JETIR.ORG



ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR) An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A STUDY TO ASSESS THE EFFECTIVENESS ON SELF INSTRUCTIONAL MODEL REGARDING CONTRACTION STRESS TEST AMONG ANTENATAL MOTHER AT SMVMCH,

PUDUCHERRY.

Dr. P. Manimegalai¹, S.Sabitha²

Associate Professor, Department of Obstetrics & Gynecological Nursing, SMVNC, Puducherry

B.Sc(Nursing)-IV Year, Sri Manakula Vinayagar Nursing college, Puducherry

ABSTRACT

A contraction stress test (CST) is performed near the end of pregnancy (34 weeks of gestation) to determine how well the foetus will cope with the contractions of childbirth. The aim is to induce contractions and monitor the foetus to check for heart rate abnormalities using a cardiotocograph. A CST is one type of antenatal foetal surveillance technique. A contraction stress test (CST) is a test for pregnant people. It checks your baby for signs of stress during uterine contractions. **Objectives of the study:** the main objective of the study is to assess the effectiveness on self-instructional model regarding contraction stress test among antenatal mothers. **Methodology:** A quantitative research approach and pre experimental research design was adopted for the present study. The study was conducted at Sri Manakula Vinayagar Medical College and Hospital, Puducherry. 50 antenatal mothers were selected who fulfilled the criteria. **Results:** The major findings of the study shows that in pre-test 25(50%) of them had moderate knowledge, 25(50%) of them had inadequate knowledge. In post-test level of knowledge on contraction stress test, majority 41(82%) of them had adequate knowledge, 9(18%) of them had moderate knowledge regarding contraction stress test among antenatal mothers was found to be moderately adequate and they need some improvement of knowledge in the form of health education regarding contraction stress test.

Keywords: Contraction stress test, Antenatal mothers, Self-instructional model

INTRODUCTION

It is an invasive method to assess the fetal wellbeing during pregnancy. When there is an alternation in FHR in response to uterine contractions, induced by oxytocin, it suggests fetal hypoxia. The test is based on the determination of the respiratory function of the fetoplacental unit during induced contractions when the blood flow through the unit is curtailed.

The objective is to detect the degree of fetal compromise so that a suitable time can be selected to terminate the pregnancy. As amnionic fluid pressure rises with uterine contractions, myo-metrial pressure exceeds collapsing pressure for vessels coursing through uterine muscle. This ultimately lowers blood flow to the intervillous space. Brief periods of impaired oxygen exchange result, and if uteroplacental pathology is present, these elicit late fetal heart rate decelerations. Contractions also may produce a pattern of variable decelerations as a result of compression.

NEED FOR THE STUDY

The contraction stress test helps to predict how your baby will do during labor. The test triggers contractions and registers how your baby's heart reacts. A normal heartbeat is a good sing that your baby will be healthy during labor.

In India, a study on Evaluation of non-stress test as predictor of perinatal outcome in high risk and low risk pregnancy. Among 100 pregnant mothers around 58% participants of high-risk group and 82% of low-risk group had 'reactive' and NST tracings respectively. Almost 36% participants of high-risk group and 16% of low-risk group were delivered baby by LSCS method. Around 24% participants of high-risk group and 10% of low-risk group had meconium-stained amniotic fluid. Around 66% babies of participants of high-risk group and 24% of low-risk group were admitted in NICU. The mean birth weight of babies of high-risk group participants was 2.52 kg and of low-risk group participants was 2.85 kg.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of self-instructional model regarding contraction stress test among antenatal mothers at SMVMCH, Puducherry.

OBJECTIVES

- 1. To assess the level of knowledge regarding contraction stress test among antenatal mothers
- 2. To assess the effectiveness of self-instructional model regarding contraction stress test among antenatal mothers
- 3. To associate between the level of knowledge regarding contraction stress test among antenatal mothers with selected demographic variables.

RESEARCH METHEDOLOGY

A quantitative research approach and pre experimental research design was adopted for the present study. The present study was conducted at Sri Manakula Vinayagar Medical College and Hospital, Puducherry. The study comprised of 50 antenatal mothers admitted in SMVMCH, Puducherry who meet the inclusion criteria. The tool consists of demographic data, knowledge questionnaire. The study outcome was evaluated by using descriptive and inferential statistics.

RESULTS AND CONCLUSION

Table-1: Frequency and percentage distribution between pre-test and post-test to assess the effectiveness of self-instructional model regarding level of contraction stress test

Level of	contraction	Pre-test score		Post test score	
stress test	J	f	%	f	%
Inadequate		25	50	0	0
Moderate		25	50	9	18
Adequate		0	0	41	82
Overall		50	100	50	100

. The major findings of the study shows that in pre-test 25(50%) of them had moderate knowledge, 25(50%) of them had inadequate knowledge. In post-test level of knowledge on contaction stress test, majority 41(82%) of them had adequate knowledge, 9(18%) of them had moderate knowledge on contraction stress test among antenatal mothers. The study findings concluded that antenatal mothers had adequate knowledge on contraction stress test after the intervention. There is significance association between occupation with level of knowledge on contraction stress test among antenatal mothers where p<0.05

Figure 1: Bar diagram showing percentage wise distribution between pre-test and post-test to assess the effectiveness of self-instructional model regarding contraction stress test.

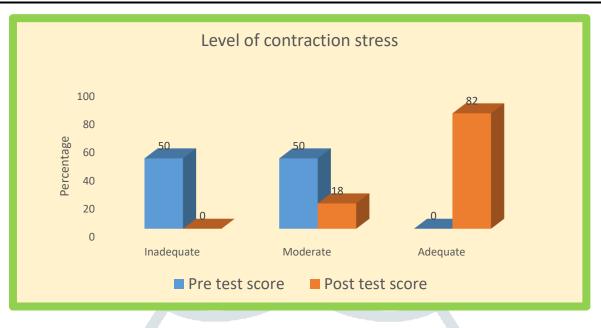


Table-2: Paired't' test to assess the effectiveness of self- instructional model regarding contraction stress test among antenatal mothers.

Level of	Pre Score			Post test		Difference	't'	p-value	
contraction stress test	Mean	SD	Mean%	Mean	SD	Mean%	in mean	test	
Overall	10.54	1.73	53	17.66	2.20	88	7.12	22.32	P<0.001*** HS

Table-2 depicted pre-test, mean score were 10.54, were in stranded deviation 1.73, and were mean percentage 53% and in post-test mean score were 17.66, were in stranded deviation 2.20, and were mean percentage 88%,t test represent 22.32 and the result shows highly significant at **P<0.001**

CONCLUSION

The present study assessed the effectiveness of self-instructional model regarding contraction stress test among antenatal mother, at SMVMCH. The study findings concluded that in post-test significance association between occupation with level of knowledge on contraction stress test among antenatal mothers where p<0.05. The study shows that self-instructional module was very effective in the present study.

RECOMMENDATIONS:

- Same study can be conducted in other parts of the country with large samples.
- Same study to can be conducted among the community settings.
- The study can be replicated with larger study participants for better generalisation.
- •

BIBLIOGRAPHY

BOOK REFERENCE:

- Dutta D.C." Textbook of obstetrics" 10th edition; 2004, new central book agency; New Delhi: page no:554-558 and 105,607.
- Diane. Fraser, margaretA- cooper "Myles text book of midwives" 16th edition. 2014; elseiver; New Delhi; page no:297
- Annamma Jacob, "A comprehensive textbook of midwives" 2nd edition; 2014; jaypee brothers publisher; New Delhi; page no:263
- Basavanthapa.BT, "A text book of midwifery and reproductive healthy nursing", 6th edition 2004; jaypee brothers publisher: New Delhi; page no:307-308
- Reeder, "Text book of maternity nursing"19th edition, 2014; jaypee brothers publisher; wolters kluwer (India); New Delhi; page no: 132-133, 243-245
- Elizabeth marie, "A comprehensive text book of midwifery "1" edition; 2010; jaypee brothers medical publisher, New Delhi: pageno: 127
- John stud, "Text book of progress in obstetrics and gynaecology" 16th edition; Elsevier; New Delhi; page no:331
- Sudhasalham, "Text book of obstetrics" 1" edition; 2007; jaypee brothers publisher: New Delhi: page no:204

JOURNAL REFERENCE:

- 1. Ronald S. Gibbs; et al., eds. (2008). Danforth's obstetrics and gynecology (10th ed.). Philadelphia: Lippincott Williams & Wilkins. p. 161. <u>ISBN 9780781769372</u>.
- Alan H. DeCherney; T. Murphy Goodwin; et al., eds. (2007). <u>Current diagnosis & treatment : Obstetrics</u> <u>& gynecology</u> (10th ed.). New York: McGraw-Hill. pp. <u>255</u>. <u>ISBN 978-0-07-143900-8</u>.
- Frances Talaska Fischbach, Marshall Barnett Dunning (2009). A manual of laboratory and diagnostic tests (8th ed.). Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins. pp. 1030–31. <u>ISBN 9780781771948</u>. <u>Association of Women's Health, Obstetric, and Neonatal Nurses</u> (2005).
- 4. Audrey Lyndon; Linda Usher Ali (eds.). Fetal Heart Monitoring: Principles and Practices (3rd ed.). Dubuque, IA: Kendall/Hunt Publishing Co. <u>ISBN 978-0-7575-6234-1</u>.
- 5. Lagrew DC Jr (March 1995). "The contraction stress test". Clinical Obstetrics and Gynecology. 38 (1): 11–25. doi:10.1097/00003081-199503000-00005. PMID 7796539. S2CID 45260930.
- 6. Tao Le; et al. (2008). First aid for the family medicine boards. New York: McGraw-Hill Medical. pp. <u>556</u>. ISBN 978-0-07-159382-3.

- Munden, ed.: Julie (2005). <u>Professional guide to diagnostic tests</u>. Philadelphia: Lippincott Williams & Wilkins. pp. <u>682</u>. <u>ISBN 9781582553047</u>.
- 8. American College of Obstetricians and Gynecologists (ACOG). (1999). Antepartum fetal surveillance (Practice Bulletin No. 9). Washington, DC: Author.
- 9. Evans (2007). Arthur T. (ed.). Manual of obstetrics (7th ed.). Philadelphia: Wolters Kluwer / Lippincott Williams & Wilkins. p. 587. ISBN 9780781796965.
- Anderson (2005). Jean R. (ed.). A guide to the clinical care of women with HIV (2005 ed.). Rockville, MD: U.S. Dept. of Health & Human Services, Health Resources & Services Administration, HIV/AIDS Bureau. p. 270.
- Ray M, Freeman R, Pine S, Hesselgesser R (September 1972). "Clinical experience with the oxytocin challenge test". Am. J. Obstet. Gynecol. 114 (1): 1–9. doi:10.1016/0002-9378(72)90279-7. <u>PMID</u> 4637035.

NET REFERENCE:

- American College of Obstetricians and Gynecologists. Special Tests for Monitoring Fetal Well-Being (https://www.acog.org/womens-health/faqs/special-tests-for-monitoring-fetal-well-being).Accessed 4/26/2022.
- Eunice Kennedy Shriver National Institute of Child Health and Human Development. What tests might I need during pregnancy? (https://www.nichd.nih.gov/health/topics/preconceptioncare/conditioninfo/tests-needed)Accessed 4/26/2022.
- 3. U.S. Department of Health & Human Services, Office on Women's Health. Prenatal care and tests (https://www.womenshealth.gov/pregnancy/youre-pregnant-now-what/prenatal-care-and-tests). Accessed 4/26/2022.
- 4. Alus M, Okumus,(2007),"The effect of different maternal positions on nonstresstest",retrived on March16 from http://www.ncbi.nim.nih.gov/pubmed.
- 5. Cito G, Luissi S, (2005), "Maternal position during non stress test & fetal heart rate pattern", retrived on November 10 from http://ukpmc.ac.uk