

THE INFLUENCE OF KCP (KNEE CHEST POSITION) GYMNASTICS ON DECREASING FETAL HEAD

Yeni Nurhayani*, Ninik Indayani

STIKES Abdi Nusantara, Jl. Swadaya No.7, Jatibening, Pd. Gede, Bekasi, West Java 17412, Indonesia

[*yeni.nurhayani111@gmail.com](mailto:yeni.nurhayani111@gmail.com)

ABSTRACT

The lowering of the bottom part of the fetus is very important in assessing the progress of labor. Even so, it cannot be certain that the fetus enters the upper door of the pelvis (PAP) on time. In pregnancy where the fetal head is slow to enter the PAP, it is very likely that there will be long partus, overdue pregnancy and breech conditions or buttocks presentation that can harm the mother and fetus. One effort to try to reduce the fetal head is the knee-chest position or chest-knee position. The purpose of this study was to analyze the effectiveness of knee chest position (KCP) gymnastics against the lowering of the fetal head to enter the upper door of the pelvis (PAP). This research is an experimental quasy. In this study, the sample was divided into 2 groups, namely intervention as many as 15 people and control group 15 people. The sampling technique is purposive sampling Bivariate analysis used in this study is to determine whether there is a relationship between the two groups, namely with the independent t test. Based on the results of the independent t test, it was found that there was an effect of knee chest gymnastics on the decrease in fetal head to enter PAP and was statistically significant because the p value was $0.020 < 0.05$.

Keywords: fetal head; gymnastics; knee chest position

INTRODUCTION

Phase 1 in Labor is an important phase because there is a decrease in the lower part of the fetus which will determine the smoothness or normal delivery. The lowering of the bottom part of the fetus is very important in assessing the progress of labor At this time the fetal head should have entered the pelvic cavity, so many of the mothers who end up feeling very worried and anxious if the fetal head does not descend on the upper door of the pelvis (PAP) then it is likely to go through the labor process by cesarean section. One way that mothers can do to change the position of the breech fetus to normal is to do the knee-chest position.(Primihastuti, 2021)(Tafazolifar, 2019) The slow progress of labor even the absence of progress in labor is one of the dangers that can cause various labor complications such as long labor, obstructed labor, mislocation of the fetus or breech and transverse . This condition will be very dangerous for maternity mothers because the extension of the labor process will cause extreme pain and is very risky to cause the mother to experience shock to death.(Handayani, 2023)(Qonitul, 2019)

The progress of labor depends largely on the entry of the fetal head into the upper pelvic door, the entry of the lowest part of the fetus (usually the head) into the upper pelvic door (PAP) for mothers who have never given birth (nullipara) starting at 34 weeks or 8 months of gestation. However, in the lowest multipara part of the fetus can have entered PAP since 36 weeks of gestational age (Andarwulan, 2023). Even so, it cannot be certain that the fetus enters the PAP on time. In pregnancy where the fetal head is slow to enter the PAP, it is very likely that there will be long partus, overdue pregnancy and breech conditions or buttocks presentation that can harm the mother and fetus.(Dinda, 2021)

In addition, the fetal head that is not at the pelvis can also cause breech presentation. Breech presentation is a common malposition in the third trimester of pregnancy. The frequency of breech presentation at term is 3%-4%. Risk factors for reporting breech include preterm labor, uterine anomalies, multiparity, placenta previa and polyhydramnios. Serious complications, such as traumatic injury or asphyxia, can occur during vaginal delivery (Liao et al 2021).

Non-invasive try to reduce the fetal head is the knee-chest position or chest-knee position carried out by pregnant women such as prostration movements with the aim of rotating the fetus breech position to a normal position. Based on the results of research conducted by states that the knee-chest position performed on 102 women with breech fetal position this position was done for 5-10 minutes 2 times a day for one week had the results of 81% of 102 people (82 people) fetal posis rotated from breech position to normal position. Based on this background, researchers are interested in conducting an analysis of the effectiveness of knee chest position (KCP) gymnastics against the lowering of the fetal head to enter the upper door of the pelvis (PAP)(Morris, 2022)

METHOD

This study is a type of intervention research with experimental quasy design or pseudo-experiments conducted on two groups or two groups pre and post test. where researchers only intervene in two groups without randomization. The location used for this research is at PMB Yeni Nurhayani. In this study, the sample was divided into 2 groups, namely intervention as many as 15 people and control group 15 people. The sampling technique is purposive sampling. Inclusion criteria: gestational age 7-7.5 months or 28-34 weeks, the situation of the uterus that is still loose, there is no indication of fetal distress and umbilical cord twisting, willing to be a respondent. The bivariate analysis used in this study was to determine whether there was a relationship between the two groups, namely the independent t test. Knee chest intervention is done by chest and shoulders as much as possible attached to the floor and then fold both knees so that the thighs are perpendicular to the floor. Keep the position for 5-10 minutes. Perform knee chest position at least 3-4 x / day.

RESULT AND DISCUSSION

Univariate analysis

Based on the table above, this study used respondents as many as 30 samples in terms of age, in this study the majority of pregnant women are pregnant women of productive age, namely 20-35 years, which is as many as 16 respondents (53.3%), not much different respondents at a young age, namely < 20 years old with 12 people or equivalent to 40%,. The highest parity was primiparous, which was 16 respondents or 53.3%, while for multipara as many as 14 respondents (46.7%).

Table 1.
Characteristics of Respondents (n=30)

Characteristic	f	%
Age of Respondents		
< 20 Years	12	40
20 – 35 Years	16	53.3
> 35 Years	2	6.7
Parity		
Primipara	16	53.3
Multiparous	14	46.7

Table 2 it can be seen that 8 (26.3%) mothers who did not knee chest their fetus has not entered the upper pelvic door (PAP) and another 7 (23.3%) have entered the upper pelvic door. While in mothers who have applied knee chest, the majority of fetuses have entered PAP, namely as many as 13 mothers (43.3%) and only 2 mothers (6.7%) whose fetuses have not entered PAP.

Table 2
 Cross-Tabulation of Fetal Head Decline and Knee Chest Intervention (n=30)

Hodge field	Intervention and Control Group				Total	Percentage
	Control	%	Knee chest	%		
Not yet in PAP	8	26.7	2	6.7	10	33.3
PAP Login	7	23.3	13	43.3	20	66.7

Table 3
 Analysis of Independent T test the effect of Knee Chest Gymnastics on the entry of the fetal head in the upper door of the pelvis (PAP) (n=30)

Risk Estimate	Value	95% Confident Interval		P Value
		Lower	Upper	
	7.4	1.23	45.0	0.020

Table 3 based on the results of the independent t test, it was found that there was an effect of knee chest gymnastics on the decrease in the fetal head to enter PAP and was statistically significant because the p value was $0.020 < 0.05$. Risk analysis was also conducted to see the strength of the relationship and it was found that giving knee chests will increase the possibility of fetal head reduction in PAP up to 7 times compared to if you do not do knee chests.

This result is in line with research that reports the Elkins mechanism carried out by pregnant women with knee positions for 15 minutes can be done 3-4 times a day, found 91% of the location of the fetus rotates into the location of the head. The use of posis knee chest can be taken into consideration so that the incidence of cesarean section decreases, so that maternal pain and death can decrease.(Wigati, 2023) he knee chest position can help the entry of the fetal head in PAP because in this position the body support centered on the chest makes The position of the fetus in rahim leads to the center of gravity of the earth because the heaviest part of the fetus is the head so that the head will descend towards the center of gravity and enter the upper door of the pelvis.(Shinmura, 2022) The knee-chest position is often taught in pregnancy exercises. This position is performed at gestational age before 28 weeks in primigravida and gestational age less than 32 weeks in multigravida, by doing it 3-4 times a day for 15 minutes. The situation of the room that is still loose is expected to give the head a chance, down towards the upper door of the pelvis. The basis for consideration is because the head is heavier than the buttocks so that it will lead to the upper door of the pelvis.(Rudiyanti, 2021)

CONCLUSION

Knee chest will increase the possibility of fetal head reduction in PAP up to 7 times compared to if you do not do knee chest and statistically significant p value was $0.020 < 0.05$.

REFERENCES

- Primihastuti, D. &. (2021). Penggunaan Peanut Ball untuk Mengurangi Nyeri Persalinan dan Memperlancar Proses Penurunan Kepala Janin pada Persalinan Kala I di BPM Wilayah Surabaya. *Journals of Ners Community*, 12(1), 1-11.
- Tafazolifar, M. K. (2019). The Effect of knee-chest position on turning breech to cephalic presentation in pregnant women: randomized clinical trial. *The Iranian Journal of Obstetrics, Gynecology and Infertility*, 21(12), 57-64.
- Qonitul, U. &. (2019). Faktor-faktor yang Melatarbelakangi Kejadian Partus Lama pada Ibu Bersalin di RSUD dr. R. Koesma Tuban. *Jurnal Kesehatan dr. Soebandi*, 7(1), 51-57.
- Handayani, I. (2023). Asuhan Kebidanan Persalinan Pada Ny. D Dengan Letak Sungsang Dan Ketuban Pecah Dini Di R sud Sekarwangi. *Jurnal Kesehatan Siliwangi*, 3(3), 705-710.
- Andarwulan, S. &. (2023). Efektivitas Birthing Ball pada Ibu Primipara terhadap Persalinan Kala Dua. *Jurnal Ilmiah Kebidanan*, 10(1), 14-21.
- Dinda, N. S. (2021). Manajemen Asuhan Kebidanan Intranatal Patologi dengan Persalinan Letak Sungsang (Literatur Review). *Jurnal Midwifery* , 3(2).
- Morris, S. G. (2022). Breech presentation management: A critical review of leading clinical practice guidelines. *Women and Birth*, 35(3), e233-e242.
- Wigati, D. N. (2023). Asuhan Kebidanan Ibu Hamil Sungsang Dengan Fokus Intervensi Posisi Knee Chest Untuk Mengubah Presentasi Janin Di Puskesmas Purwodadi I. *The Shine Cahaya Dunia Kebidanan*, 8(01).
- Shinmura, H. M. (2022). Cephalic version by postural management in the lateral position without the knee-chest position for primiparous breech presentation: A retrospective cohort study. *Journal of Obstetrics and Gynaecology Research*, 48(3), 703-708.
- Rudiyanti, N. R. (2021). Efektifitas Prenatal Yoga dalam Penanganan Kehamilan Sungsang. *Jurnal Kesehatan Metro Sai Wawai*, 14(1), 30-37.
- Liao, J. A., Shao, S. C., Chang, C. T., Chai, P. Y. C., Owang, K. L., Huang, T. H., ... & Chen, Y. C. (2021, May). Correction of breech presentation with moxibustion and acupuncture: a systematic review and meta-analysis. In *MDPI Healthcare* (Vol. 9, No. 6, p. 619).