

To evaluate the effectiveness of massage therapy in reducing level of pain perception among primigravida mothers

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ABSTRACT: The Main objective is to evaluate the effectiveness of massage therapy in terms of level of pain perception and birth experience among primi gravida mothers .To associate the reducing pain perception with demographic variables among primi gravida mothers .

KEY WORDS:First stage of labour ,pain perception,massage therapy,primi gravid mothers.

METHODS: The study group received massage therapy to apply sacrum, buttocks, waist, foot, and hand during active phases of labour .the massage therapy was given by the investigator for 20 minutes for 20 minutes again the steps will be repeated in a 10 minutes intervals. In active stage of labour (3-6cm cervical dilatation) the women completed the demographic and obstetrical information and pain was measured by 0-10 modified combined numerical categorical pain intensity scale .this study revealed that there was high significant difference found in pain between the experimental and control group.

RESULT: The pain level before massage therapy during first stage of labour was significantly Lower than after the massage therapy given to primi gravida mothers. There was a significant reduction of the post interventional score in the experimental group than the control group. The patient in the experimental group were highly satisfied with the massage therapy intervention.

CONCLUSION: The study concluded that clinical implication of massage therapy usage during labour could be an effectiveness and non pharmacological intervention in reducing pain perception.

INTRODUCTION

Pregnancy is the special event not only in the life of the woman but also in the entire family. pregnancy is a unique, exciting, and often joyous time in Mother's life , as it highlights the woman's amazing creative and nurturing powers while providing a bridge to the future pregnancy comes with some cost , however , a pregnant woman needs also to be a responsible so as to support the health of the future child. The developing foetus depends entirely on the mother's health for all needs¹. Very most consideration in pregnancy is that there are in fact two individuals that receive the treatment i.e. mother and baby, many facts of pregnancy are covered starting with preparation, planning stages, moving through conception, foetal development, Labour and Post Partum changes.

Pain and its relief for women in labour has been subject of interest since the dawn of Mankind. "Pain is unpleasant, sensory , emotional experience associated with actual or potential tissue damage or described in terms of such damage " (American pain society , 2003). Pain in labour is universal experience for child bearing women. A variety of factors affect the intensity and amount of pain experienced by women ; is based on , perception of pain³ , tolerance of pain , communication of pain, cultural characteristics and

environment of pain – whether in hospital or at home etc., The pain perceived mainly during first stage of labour is located at lower portion of abdomen and radiated to lumbar area of back and down to thighs. Pain is said to be ‘feeling of distress, suffering of agony caused by stimulation of specialized nerve endings. Massage is the rubbing and kneading of muscles and joints of the body with hands, especially to relieve the pain. Massage in general has many benefits for anyone, and better time to apply these benefits than during the stressful and exhausting process of child birth. Natural endorphins are released during massage which provides a labour mother with natural pain relieving agents from within her own body.⁴ Circulation is enhanced by massage which means less muscle fatigue for the mother and better blood flow to the baby. Stress hormone levels are also decreased during massage which can help a mother relax and lessen her overall pain levels as well.

Especially is it is used 2 to four hours prior to birth .epidural anesthesia could lead to sympathetic blockage and consequently, decrease maternal cardiac output , bladder distension, prolongation of second stage of the delivery and catheter displacement. to relief labor pain ,nitroxide,also could be administered . it would not cause second stage prolongation, but as all other anesthesia drug ,would pass the placenta and suppress fetal central nervous system .non pararmacological pain relief approaches have different advantages such as lack of side- effects for mother and fetus and also being pleasant for both of them .some of these approaches are muscle relaxation ,respiratory techniques, hydrotherapy, music therapy, massage therapy.

Massage therapy is manual manipulation of soft body tissues [muscles,connective tissues,tendons,,ligaments]to enhance the persons health and well being. some cultures have used massage therapy as pain relief during labor, for hundreds of years .massage therapy is a scientific at that implement systematic hand techniques on soft tissue, muscles ,tendons ,ligaments ,and fascia and uses hand, foot, knee ,and forearm in its techniques².massage would causes the endorphin release and reduce the ischemia by amplification of local blood supply .all of these will stimulate the sympathetic system and will relax the skeletal muscle⁵.

Mrs.kumari (2017) conducted a study to assess the effectiveness of massage therapy on severity of pain in the first stage of labour pain mothers who are admitted in the labour room during the active phase of labour in selected hospital ,jalandhar punjab. The aim of the study is to assess the effectiveness of massage therapy on sverity of labour pain admitted in the labour room during active phase of labour . result despicted that the mean pre interventional score of severity of labour pain was 82.91 and mean post interventional score was 22.66. the calculated “t value was 240039 which is significant at $p < 0.0001$. the mean pre interventional score of anxiety was 25.53 and mean post interventional score was 10.48. the calculated ‘ t value was 20.3375 which is significant at $p < 0.0001$. hence the finding revealed that there was decreased in the severity of labor pain so this study hypothesis (H 1) was accepted..

OBJECTIVES

To evaluate the effectiveness of massage therapy in terms of level of pain perception and birth experience among primi gravida mothers .

To associate the reducing pain perception with demographic variables among primi gravida mothers

MATERIALS AND METHODS

The study was conducted in Saveeetha college of nursing SIMATS thandalam .with 60 primi gravid mothers.the primi gravid mothers were recruited and were allocated by non –probability ,purposive sampling technique into two arms of the study ,but only 30 in control group and 30 in experimental group.participants .the study group received massage therapy to apply sacrum,buttocks,shoulders,waist ,foot and hand during active phases of labour the massage therapy was given by investigator for 20min again the same step is repeated in 10minutes intervals.in active stage of labour(3-6cm of cervical dilatation)the womencompleted the demographic and obstetrical information and painwas measured by 0-10 Modified combined nurnical categorical pain intensity scale ⁶. this study revealed that there was high ssignificant difference found in pain<0.001level between study and control group.the study concluded that clinical implication massage therapy usage during labour could be an effective non pharmacological intervention in reducing pain perception . this study revealed that there was high ssignificant difference found in pain<0.001level between study and control group.the study concluded that clinical implication massage therapy usage during labour could be an effective non pharmacological intervention in reducing pain perception . purposive sampling technique was used. Sample size will comprise of 60 primi gravida mothers. control group is 30 and experimental group is 60.⁷

RESULT

SECTION –A:

Frequency and percentage distribution of pre test level of pain in experimental and control group.

The above table reveals that out of 30 samples in experimental group 1(3.33%) had mild pain, 24(80%) had moderate pain and 5(16.66%) had severe pain. In control group out of 30 samples 7(23.33%) had mild pain, 18(60%) had moderate pain and 5(16.66%) had severe pain.

PRE-TEST

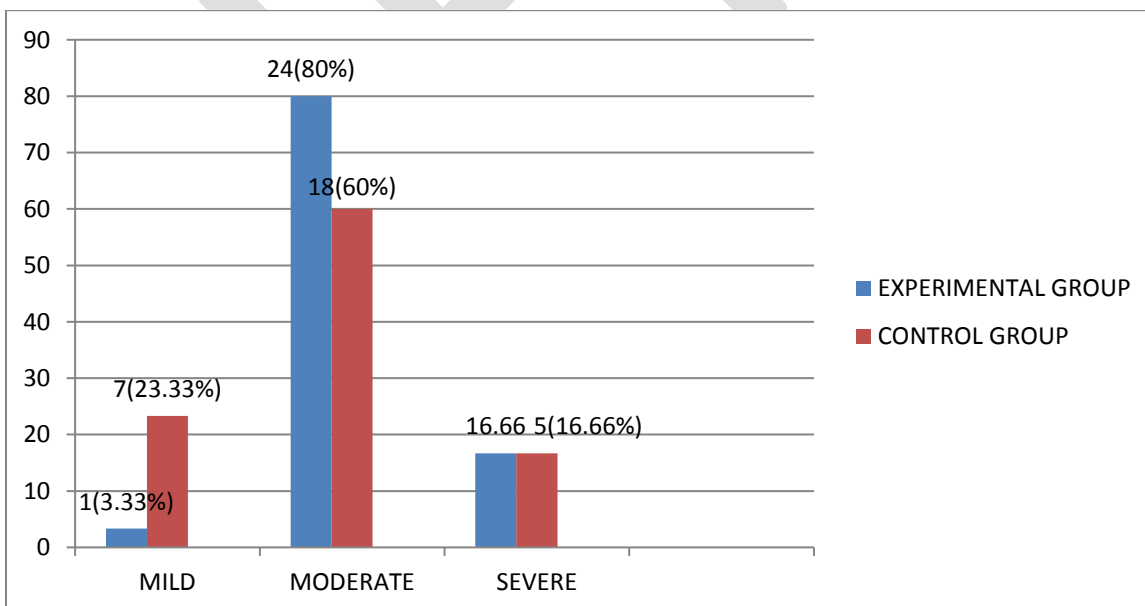


FIGURE 1: PECENTAGE DISTRIBUTION OF LEVEL OF PAIN IN EXPERIMENTAL AND CONTROL GROUP

Mean and standard deviation of pre test level of pain in experimental and control group

MEAN AND STANDARD DEVIATION OF PRE TEST LEVEL OF PAIN IN EXPERIMENTAL AND CONTROL GROUP

GROUP	MEAN	STANDARD DEVIATION
Experimental group	7.8	1.2148
Control group	7.2	7.0583

The above table reveals that the pre test mean score of pain in experimental group was 7.8 and Standard deviation (SD) was 1.2148. For control group the mean score was 7.2 and Standard deviation (SD) was 7.0583.

Frequency and percentage distribution of post test level of pain in experimental and control group.

LEVEL OF PAIN	EXPERIMENTAL GROUP		CONTROL GROUP	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Mild	20	66.66%	1	3.33%
Moderate	6	20%	12	24%
Severe	4	13.33%	17	56.66%

The above table reveals the frequency and percentage distribution of post level pain. Out of 30 in experimental group 20(66.66%) had mild pain, 6(20%) had moderate pain and 4(13.33%) had severe pain. In control group out of 30, 1(3.33%) had mild pain, 12(24%) had moderate pain and 17(56.66%) had severe pain.

POST-TEST

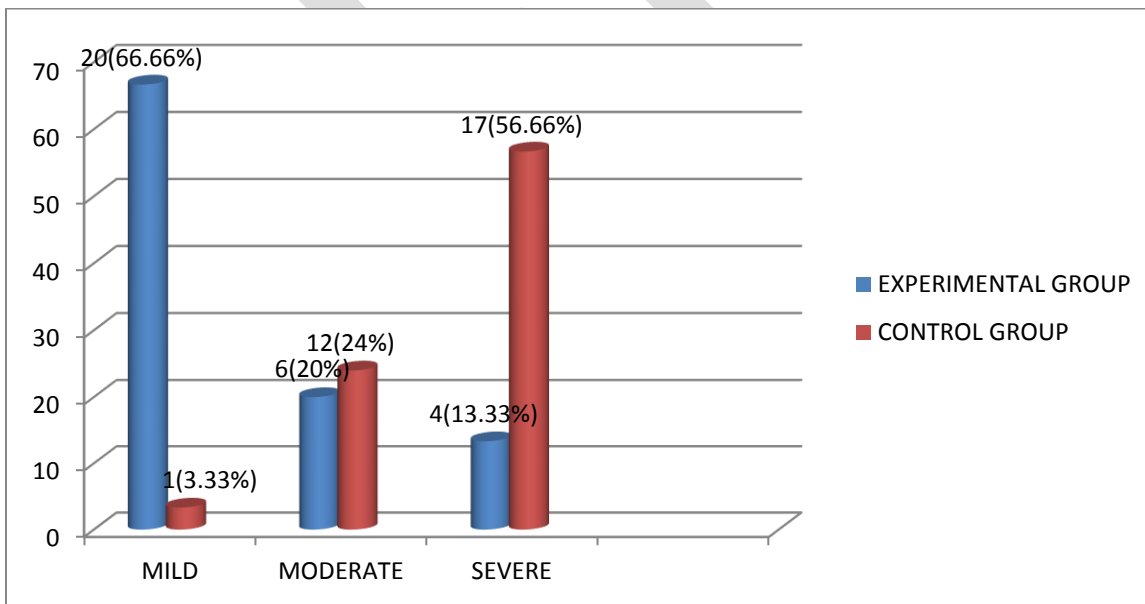


FIGURE 2: PERCENTAGE DISTRIBUTION OF LEVEL OF PAIN IN EXPERIMENTAL AND CONTROL GROUP

Table 5: Mean and standard deviation of post test level of pain in experimental and control group

GROUP	MEAN	STANDARD DEVIATION
Experimental group	2.8	1.2971
Control group	8.666	1.0938

The above table reveals the post test mean score of experimental group was 0.4 and standard deviation (SD) was 6.2. mean score of control group is 1.564 and standard deviation was 1.06

Table 6: Determine the effectiveness of massage therapy on reduction of pain perception during first stage of labour among primi gravid mothers

The above table reveals that the calculated t value for the experimental group is $t = 14.4197$ which is found to be significant at $p > 0.05$ level and the t value for the control group is $t = 8.3331$ which is found to be significant at $p > 0.05$. So the massage therapy was effective

FREQUENCY AND PERCENTAGE DISTRIBUTION OF SAMPLE CHARACTERISTICS IN EXPERIMENTAL AND CONTROL GROUP

The above table reveals that out of 30 in experimental group 15(50%) belongs to the age group of 18- 20 years, 14(46.6%) belongs to the age of 20-25 years, 1(3.33%) belongs to the age group of 26-30 years. Regarding religion 11(36.6%) were hindu and Christian is 12(40%) and muslim is 7(23.3%) Regarding Education 23(76.6)% were completed their higher secondary, and 4(13.3%) were completed their college and 3(10) were completed their university. Regarding Type of family Nuclear are 15(50) .and Joint Family are 12(40) and Extended Family are 3(10) . Regarding Socio Economic Status Lower Class are 20(66.6%) and middle class are 6(20%) and Upper class people are 4(13.3) .Regarding Occupation Agriculture working mothers are 11(36.6%) Bussiness are 6(20) . Self employment mothers are 7(23.3) and House wife mothers are 6(20%) Regrading Area living Urban are 18(60) and for Rural is 12(40).

The above table reveals that out of 30 in control group 13(43.3%) belongs to the age group of 18- 20 years, 8(26.6%) belongs to the age of 20-25 years, 9(30%) belongs to the age group of 26-30 years. Regarding religion 14(46.6%) were hindu and Christian is 7(23.3%) and muslim is 5(16.6%) Regarding Education 23(76.6)% were completed their higher secondary, and 7(23.3%) were completed their college and 0(0) were completed their university. Regarding Type of family Nuclear are 18(60). and Joint Family are 12(40) . and Extended Family are 0(0) . Regarding Socio Economic Status Lower Class are 26(86.6%) and middle class are 4(13.3%) and Upper class people are 1(3.33). Regarding Occupation Agriculture working mothers are 11(36.6%) Bussiness are 0(0). Self employment mothers are 6(20). and House wife mothers are 13(43.3%) Regrading Area living Urban are 21(70) and for Rural is 9(30).

DISCUSSION

1. The first objective was to Evaluate the Effectiveness of Massage Therapy in Reducing Level of pain perception Among Primi gravida Mothers.

Table 1 of section B reveals that out of 60 samples in pre test the experimental group 1(3.33%) have mild pain, 24(80%) had moderate pain and 5(16.66%) have severe pain. In control group 7(23.33%) have mild pain, 18(60%) had moderate pain and 5(16.66%) have severe pain.

Table 3 of section B reveals that out of 60 samples in post test the experimental group 20(66.66%) have mild pain, 6(20%) have moderate pain and 4(13.33%) have severe pain. In control group 1(3.33%) have mild pain, 12(24%) have moderate pain and 17(56.66%) have severe pain.

2.The second objective was to determine the Effectiveness of massage therapy on Reducing Level of pain perception Among Primi Gravida Mothers.

Table 5 of section B reveals that the calculated 't' value for experimental group was $t=14.4197$ which is found significant at $P<0.005$ level. Then calculated 't' value for control group was $t=8.3331$ which is significant at $P<0.0054$ level. So the Effectiveness of Massage therapy in Reducing Level of pain Perception Among Primi Gravida mothers. Is Effective

3.The third objective was to associate the demographic variables Among Primi gravida mothers.

Table 6 of section B reveals that X^2 value for demographic variables is non-significant at $P<0.005$.

CONCLUSION

The study findings that the massage therapy was effective to the experimental group during the first stage of labour for the primi gravida mothers.

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AUTHORS CONTRIBUTION

All the authors actively participated in the work of the study. All authors read and approved the final manuscript.

CONFLICT OF INTEREST

The authors declare no conflict of interests.

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