



Effects of Back-Massage on Postpartum After-Pain Among Multiparous Mothers Admitted to District General Hospital - Negombo

P.A.M.D Jayamini, P.W.G.D.P. Samarasekara, A.A.S.M Adikari,
H.P.P.S Gunathilaka and K.R.P Damitha

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EFFECTS OF BACK-MASSAGE ON POSTPARTUM AFTER-PAIN AMONG MULTIPAROUS MOTHERS ADMITTED TO DISTRICT GENERAL HOSPITAL - NEGOMBO

INTRODUCTION

Women return to their pre-pregnant state during the first six weeks after childbirth preceding many physiological discomforts, most common after-pain. After-pain described as intermittent abdominal pain similar to menstrual cramps within the first four to five days after labor (Namboothiri & Viswanath, 2016). It causes psychological problems such as depression, anxiety anorexia, and insomnia, and also, pain interrupts to mother's daily routines as well as breastfeeding self-efficacy (Evcili & Kaya, 2019). This study aimed to assess the effect of back massage on postpartum after-pain among multiparous mothers following normal labor admitted to District General Hospital (DGH), Negombo.

METHODOLOGY

This was a quantitative, quasi-experimental research study conducted in a postnatal ward at DGH, Negombo. Thirty postpartum multiparous mothers were enrolled by non-probability convenience sampling method. Inclusion criteria adapted for recruiting participant for the study were; within forty-eight hours following normal delivery, they do not receive any pharmacological pain relief substances except Paracetamol (Before collecting initial data, all recruited women should have more than one dose), full-term (37 to 42 weeks of gestation), have a single viable fetus in cephalic presentation, previously having termed labors, breastfeeding mothers (starting within one hour after labor) and willing to participate in the study. Based on their willingness to participate for each group, fifteen women were assigned to the control group where routine hospital care was applied for them and the other fifteen practiced back massage three times per day in the morning, afternoon, and evening for ten minutes. Data was collected using an Interviewer Administered Questionnaire, a Numerical Rating Scale (NRS), and an Observation Chart. The intensity of pain was assessed while breastfeeding using the NRS. Data was analysed using Mann Whitney U test. By the way, ethics approval to conduct the study was obtained from Ethics Review Committee, National Hospital of Sri Lanka, Colombo.

RESULTS AND DISCUSSION

Majority of mothers (93.3%) were in the age group of 20 to 35 years. All mothers were married and majority came from nuclear families. In concerning the race, more than 80% in each group were Sinhalese. Most of participants (73.3%) were educated up to Ordinary Level in both groups.

Table 1

Demographic Variables among Postpartum Multiparous Mothers with After-pain (n=30)

Socio-demographic data	categories	Control group (n=15)		Experimental Group (n=15)	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Age(years)	20 to 35	14	93.3	11	73.3
Civil Status	Married	15	100	15	100
Race	Sinhala	12	80.0	14	93.3
Type of family	Nuclear	13	86.7	12	80
Educational status	Up to O/L	11	73.3	11	73.3

Sixty percent of mothers delivered their second baby in both groups. It was highlighted that all participants were with episiotomy. Most of mothers had planned their current pregnancy as 80%, 73.3% consecutively in the control group and experimental group.

Table 2

Obstetrical Variables among Postpartum mothers with After-pain (n=30)

Obstetric data	Categories	Control group (n=15)		Experimental group (n=15)	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Para	2 nd	9	60	9	60
Status of pregnancy	Planned	12	80	11	73.3
Gestational weight gain	10kg – 12kg	10	66.7	8	53.3
Episiotomy	Yes	15	100	15	100

Majority of mothers (11, 73.3%) had complained of lower abdominal pain in the control group and 14, (93.3%) in the experimental group rather than other areas of the body. Table 3 exhibits that the control group represented the intensity of after-pain as moderate-pain (73.3%) while the experimental group did it as severe (66.7%) at the initial assessment. Ultimately, the intensity of after-pain in both groups decreased to a mild level in the third episode of assessment.

Table 3

Distribution of the study groups according to the intensity of their after-pain as measured by Numerical Rating Scale (NRS)

Intensity of after-pain as measured by NRS	Control group (n=15)		Experimental group (n=15)	
	Before routine hospital care(1 st episode)	After routine hospital care (3 rd episode)	Before receiving back massage (1 st episode)	After receiving three back massages (3 rd episode)
Mild (1-3 points)	1(6.7)	11(73.3)	1(6.7)	14(93.3)
Moderate (4-6 points)	11(73.3)	3(20)	4(26.7)	1(6.7)
Severe (7-10 points)	3(20)	1(6.7)	10(66.7)	0(0)

Figure 1 illustrates that the study findings showed that the median score decreased from 8 to 2, which shows a marked difference of 6 in the experimental group while the control group did it from 5 to 3, which shows a difference of 2. In contrast, the difference between mean levels of after-pain was 2.4 (5.47-3.07) in the control group and 5.46 (7.33-1.87) in the experimental group. It was a marked difference compared with the control group.

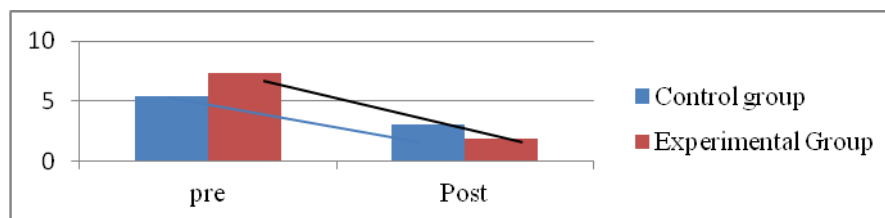


Figure 1: Comparison of After-pain among Multiparous Mothers According to their groups

Mann Whitney U test shows that there was a statistical significance ($U=52.000$, $*p= 0.027$) between the median levels of afterpain that the mothers who received three episodes of back massage felt in the experimental group compared to the mothers who received routine hospital care in the control group. Hence, the principle finding of this study is that the postpartum multiparous mothers who received back massage reported significantly fewer after-pains than the mothers who did not acquire back massage. Involution is facilitated by the hormone Oxytocin by contracting the uterus during the postpartum period (Azizah et al., 2018). When the uterus contracts, mothers feel cramps like pain. It is called after-pain. But, the after-pain terminates if the uterus frequently contracts (Namboothiri & Viswanath, 2016). This biological function facilitates the concept for the result of this study.

Researchers have found that back massage is used to reduce dysmenorrhea, labor pain, and acute pain as well as treating to mothers with lactation failure (Asrani et al., 2018; Mukhoirotin et al., 2020 & Josep & Fernandes., 2013). Furthermore, Dennis et al (2007) stated that postpartum mothers in Singapore received thorough massage for three days from her midwife to increase circulation and to bring healing to all parts of the body. And also, Australian mothers are massaged with hot salt to loosen tendons and prevent blood clots. According to Kruekaew and Kritcharoen (2018), in Thailand, specific massage called Thai massage is given by Thai midwives to their postpartum mothers to reduce lochia, pain, and anxiety and to gain heat to the body. Furthermore, Dash (2016) found that oil massage combined with other measures like lying flat on the abdomen and emptying the bladder are effectively reduced after-pain of mothers.

CONCLUSIONS/ RECOMMENDATIONS

It was concluded practicing back massage was very effective in reduction of after-pain among postpartum multiparous mothers. Still after-pain is one of the major problems among postpartum mothers remaining in Sri Lanka because it scores moderate or severe pain. Then, the nursing personal should educate mothers to use such non-pharmacological, simple, and easy procedures to reduce the level of after-pain among postpartum mothers.

postpartum mothers can be encouraged to take a back massage at least three times per day during her initial postpartum life to make reduce and to have more tolerance after-pain. Furthermore, nurses working in the maternity units can be introduced the effect of back massage on postpartum after-pain as a cost effective care. Moreover, similar studies are necessary by increasing sample size in order to conclude this finding.

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