



THE EFFECTIVENESS OF USE OF HOLD FINGER AND HYPNOBIRTHING TECHNIQUES IN REDUCING PAIN LEVELS IN WOMEN IN THE FIRST STAGE OF LABOR

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ABSTRACT

Childbirth is a physiological process experienced by all pregnant women and is a process that mothers are waiting for to meet the baby they are carrying. All labor causes pain. One of the causes of labor pain is contractions. Excessive pain can also be caused by the mother's psychology, such as excessive anxiety and fear. Therefore, there is a need for non-pharmacological interventions such as the hold finger and hypnobirthing technique to help reduce the level of pain in mothers in the 1st stage of labor. The aim of writing this article is to determine the effectiveness of providing finger hold techniques and hypnobirthing interventions in reducing the level of pain in mothers in the 1st stage of labor. This type of research is quantitative using a case study approach method by implementing finger grasping techniques and hypnobirthing interventions for mothers in the 1st stage of labor. The sample of this study consisted of 6 mothers in labor. The instrument used in this research is the Numeric Rating Scale. Based on the results of data analysis using the Wilcoxon test, the p value = 0.020 (p value < 0.05) meaning that the hypothesis is accepted, namely that there is a significant influence between the use of the finger grip technique and hypnobirthing with a decrease in the intensity of pain in mothers in the 1st stage of labor. From these results it can be concluded that the use of finger holding techniques and hypnobirthing are effective for mothers in the 1st stage of labor to help reduce pain levels.

Keywords: hold finger techniques; hypnobirthing; mother in 1st stage of labor; pain level

INTRODUCTION

Childbirth is a physiological process that occurs in every pregnancy. Childbirth is an important thing that pregnant women will face, where a mother will immediately be able to hug the baby she has been carrying for months. Childbirth is characterized by a significant increase in myometrial activity so that contractions become regular and cause pain (Sugianti & Joeliatin, 2019b). Every time you give birth, a mother will experience pain that is different for each individual. Around 90% of births are accompanied by pain (Norhapifah & Meihartanti, 2020). A subjective sensation, labor pain is brought on by ischemia of the uterine muscles, distension of the lower region of the uterus, pelvic floor muscles, and perineum, as well as tugging of the uterine ligaments, ovaries, and fallopian tubes. Early in the latent and active phases, labor pain starts to manifest. The cervix opening and uterine contractions cause pain during the initial stage of labor. The spread of pain in the first stage is lower back pain caused by pressure from the fetal head against the spine. As a result of fetal descent, the location of the back pain moves to the lower spine and the location of the fetal heart rate moves downwards to the mother's abdomen (Wulandari, 2021).

The majority of deliveries are marked by extreme pain because of psychological elements (stress and terror) in each mother. This is often called the fear-tension-pain concept (fear-tension-pain), where fear will cause tension which can cause muscles to become stiff and ultimately cause pain. Pain during labor can be a pathological condition that results in fatigue, thereby reducing the intensity of uterine contractions and the labor process can last longer,

which can endanger the condition of the mother and fetus. If the mother finds it difficult to relax, the muscles throughout the uterine wall tighten so that the intensity of the pain that occurs is higher. On the other hand, if the mother is able to relax during contractions, the pain felt can be reduced and the mother will feel comfortable during the birth process (Karuniawati & Fauziandari, 2017).

There are many ways to reduce pain during labor using non-pharmacological methods. Non-pharmacological methods are very suitable to be applied during labor because they are not dangerous to the mother and fetus and there are no negative effects that appear. Non-pharmacological methods aim to distract so as to prevent the brain from producing pain sensations (Triyani & Eugenie, 2018). Non-pharmacological pain management for mothers in the 1st stage of labor can use hold finger techniques and hypnobirthing. Finger grip relaxation is a very basic and easy relaxation method that is beneficial for emotional balance and anyone who has a connection to their fingers and the flow of energy in their body can practice it (Wahyuni, 2022). The finger holding technique is done by holding the finger starting from the thumb to the other five fingers for 3 minutes per finger, then asked to take a deep breath, exhale slowly and release regularly, exhale slowly while letting go of all negative feelings, problems that disturb the mind and imagine the feeling of unease coming out of the mind. Holding your fingers accompanied by taking a deep breath can reduce physical and emotional tension, because holding your fingers will warm the points of entry and exit of energy on the meridians (energy channels) which are connected to the organs in the body located on the fingers (Sugianti & Joeliatin, 2019a).

Hypnobirthing is hypnotherapy in childbirth which is carried out by means of hypnosis, namely changing the state of consciousness when the individual's concentration is focused and distractions are minimal (Khoiriyah et al., 2022). Hypnosis can also be used to control pain because it can prevent painful stimuli in the brain from penetrating the conscious mind. Certain theories state that hypnosis works by activating nerves in the brain which causes the release of natural morphine-like substances called enkephalins and endorphins. The hypnobirthing stimulus stimulates the pituitary to release Pro-opiomelanocortin (POMC) so that it can increase the secretion of beta endorphins. The release of beta endorphins increases the mother's tolerance for pain (Rahmawati et al., 2019).

Hypnobirthing, which combines the natural birthing process with hypnosis treatment, is a way to alleviate fear, anxiety, and tension before, during, and after childbirth. It also helps to promote positive perspective and self-confidence. One of the hypnobirthing methods used is the self-hypnosis method, namely positive suggestions for dealing with pregnancy and childbirth naturally, smoothly and comfortably. When a mother giving birth is free from fear, the body muscles and uterine muscles relax which makes the birth process easier and stress-free (Sundariningsih et al., 2021). According to Rianti Fitriani (2022), hypnobirthing has a significant influence on reducing pain levels in mothers in the first stage of labor. Hypnobirthing techniques can also be given during pregnancy to get more significant results. Therefore, hypnobirthing should be an option in reducing labor pain in addition to other benefits (Fitriani et al., 2022).

When carrying out clinical practice in the maternity room at Pandan Arang Regional Hospital, the problem that many mothers experience is excessive pain during the 1st stage of labor. Therefore, the author is interested in applying non-pharmacological methods, hold finger techniques and hypnobirthing to reduce pain in mothers in the 1st stage of labor. The aim of this research is to determine the effectiveness of finger grasping techniques and

hypnobirthing in mothers in the 1st stage of labor in the delivery room at Pandan Arang Hospital, Boyolali.

METHOD

This research uses a case study approach method by implementing finger grasping techniques and hypnobirthing interventions which aim to determine the positive effect in reducing pain in mothers in the 1st stage of labor. This kind of study is quantitative in nature. The Numeric Rating Scale, the instrument utilized in this study, is a tool for measuring the pain scale, which ranges from 1 to 10. All of the moms who gave birth in the maternity room at Pandan Arang Hospital Boyolali between June 5 and June 11, 2023, comprise the study's sample. Six people make up the sample. The duration of the intervention was ten to fifteen minutes. The research design used a pre-experimental method with a one group pretest-posttest design, which was used to determine the effect between the finger grip technique and hypnobirthing on the pain level of mothers in the 1st stage of labor. The research results were obtained from measuring the level of pain felt by the mother before and after being given the intervention and then processed using SPSS with the Wilcoxon test.

RESULTS

All pregnant women who were respondents in this study had different characteristics. However, based on ethnicity, all pregnant women who were given finger hold technique intervention and hypnobirthing came from the Javanese tribe. Apart from that, the characteristics of pregnant women can be seen in the following distribution table.

Table 1.
Distribution of respondents who were given finger grasp technique intervention and hypnobirthing based on age in the Maternity Room (n=6)

Age	f	%
20 – 25 years	3	50
26 – 30 years	2	33,3
31 – 35 years	1	16,7

Based on the table above, the results showed that the majority of respondents who received the intervention were 20 - 25 years old, namely 3 people (50%).

Table 2.
Distribution of respondents who were given finger grasp technique intervention and hypnobirthing based on the latest education in the Maternity Room (n=6)

Last Education	f	%
Elementary School	0	0
Junior High School	1	16,7
Senior High School	5	83,3
Diploma/Bachelor	0	0

Based on the table above, the highest level of education among respondents was high school, with 5 people (83.3%).

Table 3.
Distribution of respondents who were given finger grasp technique intervention and hypnobirthing based on the number of pregnancies in the Maternity Room (n=6)

Number of Births	f	%
Primipara	3	50
Multipara	3	50

Based on the table above, the number of respondents between primiparas and multiparas is balanced, with 3 people each (50%).

Pain Intensity in Mothers in the 1st Stage of Birth

Every mother in labor feels pain on a different scale. To help reduce the pain, intervention with finger grip techniques and hypnobirthing is given. This technique is given by holding the fingers starting from the thumb to the other five fingers for 3 minutes per finger, then asked to take a deep breath, exhale slowly and release regularly, accompanied by instructions to imagine positive things and provide motivation and words of affirmation to mothers giving birth. The following is a table that presents the mother's pain scale before being given the intervention and after being given the intervention.

Table 4.

Distribution of data measuring pain levels in mothers in the 1st stage of labor before being given hold finger technique and hypnobirthing interventions in the Maternity Room (n=6)

Pain Levels	f	%
1	-	-
2	-	-
3	-	-
4	-	-
5	1	16,7
6	2	33,3
7	2	33,3
8	1	16,7
9	-	-
10	-	-

Based on the table above, before the intervention was carried out, 1 person experienced a pain level of 8 on a scale, 2 people on a pain scale of 7, 2 people on a pain scale of 6, and 1 person on a pain scale of 5.

Table 5.

Distribution of data measuring pain levels in mothers in the 1st stage of labor after being given intervention by hold finger technique and hypnobirthing in the Maternity Room (n=6)

Pain Levels	f	%
1	-	-
2	-	-
3	1	16,7
4	2	33,3
5	1	16,7
6	2	33,3
7	-	-
8	-	-
9	-	-
10	-	-

Based on the table above, after the intervention of the hold finger technique and hypnobirthing, the level of pain felt by respondents was 1 person on a scale of 3, 2 people on a scale of 4, 1 person on a scale of 5, and 2 people on a scale of 6.

Table 6 shows that respondents' maximum pain scale was an 8, and that after receiving the intervention, their highest pain scale decreased to a 6. The hypothesis is accepted based on the Wilcoxon test findings, which indicate that the p value of 0.020 (p value < 0.05) indicates that there is an impact of hypnobirthing and finger clutching methods on lowering the degree of pain experienced by women during the first stage of labor.

Table 6.
 Frequency distribution of pain measurements in mothers in the 1st stage of labor before and after being given hold finger technique and hypnobirthing interventions in the Maternity Room (n=6)

Pain Levels	f (%)	f (%)
1	0	0
2	0	-
3	0	16,7
4	0	33,3
5	16,7	16,7
6	33,3	33,3
7	33,3	0
8	16,7	0
9	0	0
10	0	0

Wilcoxon Statistical Test Results p: 0.020

DISCUSSION

In this study, it can be seen that all mothers in labor experience pain with a scale ranging from 5 to 8. However, a person's pain response cannot be generalized because it is individual and there are many influencing factors such as age, race, certain actions, previous pain experiences, a person's coping patterns. in dealing with pain, and so on. According to research conducted by Ayu et al (2017), younger mothers reported experiencing higher pain intensity compared to older mothers. Younger mothers tend to express their pain verbally, while older mothers tend to express their pain nonverbally. Compared to older moms, younger mothers experience sensory discomfort more frequently. Young age is frequently linked to unstable psychological factors that intensify pain by causing worry. Another aspect of influencing pain tolerance is age. Age greatly influences the reproductive process, especially 20-35 years old, which is a good age for pregnancy and childbirth (Ayu & Supliyani, 2017).

Apart from that, the intensity of maternal pain during childbirth is also influenced by the mother's previous experiences. In primiparous mothers, the intensity of uterine contractions is stronger than in multiparous mothers. This is because multiparous mothers have previous experience of giving birth so it will be easier to adapt to pain compared to mothers who have never had experience. In primiparas there is softening, thinning, and this is followed by opening of the uterine cervix, in multiparas the softening occurs is not followed by softening because there is connective tissue due to previous delivery (Nurdiantini, I., Prastiwi, S., & Nurmaningsari, 2017). The time for the first stage in primiparas and multiparas is also different, usually in primiparas ± 20 hours and multiparas ± 14 hours. The more children there are, the less time the uterine muscles contract due to previous birth experience (Sari, 2020). The results of the study showed that after being given intervention with the finger grip technique and hypnobirthing, the level of pain felt by mothers in the 1st stage of labor decreased with a value of p = 0.020, which means that the finger hold technique and hypnobirthing were effective in reducing the level of pain in mothers in the 1st stage of labor.

This is supported by research conducted by Alam et al (2022) which states that the finger grasping technique can reduce anxiety and the level of pain felt by mothers giving birth (Alam et al., 2022). One simple method for controlling emotions and enhancing emotional intelligence is the finger-hold relaxation technique. This technique can help the body, mind and soul to reach a relaxed state, where in a relaxed state the mother's muscle tension will decrease and pain can be reduced (Hartinah, 2020). Other research states that the finger grip technique is able to reduce physical and emotional tension and is able to provide stimulation to the brain so that it

facilitates energy pathways and reduces pain (Sukmawati et al., 2023). The results of this research are also in line with research conducted by Pratiwi et al (2023) which states that hypnobirthing is able to reduce the pain scale in mothers in the 1st stage of labor. Hypnobirthing places a strong emphasis on the appearance of comforting, peaceful, and relaxing ideas. When things are quiet and relaxed, the brain immediately releases endorphins, which lessen pain and anxiety and create a comforting sense. But during labor, if you experience anxiety, fear, or stress, your brain will release chemicals that prevent endorphins from being released. The more afraid someone is during childbirth, the greater the pain they feel. However, hypnobirthing can make mothers relax and not panic so that the pain during childbirth is reduced and the birthing process goes smoothly (Pratiwi et al., 2023).

The application of hypnobirthing can help control the mother's fear and anxiety. Excessive levels of fear and anxiety can be the main cause of the pain that appears. This makes the uterus harder and able to contract. Psychological stress has a strong physical influence on the birthing process. The stress hormone, namely adrenaline, will interact with receptors in the muscles and can slow down and inhibit the labor process. Pregnant women who are about to give birth feel excessive anxiety and fear, their body will be tense and this can cause the heart to pump blood faster. This can cause high blood pressure. The labor process will also take much longer. And the pain will continue (Yulia Safitri et al., 2023). Research conducted by Gonca et al (2022) states that the regular application of hypnobirthing during pregnancy and childbirth can make the mother's condition much better during childbirth. By implementing hypnobirthing, the mother's labor time is shorter, there is no birth trauma, and the level of pain and anxiety felt by the mother is relatively lower (Buran & Aksu, 2022).

Hypnobirthing is associated with shortening the first stage of labor, especially in primiparous mothers and may reduce the use of analgesics. Childbirth can be passed without complications and does not require surgery, forceps or vacuum, even the baby who is born has a normal APGAR score. Hypnobirthing is a method that teaches mothers to understand and release the tension of fear, pain syndrome (fear, tension and pain syndrome) which causes pain and discomfort (Darma et al., 2020). In research conducted by Darma et al (2020) it is stated that the use of hypnobirthing during labor, precisely in the active phase, greatly influences the progress of labor. Hypnobirthing helps make the first stage of labor shorter. The Hypnobirthing method is based on the belief that every mother who gives birth has the potential to undergo a natural, calm and comfortable birthing process. This method is used to control the mother's thoughts and insert positive suggestions into the mother's mind, so that it can give the mother a feeling of relaxation, increase the mother's sense of well-being so that it can encourage the physiological process of childbirth (Darma et al., 2020).

Other research that is in line, namely research conducted by Sumita et al (2023), states that hypnobirthing is very efficient in providing comfort to mothers giving birth. Hypnobirthing stimulates positive thoughts, feelings of calm and relaxation so that the mother feels comfortable. When the mother is in a comfortable condition, the brain will transfer hormones that can divert pain so that the pain felt by the mother can be reduced. If the pain can be controlled, and the mother feels comfortable and relaxed, the labor process will be faster (Ambarita & Simarmata, 2023). If hypnobirthing can be applied effectively, it can be a powerful intervention in the management of labor pain. Hypnobirthing can work better than general interventions and other medical treatments in reducing pain. However, hypnobirthing will be more beneficial and efficient in reducing labor pain if applied since pregnancy. So the mother's mental and emotional condition has been conditioned since pregnancy (Mahmoud et al., 2019).

CONCLUSION

Based on the results of the analysis of this case study, it can be concluded that the use of finger grip techniques and hypnobirthing is very effective in reducing the pain level of mothers in the 1st stage of labor. Therefore, it is hoped that health workers can apply these techniques in the practice of health services for pregnant and giving birth mothers.

DAFTAR PUSTAKA

- Alam, R. I., Jama, F., & Nurlian, S. (2022). The Effect of Finger grip Relaxation on Decreasing Anxiety of Pre-Sectio Caesarea Patients at RSIA Masyita Makassar. *Original Research International Journal of Nursing and Health Services (IJNHS)*, 5(1), 56–62.
- Ambarita, S., & Simarmata, M. (2023). The Effect of Hypnobirthing Techniques on The Delivery of Labor Process and The Level of Pain in Mother. *Jurnal Kebidanan Kestra (Jkk)*, 6(1), 9–13. <https://doi.org/10.35451/jkk.v6i1.1641>
- Ayu, N. G. M., & Supliyani, E. (2017). Karakteristik Ibu Bersalin Kaitannya Dengan Intensitas Nyeri Persalinan Kala 1 Di Kota Bogor. *Jurnal Kebidanan*, 3(4), 204–210. <http://www.ejurnalmalahayati.ac.id/index.php/kebidanan/article/viewFile/629/563>
- Buran, G., & Aksu, H. (2022). Effect of Hypnobirthing Training on Fear, Pain, Satisfaction Related to Birth, and Birth Outcomes: A Randomized Controlled Trial. *National Library of Medicine*, 35(5), 918–930. doi: 10.1177/10547738211073394
- Darma, I. Y., Abdillah, N., Idaman, M., & Morika, H. D. (2020). The effect of the implementation active birth technique using hypnobirthing accelerated the progress of the first stage of labor among intrapartum mother. *International Journal Of Community Medicine And Public Health*, 7(12), 4745. <https://doi.org/10.18203/2394-6040.ijcmph20205144>
- Evrianasari, N., & Yosaria, N. (2019). Pengaruh Teknik Relaksasi Genggam Jari Terhadap Nyeri Postsectio Caesarea. *Jurnal Kebidanan Malahayati*, 5(1), 86–91. <https://doi.org/10.33024/jkm.v5i1.802>
- Fitriani, Arlym, & Yuanti. (2022). Apakah Hypnobirthing Dapat Menurunkan Nyeri Persalinan?: Systematic Literature Review. *Jurnal Ilmiah Kesehatan*, 11(2), 135–142.
- Hartinah, R. (2020). Efektifitas Teknik Relaksasi Genggam Jari Terhadap Penurunan Kecemasan Pada Ibu Bersalin Kala 1 Fase Laten. *Jurnal Kesehatan STIKES Darul Azhar Batulicin*, 9(2).
- Hazma, Y., Nurlliyani, N., & Suharman, S. (2023). The Effect Of Counter Pressure On The Scale Of Labor Pain In Active Phase I In. *Jurnal Kebidanan Malahayati*, 9(1), 88–94. <https://doi.org/10.33024/jkm.v9i1.8927>
- Karuniawati, B., & Fauziandari, E. N. (2017). Pengaruh Hypnobirthing Terhadap Lama Persalinan Kala I. *Jurnal Kesehatan ...*, 08(02), 110–116.
- Khoiriyah, H., Susanti, T., Winarsih, W., Hidayati, N., & Septiana Pratiwi, C. (2022). Hypnobirthing Pada Penatalaksanaan Nyeri Persalinan: Scoping Review. *Jurnal Kebidanan Indonesia*, 14(1), 100–117. <https://doi.org/10.36419/jki.v14i1.766>
- Mahmoud, K. Z., Obeidat, B. S., & Ishmais, M. A. (2019). Hypnotherapy in management of

- delivery pain: a review. 14(Table 1), 495–501.
- Norhapifah, & Meihartanti. (2020). Pengaruh Teknik Hypnobirthing Terhadap Penurunan Intensitas Nyeri Pada Ibu Bersalin. *Jurnal Medika : Karya Ilmiah Kesehatan*, 5(1).
- Nurdiantini, I., Prastiwi, S., & Nurmaningsari, T. (2017). Perbedaan Tingkat Nyeri Persalinan pada Ibu Primipara dengan Ibu Multipara pada Kala I Persalinan di Rumah Sakit Paru Batu Kota Batu. *Journal Nursing News*, 2(1), 511–523.
- Pratiwi, D., Kadir, D., & Br Sembiring, J. (2023). The effect of hypnobirthing relaxation on the scale Pain in labor during the active phase I. *Science Midwifery*, 10 (6), 4494–4502. <https://www.midwifery.iocspublisher.org/index.php/midwifery/article/view/1126/934>
- Rahmawati, R., Yusriani, Y., & Idris, F. P. (2019). Pengaruh Hypnobirthing Terhadap Intensitas Nyeri Pada Ibu Bersalin Normal Di RSUD Labuang Baji Makassar. *Jurnal Ilmiah Kesehatan Diagnosis*, 14(2), 147–151. <https://doi.org/10.35892/jikd.v14i2.144>
- Sari, E. (2020). Pengaruh Terapi Relaksasi Akupresur (Genggam Jari) Terhadap Nyeri Persalinan Kala I Aktif di Bidan Praktek Mandiri Afah Fahmi Surabaya. *Jurnal Kebidanan*, 8(1), 12–21. <https://doi.org/10.47560/keb.v8i1.129>
- Sugianti, T., & Joeliatin. (2019a). PENGARUH TEKNIK RELAKSASI GENGGAM JARI TERHADAP PENURUNAN NYERI PERSALINAN KALA I. In *Conference on Innovation and Application of Science and Technology (CIASTECH)*, 2, 159–162.
- Sugianti, T., & Joeliatin, J. (2019b). Efektifitas Manajemen Nyeri Dengan Kompres dan Relaksasi Genggam Jari Terhadap Nyeri Saat Persalinan Kala I Fase Aktif (Studi Kasus di Wilayah Kerja Puskesmas Kertosono Kabupaten Nganjuk Tahun 2019). *Jurnal Kesehatan*, 7(2), 64–68. <https://doi.org/10.25047/j-kes.v7i2.91>
- Sukmawati, Nurhakim, F., & Mamuroh, L. (2023). Effectiveness Of Finger Grip Relaxation Technique On Pain In Post Sectio Caesarea: A Literature Review. 10(July), 48–57.
- Sundariningsih, Raksanagara, & Suardi. (2021). Efektivitas Hipnoterapi Terhadap Penurunan Nyeri Kala I Fase Aktif Parturien Primigravida Di Praktik Mandiri Bidan. *Jurnal Sistem Kesehatan*, 6(1), 26–32.
- Triyani, S., & Eugenie, T. (2018). Efektifitas Manajemen Nyeri Dengan Kompres Dan Relaksasi Terhadap Nyeri Saat Persalinan Kala I Fase Aktif. 2-Trik: Tunas-Tunas Riset Kesehatan, 8(1).
- Wahyuni. (2022). Penerapan Therapi Genggam Jari Dalam Meminimalisir Nyeri Persalinan Kala I Fase Aktif Pada Ny. M di PMB Hasmiati, S. ST Bandar Lampung. Doctoral Dissertation, Poltekkes Tanjungkarang.
- Wulandari. (2021). Penerapan Terapi Genggam Jari Dalam Meminimalisirnyeri Persalinan Kala I Pada Ny. E Dipmb Susi Hanili. Doctoral Dissertation, Poltekkes Tanjungkarang.
- Yulia Safitri, Desi Handayani Lubis, & Alfi Laili. (2023). The Effect of Hypnobirthing Relaxation Method on Pain Intensity in Labor Women at Pratama Hadijah Clinic, Medan Perjuangan District Medan City. *International Journal of Public Health Excellence (IJPHE)*, 3(1), 11–20. <https://doi.org/10.55299/ijphe.v3i1.390>.