



“EFFECTIVENESS OF VAST ON KNOWLEDGE REGARDING POSTNATAL EXERCISES AMONG POSTNATAL MOTHERS AT MGMH, HYDERABAD, T.S”

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ABSTRACT

A Quasi-experimental study was under taken to assess the effectiveness of VAST on Knowledge regarding postnatal exercises Among Postnatal mothers at Modern Government Maternity Hospital, Hyderabad, T.S. It was conducted by Mrs. R. Chandrakala M.Sc(N) II nd year student at Govt. College of Nursing, Somajiguda, Hyderabad, in partial fulfillment of the requirement for the degree of M.Sc (N), KNR University of Health Sciences, Warangal, Telangana. The Objectives of the study were: Assess the knowledge regarding postnatal exercises among postnatal mothers, Develop and administer VAST on postnatal exercises among postnatal mothers, Analyze the effectiveness of VAST on knowledge regarding postnatal exercises among postnatal mothers, Associate the knowledge regarding postnatal exercises with selected demographic variables. The conceptual framework adopted for the study was based on Comb's Humanistic Learning Theory. The study was conducted at Modern Government Maternity Hospital, Hyderabad, T.S. The research approach used in this study was “Quantitative approach”, quasi experimental design. The population for the study was postnatal mothers admitted in selected wards. The total samples of 100 postnatal mothers were selected by Purposive sampling technique. The investigator developed VAST to educate the mothers regarding postnatal exercises. An instrument used to conduct the study was structured questionnaire as Part-A to assess the demographic variables, Part- B has 2 sections, Section-I had the knowledge of mothers regarding postnatal exercises, Section-II has the type of postnatal exercises. The investigator conducted post test to analyze the knowledge of the mothers after VAST. The reliability of the tool was found by using Karl Pearson's Coefficient Correlation method, r value was 0.8999 and the

tool was found reliable. The pilot study was conducted on 10 postnatal mothers at Government Maternity Hospital, Sulthanbazar, Hyderabad. The tool was found practicable feasible and appropriate. Data collection was done from 21-4-2019 to 30-4-2019. Purposive sampling technique was used to select 100 postnatal mothers and the study was conducted in postnatal wards at Modern Government Maternity Hospital, Hyderabad. After providing VAST on postnatal exercises analysis and interpretation of data was done with the help of descriptive and inferential statistics includes mean, standard deviation. Effectiveness of VAST regarding Postnatal exercises was analyzed with paired 't' test and association between demographic variables was tested with Karl Pearson's Chi square test. The study results shown that the overall mean of pre test was 15.770 and the post test mean was 30.760. So the knowledge levels are improved in the post test. The obtained 't' value 28.222 was greater than the table value 2.02 at 0.05 level of significance. This implies that VAST regarding Postnatal exercises is effective among postnatal mothers.

1-INTRODUCTION

A girl is a female child, from the birth to full growth. A young, immature woman, especially formerly, an unmarried woman before the marriage she has no hormonal changes in her body. After the marriage she has many hormonal changes in her body.

During pregnancy, there is a progressive anatomical and physiological changes not only confined to the genital organs but also to all systems of the body. This is principally a phenomenon of maternal adaptation to the increasing demands of the growing fetus. Postnatal period is a time of maternal changes that are retrogressive and progressive. Protecting a women's health as the time changes occur it is important for preserving her future child bearing function and for insuring that she is physically well enough to incorporate her new child into the family.

In lactating women, several studies have collectively determined that neither acute nor regular exercise have adverse affect on a mother's ability to successfully breast feed. It needs to be determined whether a women's participation in regular exercise after child birth will improve her ability to physical activity in either herself.

Regarding physical strength is key concerned of mothers and an important goal of nursing care. The common problem of the mother experiences after delivery includes circulatory problems, after pain, pain on the perineum, incontinence of urine, digestive problems, skin elasticity, thrombosis, early ambulation, and sleep deprivation, breast feeding problems, postnatal depression, backache, stress, constipation, obesity, and postnatal blues. Exercises are any bodily activity that enhances or maintains Physical fitness, overall health and wellness. Regular physical activity and more specifically regular exercise play an important to fight against the stress. Regular exercise after delivery helps to mother for early ambulation, improve the pre pregnancy shape more quickly and improve the circulation. All postpartum women need to learn exercises that promote the resumption of muscle tone and physical strength, contribute to weight loss and prevention of constipation.

Postnatal exercises offer a whole range of benefits of the mother. These exercises also promote weight loss, restore muscle strength, improve mother's mood and relieve stress and postpartum depression. Although

vigorous exercises should be delayed until the client feels well. Women who had an uncomplicated vaginal delivery can begin moderate exercises soon after the birth of child. A woman receives the physical care within the postpartum period can influences the health for the rest of her life.

Postnatal exercises are playing important role such as, increase drainage of lochia, increase ante version of uterus, to develop strength, improves the circulation, prevent backache, strengthen the tummy muscles, strengthen the pelvic floor muscles, mobility and balance, suppress back pain and increase the appetite to enable the mother to perform the necessary motions for self care activities. Postnatal exercises help the postnatal mother to involution of the uterus. Movement in and outside of the bed and breathing exercises are minimize the risk of deep venous thrombosis (DVT), contraction and relaxation of muscles, diminish respiratory and vascular complications, minimize future prolapsed and stress incontinence, prevent back ache and genital prolapsed including losing that extra body weight and getting fit and healthy, concentrate on proper postures, body alignments and keeping abdominal muscles constricted.

The postnatal exercises are important during the postpartum period, neglecting the mother doing postnatal exercise is one of the factor contributing to the mother develop some postnatal minor ailments. Because of lack of postnatal exercises the women may have pain in the abdomen, pain in the episiotomy sutures, staging of their abdomen, sub involution, restlessness, and sleeplessness. A major reason for the high mortality rate is lack of care at birth and less awareness about the postnatal exercises. In India most the mothers are not aware of postnatal exercise, which is an extended activity for promotion of maternal child well being.

There are several reasons why it's a good idea to start some gentle exercise soon after the mother had a baby. It help boost the mood, help to regain the pre baby figure and lose weight, prevent aches and pains and give more energy, if the mother is feeling tired postnatal exercises improve physical strength and stamina which will make looking after a new born baby easier, speedier healing and recovery from the rigors of the birthing process, helps to reduce postnatal depression known as the "baby and stress release. Postnatal exercises are designed to strengthen the abdominal muscles, backache, and pelvic muscles in order to regain tone after their months of accommodation to the pregnant state and their work in labor and delivery. (Christine Spahn Smith, 1985) Postnatal exercises are walking, deep breathing exercises, head and shoulder raising exercises, abdominal exercises, pelvic floor exercises, leg and foot and ankle exercises.

NEED FOR THE STUDY

Puerperium is the period following child birth during which the body tissues, specially the pelvic organs revert back approximately to the pre pregnant state anatomically and physiologically."A woman of the house is the light of the house", she is healthy in the house, the children and family members all are healthy. If she is suffering with diseases it will effect on the children and family members. In our Indian culture after delivery the mothers are depend on their mothers or mother in laws, even self care activities also they depend. If the mother delivered normally she takes rest minimum 3 months, if she has episiotomy or caesarean section the mother takes 6 months rest. Mostly primi mothers depend on their

mothers, they have fear to do any activities after delivery. So the postnatal exercises help the primi mothers for early ambulation. In multi gravida mothers have skin elasticity with more pregnancies and deliveries. So the postnatal exercises are helping the multi gravida mothers to regain muscle tone, restore and restrings the abdominal and pelvic muscles. So the postnatal exercises are more benefit to the postnatal mothers.

Minor ailments of postnatal period: After pain, incontinence of urine, pain on the perineum, digestive problems, skin elasticity, thrombosis, ambulation, sleep deprivation, breast feeding problems, postnatal depression and postnatal blues.

Incidence of minor ailments of postnatal period:

	Percen	People	Source tage
Puerperial sepsis	15%	3,58,000	https://pmj.bmj.com>content>2017
	16%	5lakhs	India
Incontinence of	33%	100	http://www.ncbi.nih.gov>pmc>2018 urine
Pain	5-20%	Minor	https://www.asahq.org>2018/05 ailments
Sleep deprivation	30%	100	http://www.ncbi.nih.gov>pmc>2017
Digestive	6-8%	100	https://www.ncbi.nih.gov>pmc>2017 problems
Thrombosis	79%	1 lakh	http://www.ncbi.nih.gov>pmc>2018
Breast feeding	92%	New	https://www.npr.org>2017/09/23 problems mothers

44% multi
gravida
mothers

Incidence of minor ailments in postnatal period at MGMH:

Disease	2014	2015	2016	2017	2018
Pain	114	107	98	101	93
Puerperial sepsis	93	91	83	78	73
Incontinence of urine	208	197	178	163	149
Digestive Problems	98	86	91	82	71
Sleep deprivation	83	71	66	64	59

STATEMENT OF THE PROBLEM

“Effectiveness of VAST on Knowledge Regarding Postnatal Exercises among Postnatal Mothers at MGMH, Hyderabad, T.S”

OBJECTIVES

- 1- Assess the knowledge regarding postnatal exercises among postnatal mothers.
- 2- Develop and administer VAST on postnatal exercises among postnatal mothers.
- 3- Analyze the effectiveness of VAST on knowledge regarding postnatal exercises among postnatal mothers.
- 4- Associate the knowledge regarding postnatal exercises with selected demographic variables.

Operational Definitions:

Effectiveness: Improvement of post test scores over pre test scores after video assisted structured teaching program prepared by investigator regarding postnatal exercises for postnatal mothers.

Video Assisted Structured Teaching Program: 30 minutes video presentation on postnatal exercises prepared and administered by the investigator for postnatal mothers.

Knowledge: Responses given by the postnatal mothers regarding postnatal exercises elicited by

questionnaire designed by the investigator.

Postnatal Exercises: Physical activities such as walking, deep breathing exercises, Tummy & Pelvic floor exercises (Kegel), Leg raising exercises, Abdominal exercises, Head & Shoulder exercises raising, Knee rolling, Hip Hitching or Leg shortening, Foot and Ankle exercises are to be performed 10-15 minutes by postnatal mother daily 2 times.

Postnatal Mothers: Women who had vaginal delivery with or without episiotomy and admitted in postnatal wards at MGMH.

Conceptual Framework:

Polit and Hungler (2008) specified that conceptual frame work deals with the interrelated concepts or obstructions assembled together in a rational scheme of the relevance to a common theme concept is an abstraction based on observation of certain behaviors and characteristics. It refers to the process of developing and refining abstract ideas. A Conceptual frame work states the functional relationship between the events and outcome is not limited to statistical relationship. The development of conceptual frame work is a fundamental process required before undertaking of any actual research. The investigator has applied for the present study Arthur Coombs Humanistic Learning Theory.

Conceptual framework according to Arthur Coombs, “Humanistic learning theory”

The conceptual framework influences each stage of the research process. It deals with interrelated concepts or abstractions that are assembled together in some rational scheme by virtue of their relevance to common theme.

The development of conceptual framework was a fundamental process required before understanding of actual research. The theory chosen for the study is Arthur Coombs, Humanistic Learning theory. According to Coombs's, humanistic learning theory was a change in behavior that persists overtime, was practiced and is repeatedly reinforced. A learning theory is a systematic integrated outlook in regard to the nature of the learning process. It influences the postnatal mothers to relate their environment (health) in such a way as to enhance their ability to use both themselves and their environment effectively.

Humanistic models are based on the work psychologists and educators such as Maslow (1971), Rogers (1951) and Coombs (1982). Humanistic approaches to learning emphasize the importance of affective as well as cognitive domain. Thus humanistic learning theory believes that education should be holistic and enhance the total development of the person, social and emotionally cognitively (Rothstein, 1990). Humanists therefore, often incorporate teaching and learning strategies that integrate feelings, values and social skills along with the knowledge (Schunk, 2000) humanists see two parts of learning:

1. The acquisition of knowledge
2. The individual's personalization of knowledge.

Arthur Coombs was one of the early humanists. He explains psychologists view is perceptual behavior of the individual. To understand human behavior it is necessary to understand learners perceptual world, how things seen from his point of view, to change another person's behavior, it is necessary to modify ones

beliefs or perception, when he sees things differently, he was believe differently. From the humanistic perspective, postnatal mothers are concerned with making learning more responsive to the affective needs of the learners where affective needs are those related to the learner's emotions, feelings, values and attitudes by accepting the learner's needs and purposes and creating educational, experiences and programmers for the development of learners unique potential. Theorist was given the concepts such as acquisition of information and personalization of information. The conceptual framework for the present study was based on the nursing process with the application of Arthur Comb's theory. Based on this concept of Comb the investigator was assessing the postnatal mother's perception about prevention and management of postnatal complications by administering the structured questionnaire was the first step of nursing process (assessment). According to Comb theory learning takes place in two parts such as "acquisition of knowledge" and personalization of information"

The investigator was prepared and administered the video assisted structured teaching programme (planning) on knowledge regarding postnatal exercises (implementation), so that the postnatal mothers was acquire knowledge. In evaluation the investigator was seen the improvement of knowledge in post-test scores over pre test knowledge scores and personalize postnatal mother's information in terms of behavior change. In this study the postnatal mother's knowledge regarding postnatal exercises was taken as dependent variable where as video assisted structured teaching programme on postnatal exercises was independent variable. It was presumed that the postnatal mother's age, religion, education, occupation, family income, type of family, no. of children, gravida, and no. of postnatal day. These are Influences on postnatal mother's knowledge regarding postnatal exercises. The investigator was taken the scientific assumptions of Arthur Coomb's Humanistic Learning theory, specifically that person and environment transformations are created in human consciousness. The philosophical assumption of Coomb's supports the study was that persons use human creative abilities.

The diagrammatic representation of conceptual framework depicts the relationship of various concepts used in the study. Postnatal mother's knowledge regarding postnatal exercises are used for the study was walking, breathing exercises, head and shoulder exercises, knee and leg rolling, pelvic tilting, abdominal exercises, pelvic floor exercises, chest exercises, leg and foot exercises. All these factors are interrelated and may affect the knowledge of postnatal mothers regarding postnatal exercises, and in turn affect to improve the circulation, help in future give birth to another child, physical fitness, and also helpful to educate the family members regarding prevention and management of postnatal complications

Assumptions: It is assumed that:

- 1-Postnatal exercises prevent postnatal complications such as incontinence of urine, after pain, digestive problems, and breast feeding problems, ambulation, postnatal blues, sleep deprivation, and thrombi embolism.
- 2-Physical fitness helps mother to provide effective care to the child.
- 3-Video assisted structured teaching programmed influence the knowledge level of mother on postnatal exercises.
- 4-Socio demographic variables influence the level of knowledge among postnatal mother.

Hypothesis:

H1: There will be a significant difference between pre test and post test knowledge scores after administration of VAST on postnatal mothers regarding postnatal exercises at 0.05 level of significance

H2: There will be significant association between the knowledge and selected demographic variables of postnatal mothers at 0.05 level of significance

Delimitations:

The study was delimited to

1-Postnatal mothers who are admitted in postnatal wards of Modern Government Maternity Hospital (MGMH), Hyderabad

2-Postnatal mothers who are having normal vaginal delivery with or without episiotomy have performed the postnatal exercises in postnatal wards of MGMH

REVIEW OF LITERATURE

Review of literature is an essential step in research project. Review literature is a keystone in research process. Review literature refers to extensive exhaustive and systematic examination of publications to relevant project. Review literature helps to lay the foundation for the study and also inspire new research ideas. A literature review provides readers with the background for understanding current knowledge on a topic and culminates the significance of new study. According to Polit and Hungler (2008), a thorough literature review provides a foundation upon which to base a new knowledge and generally is well conducted before any data are collected in any study. Review of literature is a summary of current theoretical and scientific knowledge about particular problem, which includes what is known and not known about the problem. **Polit and Hungler (2010)**

Exercise has considerable benefits for postnatal mother's including losing of weight after delivery and getting fit and health important with helping mother's cope with the life changes of being a mother

J.Back, EI Deeb Am, ABD-Ghafar KS (2019) was conducted retrospective study on effect of pelvic floor muscles training with postpartum pelvic girdle pain. They selected 25-35 years age women. The mothers are divided into two groups those are group A and Group B. group. A group received local stabilizing exercises, while Group B received stabilizing exercises and pelvic floor muscle training exercises. The result is both group A and B revealed significant decrease in pain. Group B should significant decrease in pain and functional disability and significant increase in trunk ROM and PEM strength. When compared with group A. Group B post test mean score was 45.65% and the Group A post test mean score was 16.05%. So the Group B mean score is more than the Group A. Pelvic floor exercises are more benefit to the postnatal mothers.

Lauren n. Siff: Audra J (2018) conducted experimental study on effect of pelvic floor exercises in postpartum women. They conducted study on 15 healthy postpartum women, each participant performed pelvic floor exercises, then the result is kegal exercises generates an increase in squeeze pressure (24.3cm), shortens the muscles (0.46cm), and narrows the LH(0.13cm). They evaluated kegal as they affect PFM strength and length and LH (Levator Hiatus) area. Pelvic floor exercises are benefit to

the postnatal mothers with these results

Randzimiriska.A, Straczviska (2017) conducted quasi experimental study on the impact of pelvic floor muscle training on the quality of life of women with urinary incontinence. They taken 253 women, divided into two groups. Those are training group and control group, pelvic floor muscle training given to the training group for weeks and control group no therapy. After 6 weeks of therapy, all of the training group women had an improvement in QoL (IIQ-7 $p=0.01$; UDI- 6 $p<0.01$). The following study (253 patients) compared the effectiveness of combined PFMT/BT (the training group) and no treatment (the control group). After therapy, there was a statistically significant improvement in QoL in the training group, compared with the control group ($p=0.05$).a significant improvement ($p<0.01$) in terms of QoL was observed in pelvic floor muscle training group than control group. So the pelvic floor exercises are very effective for the postnatal mother.

Bok MS (2017) conducted the prospective study regarding the effect of postnatal exercises to strengthen the pelvic floor muscles. A prospective comparison design comprising 66 matched pairs ($n=132$) of mothers, divided into a training group (TG) and control group (CG) was used. The result was while a statistically significant change in pelvic floor muscle strength was found in TG. Training group mean post test score was 79.67% and the control groups mean score was 25.34%. The improvement for the training group was significantly greater than the control group.

Dumovlin.C (Oct, 2016), was conducted study on “the postnatal pelvic floor muscle training”. The aim of the study was to rehabilitate the pelvic floor muscles. Three systematic reviews, 6 trials, 4 follow up studies have done. The result showed that the prevention of urinary incontinence immediately after delivery and in persistent incontinence, supervised intensive programmes proved to be more effective than standard postnatal care. This study concluded that as standard care does not seem to reduce the prevalence of postnatal urinary incontinence, obstetric services must address delivery of postnatal pelvic floor muscle training.

Kinjal R.Mistry et.al (2017) was conducted experimental study on knowledge of postnatal mothers regarding postnatal exercises, in that postnatal exercises promote weight loss, restore muscle strength, improve mother’s mood and relieve stress and reduce the postpartum depression. A major reason for the high maternal mortality rate is lack of care at birth and less awareness about the postnatal exercises. So it is benefited to postnatal mother and provides knowledge regarding postnatal exercises. In this study pre test mean score 14.6%, standard deviation of 8.33% and the post test mean score was 76.52% and standard deviation 13.24%. There was significant increase of mean score and standard deviation score. So the postnatal exercises are more benefit to the mother to promote weight loss and restore the muscle strength experimental study on effectiveness of planned teaching programmed on practice of postnatal exercises among mothers who have undergone lower segment cesarean section results shown that in post test control group had inadequate practice score with a mean of 16.33% standard deviation of 9.44 and mean percentage of 19.60% where as in post test the experimental group there was a significant mean practice score gain of 39.84% and standard deviation of 12.58 and mean percentage 79.67% with a

different of 60.07%. Post test mean score was greater than the pre test mean score, so the postnatal exercises are effective to the postnatal mothers.

Dawnine Entte Larson – Meyer (2012) A cross sectional study was conducted, School of Nursing and midwifery, UK, Scotland, knowledge and practice of pelvic floor exercise, 225 women (77.9%) reported being given or obtaining information about pelvic floor exercises in the postnatal period. Primi mothers and those from more deprived backgrounds were less likely to report having information about the exercises. Multi gravida mothers (n=90, 31.1%) said that they would have liked more information about the exercises. Practice of the exercises during postnatal period was reported by just over half sample (n=156, 54.0%) and more than once a day 26.3% (n=76). Primi mother and those from more deprived backgrounds, was less likely to report the practice of exercises. No difference was found in reported practice according to parity. More than half (n=157, 54.3%) of the women reported incontinence was decreased during postnatal period. No relationship was found between reported practice of pelvic floor exercises and stress urinary incontinence.

Downs DS (2011) conducted a retrospective study regarding the women's exercise beliefs and behaviors during their pregnancy and post partum. The most common exercise beliefs during post partum were that exercise controls weight gain and lack of time obstructed exercise participation. The result of the study was participants were 74 post partum women between 6 days and 5 months (mean=3.52 months) following birth of a baby (mean age=31.30 years; SD=4.37; age range=19.40 years) most of the participants was white (81.1%), married (86.5%), college graduates (44.6%), working full time (55.1%), business employers (39.2%), and earning family income (62.2%). The exercises are increased the mean and standard deviation score, so exercises are benefit in the pregnancy and postpartum period.

Studies related to prevention of urinary incontinence:

Elsevier B.V (2015) a cohort study was conducted on effect of postnatal exercises in postnatal care in preventing incontinence. The sample of the study 1800 women, recruited within 24 hours of vaginal randomized controlled trial was used for the data collection. Women in the intervention exercise group were less likely report perineal pain and feeling of depression 3 months after delivery.

Price N, et.al Maturitas (Dec 2010) Pelvic floor exercises for urinary incontinence. The pelvic floor muscle exercise helps the mother was all types of urinary incontinence. There was evidence that mothers were better exercise regimens supervised by specialist physiotherapist, or continence nurse. Urinary incontinence is a common problem among postnatal mothers, with a prevalence of between 15.7% and 49.6%. There was good evidence, that pelvic floor muscle training was an effective strategy for managing stress and urgency Urinary incontinence or over active bladder symptoms.

Chareliji P and Cockburn J (2009) conducted a prospective study regarding the promoting urinary continence in after delivery; randomized control trial. To test the effectiveness of a physiotherapist delivered intervention designed to prevent urinary incontinence among women three months after giving birth. Prospective randomized control trial with women receive the intervention which entailed training in pelvic floor exercise and incorporated these results were encouraging pelvic floor muscles. At three months after delivery the prevalence of incontinence in the intervention group was 31.0% (108 women)

and in the usual care group 38.4% (125 women) difference 7.4% (95% confident interval 0.2% to 14.6%, $p=0.044$). The proportions of women reporting doing pelvic floor exercises at adequate level was 84% (82% to 88%) for intervention group and 58% (52% to 63%) for the usual care group ($p=0.001$).

Krummel D.A.et.al (2008) Study was conducted in Department of Women's and children's Health in New Zealand (2008), Physical therapies for Prevention of urinary and fecal incontinence. In these study 13 trials was conducted on the women. There of 7 trials in childbearing women reported less urinary incontinence after pelvic floor muscle training compared to control treatment there months postpartum. 2 trials selected women at higher risk of postnatal incontinence. The third used an intensive training programmed. Four trials did not find any difference between the groups at the primary endpoint.

METHODOLOGY

The methodology of research is the way the data are gathered in order to answer the questions or analyze the research problem, which enables the investigator to form a blue print for the study undertaken. Research methodology deals with the method of investigator adopted by the investigation. It was asset of the research methodology is concerned with overall framework for conducting the study. Research methodology is a way to systematically solve the research problem.

This chapter research methodology deals with the methodological approach adopted for the study. The purpose of the study is to assess the level of knowledge of postnatal exercises. The researcher had organized the content related to the research methodology adopted for the present study under the heading of research approach, research design, variables, setting, population, sample, sample size, sampling technique, criteria for sample selection and description of the sample, method of data collection, development and description of tool, pilot study, procedure of data collection and plan of data analysis. Methodological research is the research designed to develop or refine procedures for obtaining, organizing or analyzing data.

In the present study the investigator aims to study the "Effectiveness of Video Assisted structured teaching on knowledge regarding postnatal exercises among postnatal mothers in Modern Government Maternity Hospital, Petlaburz, Hyderabad.

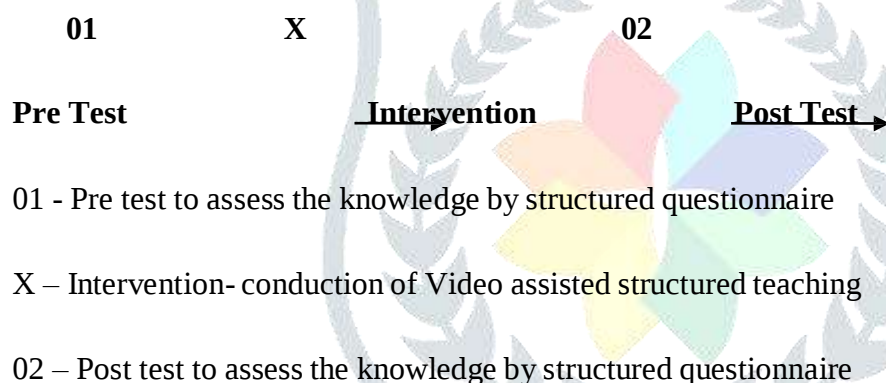
Research approach:

Research approach is the most significant part of any research. The most appropriate choice of any research approach depends upon the purpose of the research study which is undertaken to Polit and Hungler (2008), the research approach refers to a general set of orderly disciplined procedures used to acquire dependable and useful information. Selection of research approach is a basic procedure for conducting study. The research approach aids the researcher about the type of data to be collected and how to analyze it. It also suggests possible conclusion to be drawn, the data in view of nature of problem and objectives to be accomplished. In the present study, the investigator has selected quantitative approach in which the investigator aimed to study the effectiveness of video assisted structured teaching programme on knowledge regarding postnatal exercises among postnatal mothers at Modern Government Maternity Hospital, Hyderabad.

Research design:

Polit and Hungler (2008) specified that the research design is a researcher overall plan for obtaining answers to the research questions or for testing the research hypothesis. Research design is a blue print for the conduct of the study that maximizes control factors that could interfere with study's desired outcomes. It is a researcher over all plans for obtaining answers to the research questions or for testing the research hypothesis is referred to as the research design. Polit (2014) Research design helps the researcher in selection of subject, manipulation of experimental variable, procedure of data collection and the type of statistical analysis to be used to interpret the data. The research design was for the present study is pre-experimental type of one group pre test and post test design is chosen for conducting the study. To find out scores between the pre test and post test scores of postnatal mothers.

The research design selected for this study is Pre experimental one group pre test post test design. In this the total sample is taken as one group, the whole group is pre tested, followed by introduction of the independent variable as video assisted structured teaching was administered on irrespective of knowledge scores of postnatal mothers, the effectiveness of independent variable on the dependent variable is measured and tested with the help of post test structured questionnaire.



According to Polit and Hungler (2008) “setting” refers to physical conditions in which data collection takes place in the study. The type of setting selected depends on research problem and purpose. The setting of the present study selected by the investigator is Modern Government Maternity Hospital, Petlaburz, Hyderabad, T.S. It is a tertiary hospital under Osmania medical college which is having 596 beds. This hospital is mainly concerned with obstetric and gynecological in and out patient therapeutic and follow-up services and also provides various newly planned project services and participates in national programmes. It is a teaching hospital serving as a referral agency and rendering obstetrical and gynecological and neonatal services not only for the twin cities and various other districts of Andhra Pradesh and Telangana. It is a relatively new hospital in the twin cities (shifted in 2009 from Government Maternity Hospital, Nayapool). It is situated on the banks of river Musi, near City College, Rangareddy district, Hyderabad. It is the hospital which is approachable to the middle and lower category people, geographically it is in the centre of the city and people also comes from districts like Mahaboobnagar, Nalgonda, Suryapeta. In this hospital out patient and inpatient services are available. The postnatal mothers are placed in postnatal wards -I which has 60 beds and postnatal ward – II which has 40 beds, and daily

with 150-

200 postnatal OP services and 30- 50 postnatal admissions per day in postnatal wards and each ward is providing with therapeutic and rehabilitative services in 24 hours every day.

The investigator was influenced by above facts to select postnatal wards for pre test and post test. The sample was collected from this hospital because it is approachable and has adequate sample for data collection.

Population:

The population always comprises the entire aggregate of elements in which the research is interested. A population is the entire set of individuals or objects having the same characteristics. The target population is the group of population that the investigator aims to study and to who the finding were generalized. The population for the present study includes postnatal mothers who are admitted in postnatal wards at Modern government maternity hospital, Hyderabad, Telangana State..

Target Population:

The target population for the present study was postnatal mothers at Modern Maternity Government Hospital, Petlaburz, Hyderabad.

Accessible Population:

Accessible population for the present study was the postnatal mothers who are admitted in postnatal ward –I and Postnatal ward –II at Modern Government Maternity Hospital, Hyderabad at the time of the study.

Sample:

According to Sk.Sharma sample was defined as representative unit of target population. The sample of the present study was 100 postnatal mothers who are having spontaneous vaginal delivery and with an episiotomy delivery after 1st day of delivery that are admitted in postnatal ward in Modern government Maternity Hospital, Hyderabad, T.S, who intend to participate in the study.

Sample Size:

Sample size is number of subjects needed in a sample. The sample size for the present study was 100 postnatal mothers who are admitted in the postnatal wards for about 1 to 3 days were selected for the study.

Sample Technique:

Sampling refers to the process of selecting portion of the population to represent the entire population. The sampling technique for the present study was Purposive sampling technique. This is one of the Non-probability sampling methods. Through this technique the researcher select conveniently widest possible variety of respondents or subjects who are fulfill criteria of the sample and as per criteria of the sample at the time of data collection in Modern Government Maternity Hospital, Hyderabad, T.S.

In the present study, the sampling technique was considered by the investigator as the postnatal mothers for conducting a structured questionnaire, so the investigator wants to select postnatal mothers who are in stable condition. The researcher must know about the characteristics of universe before hand in order to be able to recognize typical items in the universe. In present study the investigator purposively selected the sample with certain criteria.

100 postnatal mothers was selected using purposive sampling technique. Data was collected by using self-administered structured questionnaire, after obtaining verbal consent from the postnatal mothers.

Criteria for sample selection:

The Criteria refers to the characteristics that the people in the population must possess. The purpose is to control extraneous variables as possible. Hence the criteria for sample selection for the study are:

Inclusive Criteria:

- Postnatal mothers admitted in postnatal ward of Modern Government Maternity Hospital
- Those who are willing to participate of the study.
- Postnatal mothers who are available at the time of study
- Postnatal mothers delivered through spontaneous vaginal delivery.

Exclusive Criteria:

- Postnatal mothers who are having caesarean section.
- Postnatal mothers with co morbid conditions like puerperal infections and known history of medical illness.

Development and Description of the Tool:

The tool for assessing the effectiveness of Video assisted structured teaching on knowledge regarding postnatal exercises among postnatal mothers.

The investigator will developed tool with the help of extensive review of literature from various text books, journals, literatures and suggestions from the experts in the fields of nursing, research and obstetric and gynecologists. The investigator is adopted a standard assessment tool on postnatal exercises.

The tool was divided into two parts:

The questionnaire was constructed for the present study is structured questionnaire with Part A and Part B.

- **Part-A:** Deals with demographic data.

Demographic variables include age, religion, educational status, occupation, monthly income, gravida, no. of children and postnatal day. The information about sample characteristics is gained from verbal response of the mother.

- **Part-B:** It has two sections

Section I: Deals with knowledge regarding importance of postnatal exercises

Section II: Deals with knowledge regarding the types of postnatal exercises

Variable:

In the present study investigator was identified dependent variable and independent variable and demographic variables

Independent Variable:

In the present study, the investigator identified the independent variable was Video Assisted Structured Teaching Programme on postnatal exercises. The VAST was designed for the study with the help of information available in the literature and with the help of subject experts.

Dependent Variable:

In this study, the dependent variable was Knowledge of postnatal mothers regarding postnatal exercises.

Demographic Variable:

The demographic variables have the relationship between independent and dependent variables and that needs to control either in the research design or through statistical procedures. In the present study, the demographic variables which would influence the knowledge of postnatal mothers regarding postnatal exercises are Age, religion, educational status, occupation, monthly income, gravid, parity, no. of children and postnatal day.

Validity:

According to Polit and Hungler (2008), the content validity refers to the degree to which an instrument measurement which is intended to be measure. In order to determine the content validity, the tool is to be submitted to the experts in the field of medicine, research, suggestions of experts, obstetric and gynecologists and nursing to determine its validity. Experts are declared the tool is useful for the study

Reliability:

According to the Polit and Hungler (2008), the reliability refers to accuracy and consistency of information obtained in a study. It is concerned with how the measurement techniques measure, the concept of interest to determine the accuracy of the tool, the test and retest method is used by administering tool twice to the sample of postnatal mothers. Scores were computed using the statistical package of social sciences and the Co-relation, Co-efficient is calculated by using Karl Pearson Method. The value of correlation value was 0.94 and the tool was found to be highly reliable.

Reliability of the tool was tested with Guttman's split half and spearman brown correlation and coefficient. According to Polit split Guttman's split half was an index of internal consistency to estimate the extent to which different subparts of an instrument are reliably measuring the critical attribute. Reliability of the tool according to Spearman Brown coefficient and Guttman split half coefficient.

Pilot study:

The purpose of the pilot study was to assess the feasibility of the study and to plan for statistical analysis of data. Pilot study is miniature of some parts of the actual study in which the instrument is administered to the subjects are drawn from the same population.

The pilot study was conducted at Koti Maternity Hospital, Hyderabad, from 15.4.2019 to 17.4.2019 between 10am to 1pm and 4pm to 6pm. When the mothers are free from their work, tool is given to mothers to find out the feasibility, applicability and practicability of the tool at Koti Maternity Hospital, Sulthan Bazar, Hyderabad. Sample consisted of 10 subjects; time taken by the mothers to fill the tool was about 40 to 45 minutes. The tool consist of 9 questions regarding the information of the mother, 20 questions regarding knowledge of postnatal mothers on postnatal exercises and 20 questions regarding the types of postnatal exercises. Pilot study was conducted at Koti Government Maternity Hospital, Sulthanbazar, Hyderabad, T.S. The study will be conducted on 10 postnatal mothers who fulfilled in inclusive criteria. The pilot study revealed that tool was feasible and practicable.

Method of Data Collection:

In the present study the investigator was conducted interview with the help of structured questionnaire prepared by her for gathering the information from respondents through interview. Questionnaire was used particular information was derived and administered personally to group of individual. The questionnaire was found to be the most appropriate for the study as the respondents respond by their knowledge. In the present study the investigator was interested in collecting data by interview method using structured questionnaire by assessing status of knowledge regarding postnatal exercises. The questionnaire includes a set of questions that are generally answered in a specified sequence and pre designed response. The questionnaire is a specified sequence as it is the most useful data gathering device in research project to collect desired factual information.

Data collection Procedure:

Data collection was the gathering of information needed to address a research problem. Formal permission was obtained from the Superintendent of Modern government maternity hospital, Petlaburz, Hyderabad. In order to collect the data the investigator was obtain willing from postnatal mothers at Modern Government Maternity Hospital, according to selected criteria. The purpose of the study was explained to the participants. The investigator was collected the data regarding demographical variables with structured questionnaire followed by pre-test was conducted with the help of self administered structured questionnaire and video assisted structured teaching is given regarding postnatal exercises, post-test was conducted after 72 hours. Pre-test scores were compared with post-test scores to analysis the effectiveness of the study. Data collection was done from 20.4.2019 to 4.5.2019. The investigator distributed structured questionnaire to 100 postnatal mothers. The investigator was informed about the purpose and nature of the study. Confidentially was assured in order to obtain their free and frank answer.

Data Analysis:

According to Polit and Hungler (2014) analysis is a process of organizing and synthesizing data in such a way that research questions was answered and hypothesis tested. As per curriculum plan after collecting the data, the investigator was planned to go to the data analysis with the help of descriptive and inferential statistics, i.e. mean, median, mode, standard deviation, and 't' test for obtained scores in the pre-test and post-test.

Data analysis organized into:

After collecting data it was planned to analyze and interpret the same by using descriptive and inferential statistics including mean, standard deviation, 't' test, and correlation and coefficient. The analysis and interpretation of the data was planned into four parts.

Part-I: Formulating frequency and percentages distribution of sample according to demographic variable in order to describe the sample.

Part -II: Distribution on level of knowledge of postnatal mothers on postnatal Exercises.

Part III: Determination of relationship between the post test scores with the demographic variables, by formulating frequencies and percentages.

Part IV: Identify the association of knowledge regarding postnatal exercises with selected demographic

variables.

Scores interpretation:

In this study, categorization of scores of knowledge was done based on the scores placed into three groups.

Below average

<=33.4% Average

33.5% to 66.6% above average

> 66.7%

Epilogue:

This chapter deal with research approach research design, setting, population, sample, sampling technique, criteria for sample selection, description of the sample, characteristics, method of data collection, development and description of the tool, validity and reliability, pilot study, procedure of data collection and data analysis.

ANALYSIS AND INTERPRETATION OF DATA

Statistical analysis is a method of rendering quantitative information meaning and intelligible without the aid of statistics, the quantitative data collected in a research project would be little more than a chaotic mass of numbers. According to Polit and Hungler (2010) Statistical procedures enable the researcher to reduce summaries, organize, interpret and communicate numeric information. They also point out that interpretation the statistical findings is essentially a search for the broader meaning and implications of those findings. The results of the analysis need to be interpret with due considerable of the overall aims of the project, its theoretical framework, the specific hypothesis being tested, the existing body of related research knowledge.

This chapter deals with analysis and interpretation of the knowledge of postnatal mothers regarding postnatal exercises data collected for the present study. Data was collected from a sample of hundred postnatal mothers. Analysis and interpretation was done with the help of description and inferential statistical to meet the objectives of the study. The data obtained from the samples was categorized and the study was analyzed according to the objectives of study for analysis and interpretation description and inferential statistical procedures such as frequencies, percentages, mean, and standard deviation was used. The analyzed data and results are presented in tables, under following headings.

Part-I: Formulating frequencies and percentages distribution of sample according to demographic variable in order to describe the sample.

Part-II: Distribution on level of knowledge of postnatal mothers on postnatal exercises.

Part III: Determination of relationship between the post test scores with the demographic variables, by formulating frequencies and percentages.

Part IV: Identify the association of knowledge regarding postnatal exercises with selected demographic variables.

Table –1

Frequency and percentage distribution of postnatal mothers according to their age

N= 100

Sample characteristics	Frequency	Percentage
Age		
a) 19-22 years	56	56
b) 23-26 years	34	34
c) 27-30 years	7	7
d) 31 years and above	3	3
Total	100	100

The above Table -I shows the sample characteristics by age. The above table shows that out of 100 postnatal mother's majority 56 (56%) was in the age group between 19 – 22 years, 34 (34%) was in the age group between 23 – 26 years, 7 (7%) was 27 – 30 years, and 3 (3%) was in the age group 31 years and above.

Figure – 3

Pie diagram shows that percentage distribution of postnatal mothers according to their age

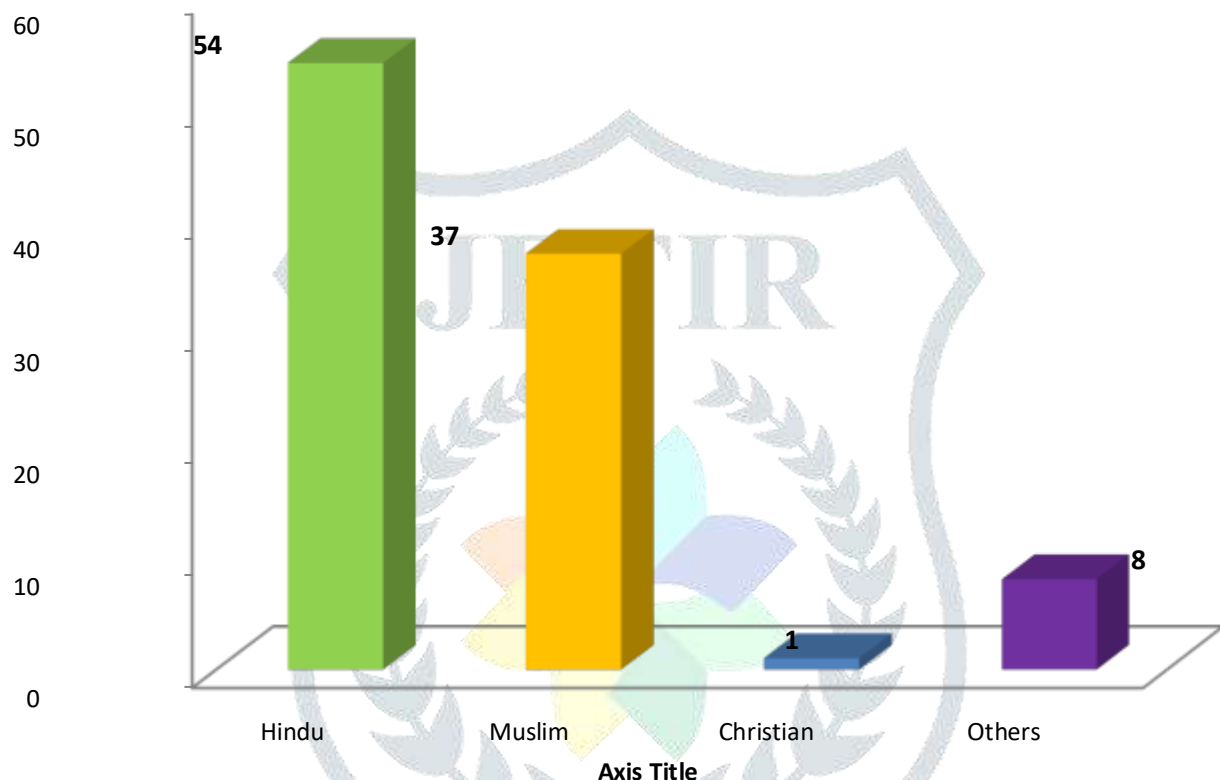
TABLE – 2

Frequency and percentage distribution of postnatal mothers according to their religion

Sample characteristics		
Religion		
		N=100
Frequency	Percentage	
Hindu	54	54
Muslim	37	37
Christian	1	1
Others	8	8
Total	100	100

Table – II shows the sample characteristics of religion in that out of 100 postnatal mother's majority 54(54%) were Hindus, 37(37%) were Muslims, 1(1%) was Christians, and 8(8%) were other religion.

FIGURE – 4



Bar diagram shows that percentage distribution of postnatal mothers according to their religion

TABLE – 3

Frequency and percentage distribution of postnatal mothers according to their education

N=100

Sample characteristics	Frequency	Percentage
Education		
a) Illiterate	22	22
b) Primary education	15	15
c) Secondary education	38	38
d) Intermediate and above	25	25
Total	100	100

Table – III shows the sample characteristics by education. That above table shows that out of 100 postnatal mother's majority 38(38%) had secondary education, 25(25%) mothers had intermediate and above education, 22(22%) mothers had no education or illiterate, and 15(15%) mothers had primary education.

FIGURE – 5

Pie diagram shows that percentage distribution of postnatal mothers according to their education.

TABLE – 4

Frequency and percentage distribution of postnatal mothers according to their occupation.

N=100

Sample characteristics	Frequency	Percentage
Occupation		
a) House wife	83	83
b) Business	8	8
c) government job	2	2
d) Private job	7	7
Total	100	100

The above table -IV shows that out of 100 postnatal mothers their occupation was majority 83(83%) mothers were house wives, 8(8%) mothers were doing business, 2(2%) mothers were doing government jobs, and 7(7%) mothers were doing private jobs.

FIGURE – 6

Pie diagram shows that percentage distribution of postnatal mothers according to their occupation.

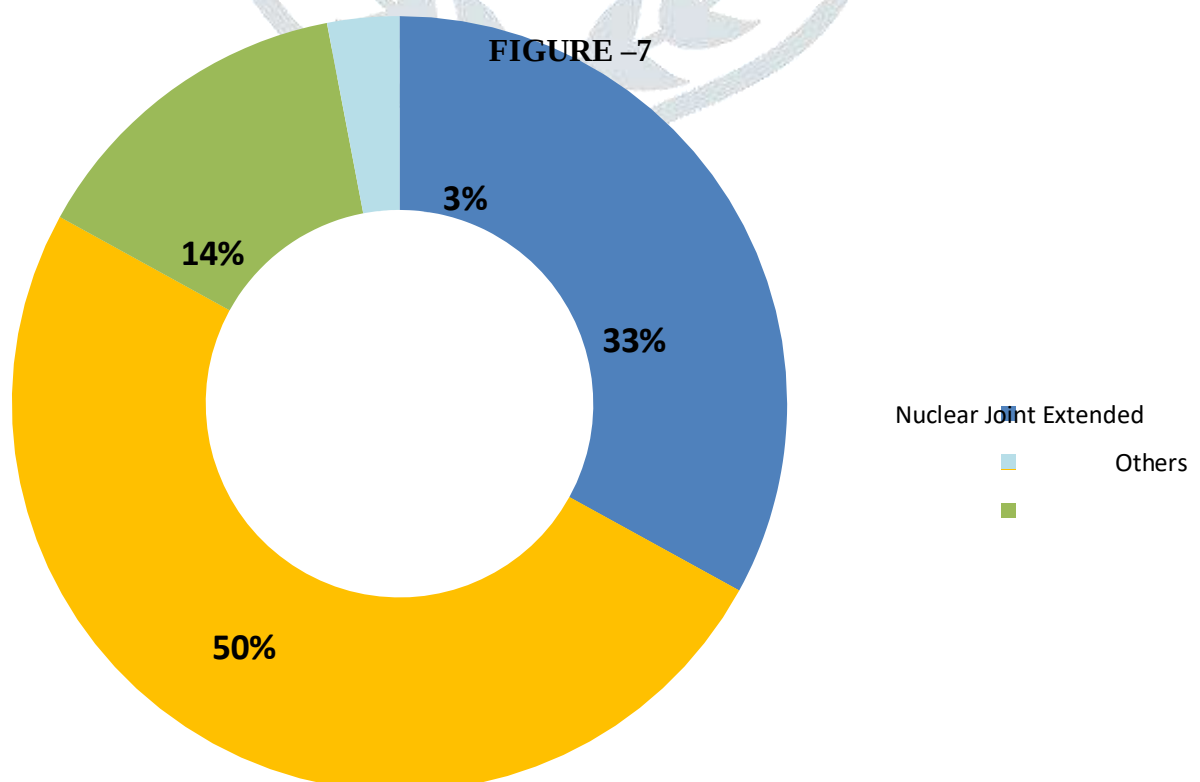
TABLE –5

Frequency and percentage distribution of postnatal mothers according to type of family

N=100

Sample characteristics	Frequency	Percentage
Type of family		
a) Nuclear family	33	33
b) Joint family	50	50
c) Extended family	14	14
d) Others	3	3
Total	100	100

Table -V shows the sample characteristics out of 100 postnatal mothers their type of family. The above table shows that majority 50 (50%) were joint family, 33(33%) were nuclear family, 14(14%) were extended family, 3(3%) were other type of family.



Pie diagram shows that percentage distribution of postnatal mothers according to type of family.

Findings:

The findings showed that interventional pre test mean was 15.7700, standard deviation was 4.32950, standard error was 0.43295, and the post test mean was 30.7500, standard deviation was 6.46845, and the standard error was 0.64684. the 't' value was 28.222 , degrees of freedom was 99. This reveals that the VAST regarding postnatal exercises were effective in improving the knowledge among postnatal mothers. Thus the formulated hypothesis was "there will be a significant improvement in postnatal exercises among the postnatal mothers after providing video assisted structured teaching programme at 0.05 level of significance was accepted. The analysis with the distribution of demographic data shows that out of 100 postnatal mothers in that 56(56%) mothers were 19-22 years age group, 34(34%) mothers were 23-26 years age group, 7(7%) were 27-

30 years age group, 3(3%) were above 31 years age group mothers, the religion of postnatal mothers was majority 54(54%) mothers were Hindu, 34(34%) were Muslim, 1(1%) was Christian and 8 (8%) mothers were other religion, the education of the postnatal mothers were majority 38(38%) were secondary education, 25(25%) mothers were intermediate and above education, 22(22%) mothers were illiterates, and 15(15%) mothers were primary education, the occupation of the postnatal mothers were majority 83(83%) were house wives, 8(8%) were doing business, 7(7%) were mothers private employees, and 2(2%) were mothers doing the government jobs, the type of the family of postnatal mothers majority 50(50%) were joint family, 33(33%) postnatal mothers had nuclear family, 14(14%) mothers had extended family, 3(3%) mothers had other family, the income of the postnatal mothers were majority 70(70%) had below Rs 10000/- income per month, 23(23%) mothers has 10001- 20000/- income, 5(5%) mothers had 20001-30000/- income, 2(2%) mothers had above 30001/- income per month, the gravid of the mothers were majority 42(42%) mothers were 1st time delivered, 37(37%) mothers were 2nd time delivered, 16(16%) mothers were 3rd time delivered, 5(5%) mothers were 3rd or above gravid mothers, when the mother was delivered day in that majority 82(82%) mothers were 1st postnatal day, 15(15%) mothers were 2nd postnatal day, 2(2%) mothers were 3rd postnatal day, 1(1%) mothers were 4th or above postnatal day of the mother, and the mother had number of children in that majority 45(45%) mothers were only one children, 34(34%) mothers had 2 children, 17(17%) mothers had 3 children, and 4(4%) mothers had 4 or above children. The analysis which deals the association between knowledge and selected demographic variables. The association was calculated by using chi square test. The obtained chi square values shows that there was significant association between knowledge and education, occupation, gravid of the mother, and number of children of the mother.

Discussion:

It is clear from the findings of the study there was significant difference between the pre test and post test scores. The findings showed that interventional pre test mean was 15.7700, standard deviation was 4.32950, standard error was 0.43295, and the post test mean was 30.7500, standard deviation was 6.46845, and the standard error was 0.64684. the 't' value was 28.222, degrees of freedom was 99. This reveals that the VAST regarding postnatal exercises were effective in improving the knowledge among postnatal mothers. Thus the formulated hypothesis was "there will be a significant improvement in postnatal exercises among the postnatal mothers after providing video assisted structured teaching programme at 0.05 level of significance was accepted.

Implications:

The finding of the study was implicated in the area of Nursing Practice, Educational research. Postnatal mothers need special teaching program to improve quality of life. The factors like age, religion, educational status of the mother, occupation, type of family of the mother, monthly income of the family, gravid, number of postnatal day of the mother, and number of children. But the performance of postnatal exercises by mother was improved through video assisted structured teaching programme of exercises.

Implications for Nursing Practice:

Nurses can help the mother to adapt to the healthy life style to lead the life optimum physical health and psychological wellbeing and nurses also can teach the mother and family members regarding the importance personal hygiene, pelvic floor exercise, perineal exercises, and breast feeding techniques. There by mothers may get operation and support from the parents and the health care system. The clinical nurses impart the knowledge on postnatal exerciss based on proper scientific based education to improve the quality of life of mother.

Implications for Nursing Research:

Research on effects of postnatal exercises during puperial period, was provide nurses the credibility to influence decision-making and policies to meet specific specialized need of mother and enhance quality of life.

Nurse researchers can conduct studies on need of the mother, especially need during pueperial period in terms of knowledge and practice of postnatal exercises in terms of improved and healthy life style.

Implications for Nursing Education:

Nursing education should prepare nurses with the update knowledge and potential knowledge and potential for imparting health information and appropriate knowledge about postnatal exercises effectively and assist the people in the hospital and community settings in developing self care potential which in turn reduces the morbidity and mortality. There is a need to educate the students especially on preparation of pamphlets, booklets, posters, and video recordings etc.

Limitations:

The study was limited to postnatal mothers who are admitted in selected wards of Modern Government Maternity Hospital, petlaburz, Hyderabad, T.S. at the time of data collection. The study was limited to

selected postnatal exercises performed by the mothers

Recommendations:

On the basis of the findings of the present study the following recommendations was made.

The similar study was replicated on a larger sample to arrive at some generalization.

An experimental study was under taken to identify the difference between performance of postnatal exercises by postnatal mothers in Government and Private Hospitals.

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