

Effectiveness of Deep Back Massage as Pain Relief in Active Phase of Labor

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A B S T R A C T

pain during the first stage of labor is caused by contractions of the uterine muscles, hypoxia of the contracting muscles, cervical stretching, ischemia of the uterine body, and stretching of the lower uterine segment. This study aims to determine the effect of deep back massage techniques on reducing the intensity of labor pain during the active phase of primiparous mothers in BPS (Midwife private practice) "YL" in 2018. The design of this study is quantitative while the type of research used is quasi experimental research (quasi experimental research) with a design. one group pretest-posttest design, which was conducted at BPS (Midwife private practice) "YL" in 2018. The sample of this study were 10 primiparous mothers. The data analysis method used to test the hypothesis is the paired sample t-test. The results show that the p value = 0.000 with a standard deviation of 0.944 was obtained. So based on the analysis of research data, it can be concluded that there is an effect of deep back massage techniques on reducing the intensity of labor pain during the first stage of the active phase of primiparous mothers at BPS (Midwife private practice) "YL" in 2018. Deep back massage therapy that has been given should be an input that can increase the mother's knowledge. on how to deal with pain when going into labor (stage I), so that you can practice these techniques with other families or neighbors in dealing with pain during labor.

I. INTRODUCTION

The goal of health development towards a healthy Indonesia in 2025 is to increase awareness, willingness, and ability to live healthy for everyone so that the highest level of public health can be realized, through the creation of a society, nation and state of Indonesia which is marked by its people who live with behavior and in healthy environment. As well as the goals and objectives of the mission of a healthy Indonesia in 2025, one of which is to reduce the maternal mortality rate from 262 per 100,000 live births in 2005 to 74 per 100,000 live births in 2025 (Fitria, S. 2017).

Childbirth is the process of releasing the products of conception (fetus and uri) that have been quite months or can live outside the womb through the birth canal or through other means with or without assistance (own strength (Manuaba, 2010). Normal or labor is the process of releasing the results. conception that can live from inside the uterus through the vagina or other way to the outside world (Indrawati, 2010).

The birth process is identical to the pain that will be experienced, where most labor is accompanied by pain. Pain in labor is a physiological process. Pain causes frustration and despair, so some mothers worry that they won't be able to go through labor. A recent study found that 67% of women feel a little worried, 12% feel very worried and 23% are not worried at all about labor pain (Cunningham, 2013).

The pain in the first stage of labor is caused by contractions of the uterine muscles, hypoxia of the contracted muscles, cervical stretching, ischemia of the uterine body, and stretching of the lower uterine segment. Pain receptors are transmitted via the T11-12 spinal nerve segment and lower thoracic accessory nerves and upper lumbar sympathetic nerves. This system runs from the periphery through the spinal cord, brain stem, thalamus and cerebral cortex (Cunningham, 2013).

Physiologically, labor pain begins to appear in the latent phase of labor (cervical opening is slow, until the opening is 3 cm) and the active phase (4 to complete opening). According to Judha (2012) the pain experienced by the mother is due to changes in the cervix and uterine ischemia during the 1st stage of labor. Various methods are used to relieve labor pain including pharmacological and non-pharmacological actions. Pharmacological action with the use of drugs has side effects on the mother such as nausea and dizziness, so that the mother cannot rely on her abdominal muscles and pushes when the uterus contracts, so that labor takes longer (Wong, 2011).

One form of non-pharmacological pain reduction is massage, for example, such as edropine massage, deep back massage, effleurage, etc. (Reeder, Martin, Koniak, & Griffin, 2011).

According to Lestari (2012) the Deep Back Massage technique is an emphasis on the sacrum which can reduce tension on the sacroiliac joint from the occiput posterior fetal position.

Deep back massage is an emphasis on the secrum that can reduce tension in the sacroiliacus joint from the occiput posterior fetal position. The deep back massage method is also a massage method by treating the patient lying on his side, then the midwife or patient's family presses the secrum area firmly with the palms of the hands, release and press again, and so on. During the contraction, you can put pressure on the spectrum that starts at the beginning of the contraction and ends when the contraction stops. Emphasis can be made with the fist clenched into a tennis ball on the sacrum where compression during the contraction equals pain relief using the 50-100 mg meperidine drug. By pressing stimulates the cutaneous so that it can inhibit pain impulses from reaching the thalamus. This is in accordance with the gate control theory. Back pressure is effective when the opening is 4-7 cm (Indah, et al, 2012).

From this background, the authors are interested in knowing more about "The Effect of Deep Back Massage Techniques on the Decrease in the Intensity of First Stage Labor Pain in the Active Phase of Mother Primipara at BPS (Midwife private practice)" YL" in 2018".

II. METHODS

This research was Quasi Eksperiment, one Group Pretest – Posttest Design. This srudy was Conducted in one of midwife private practice. The population in this study were childbrith women in BPS YL . Samples were taken using purposive method, 10 chilbirth women become sample of this study. Data collection tools used in this study were observational sheet by measuring pain scale using wong face, before and after intervention of deep back massage. The analysis was done by univariate and bivariate using SPSS for Windows applications.

III. RESULT

3.1 pain scale of childbirth women in first stage of labor before intervention

Table 1
Pain scale of childbirth women in first stage of labor before intervention

Pain scale	Before intervention	
	f	%
No hurt (0)	0	0
Hurt little bit (1-2)	0	0
Hurt little more(3-5)	0	0
Hurt even more (6-7)	2	20
Hurt worst (8-10)	8	80
	10	100

Based on Table 1 we know that 8 of 10 childbirth women experience ‘hurt worst’ pain level.

3.2 pain scale of childbirth women in first stage of labor after intervention

Table 2
Average of Haemoglobin pretest level in control group

Pain scale	After intervention	
	f	%
No hurt (0)	0	0
Hurt little bit (1-2)	0	0
Hurt little more(3-5)	1	10
Hurt even more (6-7)	9	90
Hurt worst (8-10)	0	0
	10	100

Based on Table 2, we know that 9 of 10 childbirth women experience ‘hurt even more’ pain level after have given the intervention.

3.3 differences in the mean of the intervention and control group on hemoglobin levels in pregnant women

Table 3
The Effect of Deep Back Massage Techniques on the Decrease in the Pain Intensity of Stage I Labor in the Active Phase of Primipara

Variabel	N	Mean	Std. Deviation	T	Sign
Pre and post pain scale	10	1,900	0,994	6,042	0,000

Based on Table 3 show that the results of the independent t-test statistical test showed that the value of $p = 0.000$ (<0.05) shows that there is a significant effect of deep back massage on reducing pain scale during first stage of labor..

IV. DISCUSSION

In this study, pain before the birth of the mother during the first stage of the active phase, it is known that pain before being given deep back massage therapy was found that almost all respondents (80%) had a very severe pain intensity level.

The results of this study are the same as the results of research conducted by Indah Lestari regarding the effect of deep back massage on reducing active phase I labor pain in primigravida labor at BPS in the Work Area of the Dlanggu Public Health Center, Mojokerto Regency, where pain before being given deep back massage therapy generally experiences severe pain. heavy (87.2%).

The pain in the first stage of labor is caused by contractions of the uterine muscles, hypoxia of the contracted muscles, cervical stretching, ischemia of the uterine body, and stretching of the lower uterine segment. Pain receptors are transmitted via the T11-12 spinal nerve segment and lower thoracic accessory nerves and upper lumbar sympathetic nerves. This system runs from the periphery through the spinal cord, brain stem, thalamus and cerebral cortex (Cunningham, 2013).

The results of this study are the same as the results of research conducted by Indah Lestari regarding the effect of deep back massage on reducing active phase I labor pain in primigravida labor at BPS in the Work Area of the Dlanggu Health Center, Mojokerto Regency, where there is an effect of deep back massage therapy on reducing pain during labor. I active phase (p value = $0.001 <0.05$).

Pain is a feeling of discomfort, both mild and severe, which can only be felt by the individual without being felt by others, including thought patterns, direct one's activities, and

changes in one's life. Pain is an important sign and symptom that can indicate a physiological disturbance (Irman, 2007).

Deep back massage is an emphasis on the sacrum that can reduce tension in the sacroiliac joint from the occiput posterior fetal position. The deep back massage method is also a massage method by treating the patient lying on his side, then the midwife or patient's family presses the sacrum area firmly with the palms of the hands, release and press again, and so on (Indah, et al, 2012).

In principle, this method is effective at an opening of 4-7 cm. deep back massage during childbirth can function as an epidural analgesic which can reduce pain and stress, and can provide comfort to the mother in labor. Therefore, essential care is needed for mothers during childbirth to reduce pain and stress due to childbirth, which can improve midwifery care for mothers in labor (Anonymous, 2016).

The assumption of the researchers in this study is that deep back massage therapy carried out during the first stage of the active phase is proven to be able to help respondents reduce pain during the first stage of the active phase. It is known that before giving deep back massage, the pain felt by the mother during the active phase as a whole experienced very severe pain (on a scale of 8-10) 80%, and after being given deep back massage therapy, it was found that the very heavy pain had become a level. severe pain 90% and 10% moderate pain level, and none of the mothers experienced a very severe level of pain. It is proven that deep back massage therapy can affect the pain felt by the mother during stage I. However, there were also respondents who experienced pain levels 7 and after being given deep back massage therapy there was no decrease in pain. This is in accordance with Anugraheni (2013) which states that the pain response that a person feels is different, but there are respondents who experience pain but it does not affect the compresses given, this can be influenced by other factors such as psychology and so on.

V. CONCLUSION

Deep back massage is an emphasis on the sacrum that can reduce tension in the sacroiliac joint from the occiput posterior fetal position, this technique is proven as one of non pharmacology pain relief in first stage of labor. It is recommended for health workers to apply this method on increasing women comfort in first stage of labor.

REFERENCES

- Anik Maryunani, 2010, Ilmu Kesehatan Anak, Jakarta : CV. Trans Info. Media.
- Aryani. Y, 2015. Pengaruh masase punggung terhadap intensitas nyeri kala I fase laten persalinan normal melalui peningkatan kadar endhorpin. Jurnal kesehatan andalas, Vol 4.
- Astria Blandina (2013). Pengaruh Deep Back Massage Terhadap Nyeri Persalinan Kala I Fase Aktif Ibu Inpartu Primigravida di BPS Ending Adji, Amd,Keb. Jurnal keperawatan STIKes William Booth
- Bobak, Lowdermilk, Jensen, 2004, Buku Ajar Keperawatan Maternitas / Maternity Nursing (Edisi 4), Alih Bahasa Maria A. Wijayati, Peter I. Anugerah, Jakarta : EGC
- BPS, Yulinda Laila, SS.T, 2018
- Cunningham. 2013. Obstetri Williams. Jakarta : EGC
- Fraser M.D, 2009. Buku Ajar Bidan. Jakarta : EGC
- Fitria Nita, (2017). Prinsip Dasar dan Aplikasi Penulisan Laporan Pendahuluan dan Strategi Pelaksanaan Tindakan Keperawatan (LP dan SP). Jakarta : SalembaMedika.
- Hidayat, A. A. (2008). Pengantar Konsep Dasar Keperawatan. Jakarta: Salemba Medika.
- Indrawati, P. (2010) Panduan Perawatan Kehamilan. Jakarta Selatan : Atma Media Press.
- Jenny, S. 2013. Asuhan kebidanan persalinan & bayi baru lahir. Jakarta : Erlangga
- Kementerian Kesehatan RI b. 2015. Situasi Kesehatan Ibu. Pusat data dan Informasi Kementerian Kesehatan RI. Diakses 22 Juli 2018. [http://pusdatin.kemkes.go.id/resources/download/pusdatin/infodatin/infda tin-ibu.pdf](http://pusdatin.kemkes.go.id/resources/download/pusdatin/infodatin/infda%20tin-ibu.pdf)
- Kiki Izzah Tazkiyah, tentang pengaruh teknik deep back massage terhadap pengurangan nyeri persalinan kala I fase aktif. Jurnal Akademi Kebidanan Estu Utomo Boyolali
- MC. Kinney, et al. (2002). Maternal child nursing. Philadelphia : WB. Saunders Co
- Mochtar R, 2012. Sinopsis Obstetric Fisiologi dan Patologi jilid 1. Jakarta : Penerbit buku kedokteran EGC
- Notoatmodjo,S. 2012. Metodologi Penelitian Kesehatan. Jakarta: Rineka Cipta
- Patree. B., Walsh, V.L. (2007), Buku Ajar Kebidanan Komunitas, Jakarta : EGC
- Prawirohardjo, Sarwono., (2005). Ilmu kebidanan. Jakarta : Yayasan Bina Pustaka
- Reeder, Martin dan Koniak-Griffin. 2011. Volume 2 Keperawatan Maternitas Kesehatan Wanita, Bayi dan Keluarga Edisi 18. Jakarta: ECG.
- Sarwono. 2008. Ilmu Kandungan. Jakarta : Yayasan Bina Pustaka
- Saryono. 2011. Metodologi Penelitian Kualitatif dalam Kesehatan. Yogyakarta : Nuha Medika.
- Simkin, Penny, dkk. (2007). Panduan Lengkap Kehamilan, Melahirkan, dan Bayi. Jakarta: Arcan

- Sugiyono. 2010. Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif, dan R&D. Bandung: Alfabeta
- Tamsuri, 2007, Konsep Dan Penatalaksanaan Nyeri. Jakarta : EGC
- WHO. World Health Statistics 2015: World Health Organization; 2015
- Wong, L. D. (2011). Pedoman Klinis Perawatan Pediatrik. EGC. Jakarta.