EFFECTIVENESS OF VIDEO ASSISTED STRUCTURED TEACHING ON KNOWLEDGE OF PELVIC FLOOR MUSCLE EXERCISES AMONG ANTENATAL MOTHERS AT MGMH, PETLABURZ, HYDERABAD

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ABSTRACT

An experimental study was undertaken to assess the Effectiveness of Video Assisted Structured Teaching on Knowledge of Pelvic Floor Muscle Exercises among Antenatal mothers At MGMH, Petlaburz, and Hyderabad. Objectives of the study – 1) Assess the knowledge of Antenatal Mothers regarding Pelvic floor muscle exercises by pre test.2) Develop and Conduct Video assisted structured teaching on Knowledge of Pelvic floor muscle exercises to antenatal mothers admitted at MGMH, Petlaburz, Hyderabad. 3) Analyze the effectiveness of Video assisted structured teaching on knowledge of Pelvic floor muscle exercises among antenatal mothers by conducting post test. 4) Associate between the knowledge of Antenatal mothers regarding pelvic floor muscle exercises among antenatal mothers with selected variables.

There was an improvement of knowledge scores from pre test to post test and the obtained Mean was 15.28 and after VAST the post test Mean was 28.54. It is indicated that significant difference between the pre test and post test scores on knowledge of antenatal mothers regarding Pelvic floor muscle exercises. The computed paired't' value of pre test and post test Knowledge is 15.664. The Chi sqare shows there is a significant relationship between Knowledge of Antenatal mothers and when compared with Age, Education and Period of gestation and there was a significant difference in pre test scores and post test scores. The obtained chi square value is 46.000 at df=2 at p< 0.05 level of significance. As the obtained value is greater than the table value there is significant difference in the pre test and post test scores so that the Null Hypothesis was rejected and Research Hypothesis is accepted.

Keywords: *Video-assisted teaching program; Knowledge; Attitude; Socio personal variables*

INTRODUCTION

Pregnancy is a life-changing momentous event, which can leave a feeling of ecstatic. Pregnancy is a life-cycle in every woman's life. It's a time when women need to be prepared mentally, physically, to meet the challenges of child birth and the transition to parenthood. Giving birth is asking to run a marathon it requires stamina, determination and focus. Keeping physically active during pregnancy is good preparation for the hard work of labour.

Many women have a myth that they may not work postnatally and whatever the changes occur in pregnancy they sustain for lifelong especially the physical changes, for this reason they are going for many cosmetic surgeries even though there are many natural methods and techniques which can be practiced from the period of antenatal and helps in regaining to the near normal stage. This is only because of lack of knowledge and ignorance. Among those natural methods, Pelvic floor muscles exercises are the one of the best method which helps in regaining the strength and prevents the complications due to the laxity of the pelvic floor postnatlly.

A number of women experience trouble bringing their abdomen back to its original tone and size after childbirth. Some exercises can help our abdomen return to its original size. There has been a gradual acceptance that exercise is beneficial for women during any part of the reproductive process. Benefits are particularly apparent for those women exercising postpartum, where exercise has been found to improve cardiovascular fitness, contribute to weight loss, and prevent long term weight retention.

The first few weeks with a new baby will be very demanding, so it is important to remember to make time for you. Try always to have a balanced mixture of exercise and rest. Do not exercise when you are really tired and have a rest every day.

Specific postnatal exercises are fairly important. They involve toning and restrengthening weakened abdominal, lower and upper back muscles and pelvic floor muscles. Some exercises are recommended during the first 6 weeks, while others are not recommended until at least 6 weeks after the birth. Postnatal exercises are aimed at:

After delivery the mother follow some basic things such as Adopt a daily exercise philosophy, Must eats, don't eat anything processed, Must drink, Seek out a supportive social network and Fill up on fibber and Breathe. Exercise after pregnancy and birth helps you return to your pre pregnancy shape and gives you increased energy to cope with the demands of motherhood. Always ask your doctor or midwife before starting an exercise program, especially if you have had a caesarean section. It is important to make sure your abdominal muscles have healed before you do any vigorous exercises such as crunches

Postpartum exercise appears to be effective in decreasing postpartum urinary incontinence. Pelvic floor muscle training appeared to be an effective treatment for adult women with stress or mixed

incontinence. There is now evidence to support the antidepressant effects of exercise in general and in clinical populations.

As government of India has put forward many programs for implementing family planning services to the community, majority of people are not utilizing the method properly due to the lack of knowledge, misconceptions etc. resulting in unplanned pregnancies and legal abortions. So the investigator planned to conduct a video assisted teaching program regarding temporary family planning method to postnatal mothers of Govt. T.D. Medical College Hospital Alappuzha, because audio visual aids play a very constructive role in today's society. It plays an important role in increasing of public awareness and collect the views, information and attitude towards certain issue. It is the most powerful tool of communication in emerging world and increased the awareness and presents the real stage of society.

REVIEW OF LITERATURE

Mason L, Roe B, Wong H et al., (2009) conducted a study on Role of Pelvic Floor Muscle Exercises in the Prevention of Stress Urinary Incontinence during Pregnancy and the Postpartum Period at Australia The aim of this study was to determine the role of pelvic floor muscle exercises (pelvic floor muscle exercises) in the prevention of stress urinary incontinence (SUI) during pregnancy and the postpartum period. A statistically significant difference was found between the intervention and control groups in terms of stress urinary incontinence development at the 28th and 32nd weeks of gestation and the 12th postpartum week ($p < 0.05$). The study concluded as pelvic floor muscle exercises are effective for prevention of stress urinary incontinence development during pregnancy and in the postpartum period.

A study was conducted (2003) in Canada, exercise in pregnancy and the postpartum Period. Knowledge of the impact of exercise on maternal, fatal and neonatal morbitity,andof the maternal measures of fitness all women without contraindication should be encourage to participate in aerobic and strength-conditioning Exercises as part of a healthy lifestyle during their pregnancy

A cross sectional study was conducted (2007) School of Nursing and Midwifery, UK, Scotland, knowledge and practice of pelvic floor exercises. 225 women (77.9%) reported being given or obtaining information about pelvic floor exercises in the current pregnancy. Books were the most frequently mentioned source of

information. Midwives were the health professionals most likely to give information about pelvic floor exercises. Younger women, first-time mothers and those from more deprived backgrounds were less likely to report having information about the exercises. A third of women (*n*=90, 31.1%) said that they would have liked more information about the exercises. Practice of the exercises during pregnancy.

A study was conducted in New Zeland (2011), Exercise in pregnancy: weighing up the long-term impact on the next generation. There is now a large body of evidence demonstrating the influence of the in utero environment on postnatal growth. Regular aerobic exercise during pregnancy elicits maternal and fetal adaptations that seem specific to the period of gestation in which training is initiated and maintained. This review considers the evidence for both positive and negative long-term health outcomes for offspring.

A descriptive and exploratory study was conducted (2011) in Brazil on Exercise of essential competencies for midwifery care by nurses. The study population consisted of 272 nurses and/or midwives who provide care for pregnant women and newborns at the primary health care units and maternity hospitals of the public health system. the data collection was based on a single form given to the coordinators and two questionnaires, one handed out to antenatal and postnatal nursing and/or midwifery staff and another handed out to labour and birth nursing and/or midwifery staff. The results showed that nurses and/or midwives providing care for women during pregnancy, labour, birth and the postnatal period did not put the essential competencies for midwifery care into practice, because they encountered institutional barriers and personal resistance. The model of care in the public health services of São Paulo (eastern zone) is based much more on hierarchical positions than on professional competencies or on the recommendations of the scientific community. As a result, health authorities need to review their midwifery policies to improve maternal-infant care by nurses and/or midwives in order to ensure the implementation of best midwifery practice.

A study was conducted (2005) on maternal diet and exercise: Effects on long-chain polyunsaturated fatty acid concentrations in breast milk. A study on breast milk in exercising Moms concluded that moms who are breastfeeding can exercise moderately without diminishing the amount of vital fatty acids in their

breast milk. In fact, the concentration of certain fats involved in infant growth and development may temporarily increase right after a bout of moderate activity. The authors suggest that exercise could benefit breastfeeding mothers and babies.

A study was conducted (2010) in America, Physical therapy exercise and health education programme in postnatal mother. In this study, 161 English-speaking women who were being discharged from the postnatal ward of The Angliss Hospital were randomly assigned to an experimental Mother & Baby (M&B) Program or an education only (EO) group. Once a week for 8 weeks the M&B group, comprised of 62 women, undertook 1 hour of exercise with their babies, facilitated by a women's health physical therapist, combined with 30 minutes of parenting education delivered by health care professionals. Seventy-three women were assigned to the EO group and received only the same written educational materials. Twenty-six of the women did not receive either of the allocated interventions. Results revealed there was significant improvement in well-being scores and depressive symptoms of the M&B group compared with the EO group over the study period.

Objectives of the study – 1) Assess the knowledge of Antenatal Mothers regarding Pelvic floor muscle exercises by pre test.2) Develop and Conduct Video assisted structured teaching on Knowledge of Pelvic floor muscle exercises to antenatal mothers admitted at MGMH, Petlaburz, Hyderabad. 3) Analyze the effectiveness of Video assisted structured teaching on knowledge of Pelvic floor muscle exercises among antenatal mothers by conducting post test. 4) Associate between the knowledge of Antenatal mothers regarding pelvic floor muscle exercises among antenatal mothers with selected variables.

Hypothesis:

H0: There is no association between the pre test and post test knowledge scores of pelvic floor muscle exercises among antenatal mothers after conducting the video assisted structured teaching.

H1: There is a significant difference between the pre test and post test knowledge scores of pelvic floor muscle exercises among antenatal mothers after conducting the video assisted teaching.

H2: There is a association between the pre test and post test knowledge scores of pelvic floor muscle exercises among antenatal mothers with selected

demographic variables after conducting the video assisted teaching.

The conceptual frame work adopted for the study was based on Orem's Self Care Nursing systems Theory. The study was conducted at Modern Government Maternity Hospital, Petlaburz, Hyderabad, and Andhra Pradesh. Structured questionnaire was used to assess the Knowledge before and after administration Video Assisted Structured Teaching On Pelvic Floor Muscle Exercises. Fifty Antenatal Mothers was selected by purposive sampling for the study. Tool validity was done by experts in the field of Nursing, Obstetrics and Gynaecology, and Research. The reliability of the tool was tested in pilot study by Spearman Brown Coefficient Correlation and a value of r = 0.884. A pilot study was conducted on five Antenatal mothers at District Hospital, King Koti, Hyderabad, and A.P. It was found that the tool was feasible, appropriate and practicable. In main study Fifty Antenatal mothers were selected using purposive sampling technique.

RESEARCH METHODOLOGY:

The effectiveness of independent variable on the dependent variable is measured and tested with the help of post test questionnaire.

0_1 Pretest	X Intervention	0_2 Post test

0_1 x 0_2

0_1 - Pretest

x – Intervention – conduction of Video assisted structured teaching

0_2 - Post test

Data collection was done for 15 days from 30-04-13 to 13-5-12. Pre test was done with Interview method by Structured questionnaire followed by administration of Video assisted structured teaching on Pelvic floor muscle exercises with seven days gap post test was conducted. Post test scores were also obtained using the same structured questionnaire.

Analysis and interpretation of data was done with the descriptive and inferential statistics. Out of 50 antenatal mothers 23(46%) were having knowledge level below average and 27(54%) were average in the pre-test. In the post test 27(54%) antenatal mothers were average knowledge level and 23(46%) were having above average level. The obtained chi square value is 46.000 at df=2 at $p< 0.05$ level of significance. As the obtained value is greater than the table value (5.99) there is significant difference in the pre-test and post-test scores.

There is a association between the pre test and post test knowledge scores of pelvic floor muscle exercises among antenatal mothers with selected demographic variables like age, education and period of gestation analyzed by chi square test shoes the values of age χ^2 - 4.802 is greater than table value of 4.77 at 0.05 level, education χ^2 - 22.258 is greater than table value of 2.571 at 0.05 level and period of gestation χ^2 - 6.605 is greater than table value of 5.99 at 0.05 level. So Null hypothesis is rejected and Research hypothesis is accepted.

Relationship between the Knowledge of sample on Pelvic floor muscle exercises after VAST According To Pre Test and post test scores N=50

Knowledge level percentage			**frequency**	
B.avg.	**Avg.**	**A.Avg**	**B.avg.**	**Avg. A.Avg**
Pretest		23		27
00	46	54	0.0	
Post test		00	27	23
0.0	54	46		
df – 2		χ^2 =46.000		

Table shows that average out of 50 Antenatal mothers 23(46%) were having knowledge level below average and 27(54%) were average in the pretest. In the post test 27(54%) Antenatal mothers were average knowledge level and 23(46%) were having above average level. The obtained chi square value is 46.000 at df=2 at p< 0.05 level of significance. As the obtained value is greater than the table value there is significant difference in the pre test and post test scores.

Relationship between the Section –I Anatomy and Physiology of Pelvic Floor muscles and knowledge of sample According to Pre Test and post test scores N=50

Knowledge level percentage			**frequency**	
B.avg.	**Avg. A.Avg**	**B.avg.**		**Avg. A.Avg**
Pretest		11		36
03	22	72	6	
Post test		02		27
21	04	54	42	
df – 2		χ^2 = 21.016		

Table shows that out of 50 antenatal mothers among those 11(36%) were having knowledge level below average and 36(72%) were average and 3(6.0%) were above average in the pre-test. In the post test 2(4.0%) were having below average knowledge level and 27 (54%) were having average knowledge and 21 (42.0%) were having above average level. The obtained chi square value is 21.o16 at df=2 at p< 0.05 level of significance. As

the obtained value is greater than the table value there is significant difference in the pre test and post test scores in Section –I knowledge level of antenatal mothers.

Relationship between the Section –II Physiological changes in Pelvic floor muscles in Pregnancy and Labour and knowledge of sample According To Pre Test and post test scores N=50

Knowledge level	**frequency**		**percentage**	
B.avg.	**Avg.**	**A.Avg**	**B.avg.**	**Avg. A.Avg**
Pretest	33	14	03	66 28 6
Post test	09	19	22	18 38 44

df – $2\chi^2$ = 28.912

Table shows that the obtained chi square value is 28.912 at df=2 at p< 0.05 level of significance. As the obtained value is greater than the table value there is significant difference in the pre test and post test scores in Section–II knowledge level of antenatal mothers.

Relationship between the Section –III On Pelvic floor muscle exercises and knowledge among Antenatal mothers According to Pre Test and post test scores N=50

Knowledge level	**frequency**		**percentage**	
B.avg.	**Avg.**	**A.Avg**	**B.avg.**	**Avg. A.Avg**
Pretest	21	29	00	42 58 6
Post test	00	24	26	0.0 48 52

df – $2\chi^2$ = 47.472

Table shows that the obtained chi square value is 47.472 at df=2 at p< 0.05 level of significance. As the obtained value is greater than the table value there is significant difference in the pre test and post test scores in Section –III knowledge level of antenatal mothers.

Interpretation:

There was an improvement of knowledge scores from pre test to post test and the obtained Mean was 15.28 and after VAST the post test Mean was 28.54. It is indicated that significant difference between the pre test and post test scores on knowledge of antenatal mothers regarding Pelvic floor muscle exercises. The computed paired't' value of pre test and post test Knowledge is 15.664. The Chi sqare shows there is a significant relationship between Knowledge of Antenatal mothers and when compared with Age, Education and Period of gestation and there was a significant

difference in pre test scores and post test scores. The obtained chi square value is 46.000 at df=2 at p< 0.05 level of significance. As the obtained value is greater than the table value there is significant difference in the pre test and post test scores so that the Null Hypothesis was rejected and Research Hypothesis is accepted.

Conclusion:

Following conclusions were drawn on the basis of the findings of the study.

After Video Assisted Structured Teaching there was a significant difference in the post test scores.

The findings suggest that most of the antenatal mothers have shown interest to follow the instructions to practice in regard to prevention of complications of pelvic floor laxity inpost natal period and menopausal period.

The findings indicate that the antenatal mothers can further continue their education and practice to prevent of complications.

There was an increased knowledge regarding Pelvic floor muscles, changes in pregnancy and labour and all types of pelvic floor muscle exercises.

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