.

DATA COLLECTION PROCEDURE

The data collection procedure was done for a period of 1 weeks in Gynaecology unit of Deepak Hospital at Jalna. Permission to conduct the study was obtained from the Chairman, Head of the gynaecology department and unit in-charge of gynaecology Unit. The subjects were informed by the researcher about the nature and purpose of the study. Informed written consent was obtained as per the rule on day 1st.Researcher selected 30 samples through non-probability purposive sampling technique. Total samples are 6 in the experimental group. Numerical pain rating scale is used to assess Level of pain among the patient followed by administration of Kegel exercise for experimental group. Post-test was done on 7th day. The time taken by the researcher 48 to complete the tool for each sample is 5 minutes. The samples are observed for Level of pain by using Numerical pain rating scale.

PLAN FOR DATA ANALYSIS

Data are collected, arrange and tabulated descriptive statistics like frequency, percentage and mean are used for categorical distribution data. Inferential statistic is used to find out the effect of kegel exercise on level of pain and chi-square is used to measure the association of post-test level of pain on hospitalization with selected demographic variables in the control group.

RESULT:

- Most of the samples 13(43.30%) of post-natal mothers were between the age group in 18-22 years.
- Most of the samples 16(53.30%) of post-natal mothers were primi gravidas.
- The majority of 17(56.70%) of post-natal mothers were educated up to school level.
- Most of the sample 26(86.70%) of post-natal mothers were house wife.
- The majority of sample 28(93.305) of post-natal mothers doing episiotomy.
- The most of the samples 20(66.70%) of post-natal mothers' residence in urban area.
- Most of the post-natal mothers 19(63.30%) were non-vegetarian.
- Most of the samples 23(76.70%) of post-natal mothers were marriage between the age group in 16-20 years.
- The majority of samples 17(56.70%) of post-natal mothers were parity.
- The majority of samples 18(60%) of post-natal mother body build is moderate.
- The chi square test was used to find out association between effect of Kegels exercise and selected demographic variables among post-natal mother.
- The calculated p value was greater than 0.05 which confirmed the fact that there is no significance association between level of pain with selected demographic variables with regard to the association between the level of pain and selected demographic variables in experimental group, the study findings have revealed that in the experimental group there was a significant association between level of pain and occupation, Age of marriage, Body build, age of mother, dietary pattern, Residence.

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