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Special Issue

A PRE EXPERIMENTAL STUDY TO ASSESS THE VIDEO ASSISTED TEACHING PROGRAMME (VATP) ON KEGEL,S EXERCISE TO PREVENT URINARY INCONTINENCE AND STRENGTHING OF PELVIC FLOOR MUSCLES AMONG ANTENATAL MOTHERS IN SELECTED PRIVATE HOSPITAL GWALIOR .

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Abstract
KEGEL exercise is to improve muscle tone by strengthening the pubococcygeus muscles of the pelvic floor. For pregnant women KEGEL is the exercise prescribed by Gynecologist to overcome the physiological stresses by preparing Pelvic Floor muscles for pregnancy and childbirth. Urinary incontinence is common during pregnancy and postpartum. Pelvic floor muscle exercise is suggested to help women to prevent urinary incontinence or regain urinary continence during pregnancy and after delivery. Regular Kegel exercise helps to be fit for antenatal mothers, postnatal mothers and improves your ability to cope with labour. Also, this tightens vagina after delivery. A Pre Experimental research approach was adopted for the study. Pre test and Post test research design was adopted for the study. 60 Antenatal mothers were included in the research study. In pre test it was found that the Antenatal mothers had little bit knowledge about Kegel Exercise to prevent urinary incontinence. After application of VATP there was enhancement in the knowledge by questionnaire method So, it was concluded that VATP ensured the enhancement in the knowledge of Antenatal mothers.
Keyword: Kegel exercise, Antenatal mother , Effectiveness, Pelvic Floor Muscles, Video Assisted Teaching Programme, Urinary Incontinence.

Introduction

Pelvic floor exercise, cortical impulses contract fast –twitch , striated periurethral sphincter muscles via the pudendal nerve. It is theorized that these KEGEL exercise is 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. Urinary incontinence is common during pregnancy and postpartum. Pelvic floor muscle exercise is cost-effective which can be implemented by nurses. Therefore, pelvic floor muscle exercise is suggested to help women to prevent urinary incontinence or regain urinary continence during pregnancy and after delivery.

KEGEL's exercise help to strengthen the PUBOCOCCYGEUS (PC) muscles, which support the pelvic floor. The potential benefits of doing KEGEL exercise on a regular basis include include: greater case in achieving orgasm lubrication, heightened control over sensation during penetration, and protection against urinary incontinence bladder prolapse. PC muscles are activated when one stop the flow of urine. Clinicians are encouraged to use this example when teaching patients about KEGEL exercise . often , a total of 200 repetitions are recommended per day, not necessarily all at

one time.

Although early studies suggested isolation of the PUBOCOCCYGEUS MUSCLE was the optimal way to increase its strength, recent studies have reported that overflow contraction through lower extremity and abdominal muscle contraction may enhance pelvic floor muscle training.

KEGELexercises for pelvic floor which plays important role during pregnancy, birth and post birth as well as labor pain and premature ejaculation. The pelvic floor is a set of muscles which are attached to the base of your spine at the back and pubic bone in front which support your bowel, uterus, vagina and bladder.A strong pelvic floor supports your baby and bladder during pregnancy, help rotate your baby's head during labour and stress incontinence once your baby is born. Therefore, the contraction and relaxation exercises which are performed to strengthen a pelvic floor muscles are called as Kegel Exercises.

The antenatal period of the time during which mothers body adjust physically and psychologically to the process of childbearing. The period following childbirth during wich the body tissues, in particular the genital and the pelvic organs, return to the condition they were in pre –pregnancy, which lasts for approximately 6 weeks immediately following delivery , the lower segment becomes a thin , flably , collapsed structure . It takes a few weeks to revert back to the normal shape and size of the isthmus. Pregnancy is one of the most vital and delicate times in a woman's life.

regular exercise.As the baby start to develop it pushes the uterus and other organs away and after birth the organs return to there respective positions. Because of this muscles become weak and even looses its strength while giving birth, thus kegels help them to tighten up.It is obvious that after birth the muscles will get tired because they have gone through a lot of exertion and as every lady wants to get back shape of her body, KEGELS can be performed to get back fitness and shape by toning vaginal muscles. So, after pregnancy to give back their strength it is required.

OBJECTIVES

1. To assess the Pre-test knowledge and practice score of antenatal mothers regarding KEGEL exercise to prevent urinary incontinence and strengthening of pelvic floor muscles.

2. To assess the effectiveness of video assisted teaching programme regarding exercise to prevent urinary incontinence and strengthening of pelvic floor muscles by compare the pre-test and post test knowledge score.

3. To assess the Post-test knowledge and practice score of Antenatal mothers regarding KEGEL exercise to prevent urinary incontinence and strengthening of pelvic floor muscles.

4- to assess association between pre test knowledge with selected demographic variables.

METHODOLOGY

Study design- in this study a pre experimental research design was adopted.

Study population - Antenatal mothers

Study area- study was conducted in BIMR hospital Gwalior (M.P.)

Sample size – 60 antenatal mothers.

Sampling method- Self structured questionnaire method

Sample technique- Convenient sampling technique was adopted to select the sample of this study.

Inclusion criteria

- Antenatal mothers who admitted in Private hospital Gwalior.
- Antenatal mothers who were available at the time of data collection.
- Antenatal mothers who were willing to participate in the study.

Exclusion criteria

- Who were willing to participate in the study?

Data collection tool - Self structured questionnaire was used to collect the data from the ante natal mothers.

DOVELOPMENT AND DESCRIPTION OF TOOL: Self structured questionnaire tool was developed for the collection of data. Tool was translated in Hindi language.

FORMATE OF THE TOOL:

The tool consists of three sections:

Section A-

Demographic data consisting of items seeking information about background data such as age education ,source of information, Occupies maximum times of the day, Gravida, type of previous delivery etc .

Section B—

Questionnaire related about KEGEL's exercise to prevent urinary incontinence and strengthening of pelvic floor muscles. It consists of 30 questions all of which are scored . The total score was 30 and each question contains of 4 answer out of which one answer is correct .The correct answer is given a score of "1" and each wrong response score " 0".

Section C—

Checklist to assess the practice of Antenatal mothers regarding KEGEL's exercise. An answer key was prepared for scoring answer to the self administered questionnaire guide.

Data collection – A formal written permission was obtained from the BIMR Hospital Keeping in mind the ethical aspect of research, the data was collected after obtaining the informed consent of the sample. The sample were assured anonymity and confidentiality of information provided by them. Pre-test was conducted from **12/07/2018 to 19/07/2018** followed by administration of training programme (demonstration). The duration of the session 30-40 minute.

Statistical Analysis

The data analysing was done in according with the objectives of the study and overall post-test knowledge score obtained by subjects was 19.88 with standard deviation 6.94 .The improvement in ,mean score for overall knowledge was 6.94 with ''Z" test value of 4.04 and found to be significant at the level of $P<0.05$. It is evident that training was effective in improving the knowledge of Antanatal mothers regarding KEGEL,S EXERCISE TO PREVENT URINARY INCONTINENCE AND STRENGTHING OF PELVIC FLOOR MUSCLE.

Ethical clearance and informed consent

Institution's ethical review committee 's permission was taken weitten permission was obtained from the ethical committee of BIMR hospital Gwalior after explaining the type and purpose of

study . The response of participants were kept confidential.

Results

MAJOR FINDINGS OF THE STUDY

FINDING RELATED TO DEMOGRAPHIC DATA

- ✓ Most of the subject from the age group 18- 25 yrs8.(13.33%), 26-32yrs. 20(33.33%),33-40yrs.24(40%),<40yrs 8(13.33%).
- ✓ the subject were get the source of knowledge was poor, from multimedia only 5(8..33%),school 0 (0%) family 0(0%)and health professionals 5(8.33%)
- ✓ In the study the educational status of Antenatal mothers are Illiterate 0(0%), 10^{th} 8(13.33%),12^{th} 15(25%),Graduation 17(28.33%) and Master and avobe 20(33.33%).
- ✓ In the study the **Any problem related to Gynaecological and renal,.**of Antenatal mothers are no any suffering from any Gynaecological and renal problem,The data reveals that subjects were No 60 (100%) and Yes 0 (0%).
- ✓ In the study the **Position occupies maximum times of day are** Standing 10 (16.66%) , Seating 15 (25%), Bending 15(25%) and All types 20 (33.3).

- ✓ Most of the subjects were form **the Gravida of Antenatal mothers** are First Gravida 32 (53.3%) , second Gravida 18(30%) , Third Gravida 5(8.3%) and Fourth and more 5(8.3%) .

- ✓ **In the study the Types of Previous Delivery ..... if any are** Normal vaginal delivery 5(8.33%),Episiotomy 10(16.66%), Caesarean 13(21.66%), and No previous delivery 32(53.33%).

FINDING RELATED TO EFFECTIVENESS OF TEACHING PROGRAMME

Antenatal mothers of BIMR hospital (Gynae) OPD had inadequate knowledge and practice in KEGEL EXERCISE. Teaching programme increase the knowledge score of Antenatal mothers after being exposed to demonstration.

The overall mean post-test knowledge and practice score (19.88) of Antenatal mothers are apparently higher than overall mean Pre-test score (9.98) and is significant.

Table -1

PRETEST	TREATMENT	POST TEST
Administration of knowledge questionnaire.	Training programme	Administration of same knowledge questionnaire
Q_1	S	Q_2

Table-1 pre experimental with one group pre test and post test design

Table-2

S. No.	KNOWLEDGE LEVEL	SCORE
1.	Very poor	1-6
2.	Poor	7-12
3.	Average	13-18
4.	Good	19-24
5.	Very Good	25-30

Table-2 To interpret level of knowledge the score were distributed as follows.

Table- 3

SL.NO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE (%)
1.	AGE IN YEARS		
	A. 18- 25 yrs.	8	13.33%
	B. 26-32 yrs.	20	33.3%
	C. 33-40 yrs.	24	40%
	D. < 40 yrs.	8	13.33%
2.	EDUCATION STATUS		
	A. ILLITERATE	0	0%
	B. 10^{TH}	8	13.33%
	C. 12^{TH}	15	25%
	D. GRADUATION	17	28.33%
	E. MASTER AND ABOVE	20	33.33%
3	SOURSE OF Information aboutkegel exercise	5	8.33%
	A. MULTIMEDIA	0	0%
	B. SCHOOL	0	0%
	C. FAMILY	5	8.33%
	D. HEALTH PROFESSIONAL		

4.	ANY PROBLEM RELATED TO GYNAECOLOGICAL AND RENAL--- A. YES B. NO C. IF YES SPECIFIC	 0 60	 0% 100%
5.	POSITION OCCUPIES MAXIMUM TIMES OF DAY A. STANDING B. SEATING C. BENDING D. ALL TYPES	 10 15 15 20	 16.66% 25% 25% 33.33%
6.	GRAVIDA A. FIRST B. SECOND C. THIRD D. FOUTH AND MORE	 32 18 05 05	 53.33% 30% 8.33% 8.33%
7.	TYPE OF PREVIOUS DELIVERY A. NORMAL B. NORMAL WITH EPISIOTOMY C. CEASEARION D. NO PREVIOUS DELIVERY	 5 10 13 32	 8.33% 16.66% 21.66% 53.33%

TABLE-3-FREQUENCY AND PERCENTAGE DISTREBUSION ON AGE,EDUCATIONAL STATUS, SOURSE OF KNOWLEDGE, ANY GYNAECOLOGICAL PROBLEM, POSITION, GRAVIDA,TYPE OF PREVIOUS DELIVERY .

Table- 4

DEMOGRAPHIC VARIABLES	CATEGORY	FREQUENCY	PERCENTAGE
AGE	A. 18- 25 yrs.	**8**	13.33%
	B. 26-32 yrs	**20**	33.3%

	C. 33-40 yrs.	**24**	40%
	D .< 40 yrs.	**8**	13.33%

TABLE:- 4.FREQUENCY AND PERCENTAGE DISTREIBUTION OF AGE IN YEAR

Table- 5

S.NO.	EDUCATION STATUS	FREQUENCE	PERCENTAGE
1	A. ILLITERATE	0	0%
2	B. 10^{TH}	8	13.33%
3	C. 12^{TH}	15	25%
4	D. GRADUATION	17	28.33%
5	E. MASTER AND ABOVE	20	33.33%

Table- 5. DISRIBUTION OF SUBJECT ACCORDING TO EDUCATION-

Table- 6

s.no.	SOURSE OF Information about KEGEL's exercise	FREQUENCE	PERCENTAGE
1.	A. MULTIMEDIA	5	8.33%
2.	B. SCHOOL	0	0%
3.	C. FAMILY	0	0%
4.	D. HEALTH PROFESSIONAL	5	8.33%

Table 6.Distribution of subject according to source of knowledge regarding Kegel exercise—

Table - 7

ANY PROBLEM RELATED TO GYNAECOLOGICAL AND RENAL---	FREQUENCY	PERCENTAGE
A. YES	0	0%
B. NO	60	100%
C. IF YES SPECIFIC		

Table 8. Distribution of subjects according to any problem related to Gynaecological and renal ……

Table- 8

POSITION OCCUPIES MAXIMUM TIMES OF DAY	FRENQUENCY	PERCENTAGE
A. STANDING	10	16.66%
B. SEATING	15	25%
C. BENDING	15	25%
D. ALL TYPES	20	33.33%

Table – 8 Distribution of subjects according to position occupies maximum times of day-

Table - 9

GRAVIDA	FREQUENCY	PERCENTAGE
A. FIRST	32	53.33%
B. SECOND	18	30%
C. THIRD	05	8.33%
D. FOUTH AND MORE	05	8.33%

Table- 9 Distribution of subjects according to Gravida-

Table - 10

	TYPE OF PREVIOUS DELIVERY	FREQUENCY	PERCENTAGE
A	NORMAL	5	8.33%
B	NORMAL WITH EPISIOTOMY	10	16.66%
	CEASEARION		
C	NO PREVIOUS DELIVERY	13	21.66%
D		32	53.33%

Table 10. Distribution of subjects according to types of previous Delivery.

Table – 11

	TYPE OF PREVIOUS DELIVERY	FREQUENCY	PERCENTAGE
A	NORMAL	5	8.33%
B	NORMAL WITH EPISIOTOMY	10	16.66%
	CEASEARION		
C	NO PREVIOUS DELIVERY	13	21.66%
D		32	53.33%

Table 11. Distribution of subjects according to types of previous Delivery-

Table 12.

SCORES	LEVELS OF PRACTICE
1 - 6 marks	Very poor
7- 12- Marks	Poor
13-18 Marks	Average
19 -24Marks	Good
25-30Marks	Very Good

Table 12. Distribution of levels of practice

TABLE 13.

N =60

S.NO.	CATEGORIES	FREQUENCY	PERCENTAGE
1	Very Poor	0	0%
2	Poor	50	92.33%
3	Average	10	8.66%
4	Good	0	0%

5	Very Good	0	0%

TABLE 13. Frenquency and percentage distribution of pre-test.

Table- 14

S.NO.	CATEGORIES	FREQUENCY	PERCENTAGE
1	Very Poor	0	0%
2	Poor	0	0%
3	Average	4	6.66%
4	Good	42	70%
5	Very Good	14	23.33%

TABLE 14. Frequency and percentage distribution of post-test.

Table- 15

S.No.	Knowledge level	Score	Pre-test percentage	Post-test PERCENTAGE
1.	Very Poor	1-6	0%	0%
2.	Poor	7 – 12	92.33%	0%
3.	Average	13 – 18	8.66%	6.66%
4.	Good	19- 24	0%	70%
5.	Very Good	25- 30	0%	23.33%

Table 15. subject distribution on pre-test and post-test knowledge score of Antenatal mothers regarding Kegel exercise to prevent urinary incontinence and strengthening of pelvic flor muscles.

Table- 16

SCORES	LEVELS OF PRACTICE
0– 1 Marks	Poor
2 -3 Marks	Average

4 -5 Marks	Good
6-8 Marks	Very Good

Table 16. Distribution of practice score

Table- 17

S.NO.	CATEGORIES	FREQUENCY	PERCENTAGE
			0
1	Poor	0	0%
2	Average	4	6.66%
3	Good	42	70%
4	Very Good	14	23.33%

Table 17. –Distribution of post-test practice score after teaching programme.

Table- 18

SCORE	MEAN	STANDARD DEVIATION	MEAN DEFFERNCE	Z VALUE	SED
Pre-Test	**9.98**	**4.24**	**5,74**	**4.04**	**0.60**
Post- Test	**19.88**	**6.94**			

TABLE 18. VALUES OF MEAN, STANDRED DEVIATION, MEAN DIFFERENCE Z VALUE AND P VALUE OF PRE-TEST AND POST-TEST KNOWLEDGE ON PRACTICE SCORE.

Table- 19

SCORE	MEAN	STANDARD DEVIATION
PreTest	9.98	4.24
Post Test	19.88	6.94

Table 19. Mean and standard deviation of pre-test and post-test knowledge score of Antenatal mothers.

Table- 20

SCORE	MEAN	STANDARD DEVIATION	MEAN %	Z VALUE
PreTest	9.98	4.24	16.63	4.04
Post Test	19.88	6.94	33.13	

Table 20. – value of Mean, standard deviation mean% and Z test value

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