

Partograph training: knowledge and attitude to implementation



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ABSTRACT

One of the efforts to accelerate the reduction of MMR in the operation of antenatal services, by increasing the coverage of pregnant and childbirth services, one of which is the help of childbirth by using partographs. Partograph training aims to help birth attendants such as midwives can determine the attitude in the event of a long delivery so there is no delay in deciding to refer. This study aims to determine the effect of training treatment on midwives' knowledge and attitudes to implementation of partographs for women giving. The research in this study used Quasi Experiment Research. This research was conducted on a total sample of 48 midwives who worked in PHC in Kupang City that have Basic Emergency Neonatal Obstetric Services in 2019. Data analyzed using descriptive statistics and paired sample t-test. Most of the respondents are >30 years old (69.7%), have a Diploma in Midwifery education (75.8%), and have received partograph training (75.8%). There was a significant influence of partograph training to knowledge (Mean -35.625; 95% CI -38.674-(-32.576); p-value 0.000) and attitude (Mean -10.521; 95% CI -12.025-(-9.025); p-value 0.000). Partograph training has a great influence on the knowledge and attitudes of midwives in the implementation of partographs in childbirth mothers.

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INTRODUCTION

The profile report of district health offices in NTT Province shows that maternal mortality cases from 2014-2017 experienced fluctuations wherein 2014 the number of maternal deaths 158 cases increased in 2015 to 178 cases in 2016 decreased to 177 cases and in 2017 decreased again to or 163 / 100,000 KH. ⁽¹⁾ The mortality rate in the NTT region especially Kupang City is quite high. Based on data reported by the Family Health Sector, the maternal mortality rate was 49 / 100,000 KH. ⁽²⁾ Government programs to reduce MMR and IMR one of them is *Expanding Maternal Neonatal Survival* (EMAS) with a target of reducing MMR and IMR by 25%. This program is carried out in provinces and districts where the number of maternal and infant deaths is large. ⁽³⁾ The same effort was also endeavored by the NTT Provincial Health Office, to overcome this problem, the NTT Province has initiated breakthroughs with the MCH Revolution with the motto of all mothers giving birth to inadequate Health Facilities. Which achievement indicators include the declining role of traditional birth attendants in assisting childbirth or increasing the role of skilled health workers in assisting childbirth. ⁽¹⁾

Coverage of delivery assistance by health workers in Kupang City in the 2014-2017 period on average increased, in 2010 coverage of delivery assistance by health workers amounted to 72.92%,



which then increased to 82.50% at the end of 2015. ⁽²⁾ With thus demonstrating the importance of implementing quality care to mothers from pregnancy to childbirth or during a mother of reproductive age and newborns. Ministry of Health to accelerate the decline in MMR that occurs during labor through a paradigm shift, namely: shifting the mindset that focuses on observing and using partographs to monitor the condition of the mother and fetus and the progress of labor. ⁽⁴⁾

The role of partographs in old delivery, detection is very large so that the ability to use good partographs by midwives is needed. Midwives have experienced midwifery practices having different parts of knowledge, both obtained through education and training. This is related to the different educational backgrounds of midwives so that the understanding and perception of partographs are different. ⁽⁴⁾

Midwives as one of the health professionals in the field of providing midwifery services according to midwifery service standards are required to be able to predict abnormalities that occur during labor by using a partograph that can describe the state of the mother, the state of the fetus, the progress of labor, resulting in deviations and abnormalities, midwives can make clinical decisions to terminate labor or be referred to more adequate health facilities. ^(5,6)

Kupang City Health Center Poned is a place of delivery that handles normal deliveries at any time. The number of deliveries in the period July 2017 to July 2018 was 201,300. Thus it is necessary to apply partographs at each delivery to be able to determine what needs to be done immediately, according to the condition of the mother and fetus, so that maternal and fetal deaths can be reduced to a minimum.

Based on the assessment of the filling of partograph sheets on 35 midwives who participated in the training *midwifery update* in Kupang, the results obtained were 50% incomplete in the initial writing of the cervical opening examination, reduction in the lowest part of the fetus, hours when first felt contractions and rupture of membranes, the total volume of urine not written and incompleteness on filling in the patient's initial data as well as the baby's birth date. With the partograph, the midwife can control the progress of labor and make the right decisions. This encourages researchers to carry out research. Effects of Partograph Training on midwives' knowledge and attitudes in the application of partographs to mothers giving birth in delivery rooms at Poned Puskesmas in Kupang City "2019

METHOD

The approach used in the research in this study is Quasi Experiment Research (Research Experiment *Quasi Experiment*). The study sample was a total population of all midwives in the delivery room Puskesmas Poned Kupang City of 48 people. To answer the problem formulation, the hypothesis test used is to use *paired sample t-test*. Test *paired samples t-test* was performed to determine the effect of APN training on knowledge and attitude of midwives in the application partograph maternal,

RESULTS

Characteristics of Research Subjects

Table 1. Characteristics of Respondents

No	Characteristics of Respondents	F	%
Age			
1	<25 years	6	6.1
2	25-30 years	12	24.2
3	> 30 years	30	69.7
Education			
1	D3	40	75.8
2	D4 / S1	6	15.2
3	S2	2	9.1
APN training			
1	Yes	40	75.8
2	No	8	24.2

The above table shows that most respondents aged > 30 years were 30 people (69.7%), aged 25-30 years were 12 people (24.2%), and <25 years were 6 people (6.1%). The results of the study showed that the majority of respondents educated in D3 in Midwifery were 40 people (75.8%), had D4 / S1 education in 6 people (15.2%), and S2 education in 2 people (9.1%). The table above shows that the majority of respondents had attended the Normal Childbirth Training as many as 40 people (75.8%) while those who had not attended the APN training were 8 people (24.2%).

Learning outcomes Partograph training

Table 4 Partograph Training Learning Outcomes Data

Sample Group	N	Average	Standard Deviation	Variance	lowest score	Highest Score
Early Test Knowledge	48	61.04	13,086	171,232	40	80
FinalTest Knowledge	48	96.67	6,302	39,716	80	100
Initial Attitude Tests	48	88.12	6,967	48,537	60	95
Final Attitude Test	48	98.65	3,219	10,361	85	100

In the knowledge variable with a total sample of 48 people, the average score of the pre-test (pre-test) of partograph training is 61.04 with a standard crossing of 13.086 and variance of 171.232 and the lowest score of 40, and the highest score of 80. For the final test (post-test) Partograph training with a total sample of 48 people obtained an average score of 96.67 with a standard intersection of 6.302 and variance of 39.716 and the lowest score of 80 and the highest score of 100. While on the attitude variable with a total sample of 48 people obtained an average initial test score (pre-test) of 88.12 with a standard intersection of 6.967 and variance of 48.537 and the lowest score of 60 and the highest score of 95. For the final test (part test) for partograph training, a sample size of 48 people obtained an average score of 98.65 with an intersection standard of 3,219 and variance of 10,361 and the lowest score of 85, and the highest score of 100. Effect of APN Training on Knowledge and Attitudes of Midwives in the application of partographs in childbirth

Table 5 Effects of APN training on midwives' knowledge and attitudes in implementing partographs

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Knowledge Pre and Post-test	-35.625	10.499	1.515	-38.674	-32.576	-23.508	47	.000
Pair 2	Attitude Pre and Post-test	-10.521	5.182	.748	-12.025	-9.016	-14.067	47	.000

From the results of the statistical tests above, it can be concluded as follows:

The Effect of Partograph Training on Midwives Knowledge in Partograph Application in Birth to Women

The calculated value for the knowledge variable is -23.508 with a probability (Sig.) Of 0,000. Because of the probability (Sig.) 0.000 <0.05 then H_0 Rejected. This means that there is a significant influence of partograph training on the results of knowledge of midwives in the application of partographs in mothers giving birth. Based on the results of this processing, it can be concluded that partograph training gives a great influence on the knowledge of midwives in the application of partographs in mothers giving birth.

The Effect of Partograph Training on Midwife Knowledge in the Application of Partographs on Childbirth Mothers' t-counts for attitude variables are -14,067 with a probability (Sig.) Of 0,000. Because of the probability (Sig.) 0.000 <0.05 then H_0 Rejected. This means that there is a significant

influence of partograph training on the results of the midwife's attitude in the application of partographs in childbirth. Based on the results of the processing, it can be concluded that partograph training has a great influence on the attitude of midwives in the application of partographs in mothers giving birth.

DISCUSSION

Characteristics of Respondents

Table 1 above shows that the majority of respondents aged > 30 years are 30 people (69.7%), the education level of respondents is mostly D3 Midwifery as many as 40 people (75.8%) and the majority of respondents have received APN training which is 40 people (75.8%).

According to Nursalam, age 25-30 years is a fairly mature age in the development of one's soul.⁽⁶⁾ Based on the age characteristics, it shows that the respondent's tendency is better in applying partograph when normal delivery care.

Good midwife knowledge about partographs cannot be separated from experience and education and supporting factors around the mother such as training and seminar seminars that have been attended by midwives and technological advances in the world of health, especially midwifery.^(4,5) In this study, it was found that the majority of respondents were midwifery D3 graduates, D4 and S2 and most midwives had attended normal childbirth training (APN), midwifery updates so that midwives' knowledge of partographs was also better. The level of education of a midwife influences the partograph filling during normal childbirth assistance where the higher the education the better the expectant partograph is.

In theory, the higher a person's level of education, the easier it is to receive information so that the more knowledge he has. The level of education is a process of developing human resources. According to Notoatmodjo education is one of the factors that is the basis for implementing action. Education is a learning process which means that in education the process of growth, development, or changing the direction to more mature.⁽⁷⁾

Normal Delivery training learning outcomes data

In the knowledge variable with a total sample of 48 people, the average score of the pre-test (pre-test) of partograph training is 61.04 with a standard crossing of 13.086 and variance of 171.232 and the lowest score of 40, and the highest score of 48. For the final test (post-test) Partograph training with a total sample of 48 people obtained an average score of 96.67 with a standard intersection of 6.302 and variance of 39.716 and the lowest score of 80 and the highest score of 100. While on the attitude variable with a total sample of 48 people obtained an average initial test score (pre-test) of 88.12 with a standard intersection of 6.967 and variance of 48.537 and the lowest score of 60 and the highest score of 95. For the final test (part test) for partograph training, a sample size of 48 people obtained an average score of 98.65 with an intersection standard of 3,219 and variance of 10,361 and the lowest score of 85, and the highest score of 100.

From the description of partograph training data, it can be seen that the average of the final test sample group is higher than the average of the initial test sample group. This can be assumed to be an improvement towards a better knowledge of midwives' knowledge and attitudes about partographs.

Effect of Normal delivery training

Based on table 3. shows that most respondents had initial knowledge about low partograph 40 and high knowledge about partograph 80, respondents who had final knowledge about low partograph 80, and respondents who had high final knowledge about partograph 100. This study showed that the better the knowledge of a midwife the better it is in applying partographs during normal childbirth care. Knowledge is a domain that is very important for the formation of an action on good behavior that is beneficial for an activity.⁽⁷⁾

According to Ali stated that the midwife's knowledge of normal delivery care influences the midwife in applying partographs to maternity when performing Normal Childbirth Care (APN). According to Soetimah (2004) that knowledge is very influential on a person's behavior to be obedient. Midwife's knowledge about partographs is support for midwives in implementing good and safe APN by the tasks carried out and needs to be optimized.^(4,5)

Knowledge is the result of knowing, and this happens after people have sensed a certain object. Sensing occurs through the five human senses namely vision, hearing, touch, smell, taste.

Most of the knowledge or cognitive is a very important domain in shaping one's actions (*overt behavior*). Based on experience and research it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. However, the formation of behavior itself is not solely based on knowledge but is still influenced by many very complex factors. ⁽⁷⁾

Knowledge plays an important role in determining how a person acts. When a midwife is well aware of the benefits of partographs, it is most likely to apply partographs to any normal delivery care provided. This knowledge can be obtained from education, training, or experience while working. ⁽⁷⁾ However, the results of the study also showed that there were still respondents with a good level of knowledge about partographs, but did not apply partographs properly when giving normal childbirth care. This happens because, besides knowledge, many other factors influence the application of partographs to pregnant mothers. Some of them are the level of perceived needs or attitudes and beliefs regarding health services.

This is not in line with Green's theory in Notoatmodjo about knowledge factors that influence a person's behavior. In the opinion of Notoatmodjo that knowledge a person has 5 levels, the lowest level is to know (*know*) that is defined simply can mention, the second and third tiers, namely to understand and apply the principles of the unknown. ⁽⁷⁾

According to Rosanti, to improve the behavior of a midwife, knowledge is very important for the formation of one's actions. That is, the higher the level of one's knowledge the greater awareness to apply partographs or the level of participation becomes active. ⁽⁸⁾

Based on table 4. shows that the majority of respondents have a low initial attitude in the application of partographs during normal childbirth care by 60 while those who have a high initial attitude in the application of partograph 95. The results of this study indicate that the more effective the attitude of a midwife, the better the apply partograph when normal delivery care. According to the theory that attitude is related to obedience in carrying out care to mothers in labor. ⁽⁵⁾

The results of this study are supported by research conducted by Fauziah which states that midwives have a positive attitude of 88%. A good attitude will affect the compliance of midwives in applying partographs to normal childbirth care.

Attitude is a reaction or response that is still closed from someone to a stimulus or object. Attitude is a readiness to react to certain environmental objects as an appreciation of the object. A positive attitude towards an object is not necessarily expressed in the form of action, thus in studying individual attitudes not only based on actions but must be based on a phenomenon that can be observed and measured in a verbal form such as statements of belief, statement of intention and also in the form of non-verbal like physiological reactions. ⁽⁷⁾

Attitude is the intention in a person not to do or do the work as part of a fun activity. A good attitude is an attitude where people want to do the work without being burdened by something that becomes an internal conflict. a midwife who has a positive attitude/belief about partograph will apply well when labor is normal and vice versa, a midwife with a negative attitude/belief or not sure about the partograph will not apply at the time of labor delivery. ⁽⁸⁾

An attitude has not been automatically realized in an action to manifest the attitude into real action. It requires supporting factors or a condition that allows a midwife to apply to partographs. According to Allpont, the attitude has 3 main components, namely: Trust, ideas, and concepts of an object, emotional life or emotional evaluation of an object, the tendency to act. These three components together can form a complete attitude. ^(7,9)

In determining this whole attitude, knowledge, thoughts, beliefs, and emotions play an important role. As with knowledge, attitude also has levels based on its intensity, as follows: Receiving, means that a person or subject is willing to accept a given stimulus (object), Responding (*responding*), means someone gives an answer or response to a question or object faced, regardless of right or wrong, Respect (*valuing*), means someone gives a positive value to the object or stimulus, in the sense of discussing it with others even inviting or influencing or encouraging others to respond and be responsible (*responsible*), the most attitude a high level is responsible for what he believes. Someone who has taken a certain attitude based on his belief must dare to take risks if other people mock or other risks. ^(7,9)

CONCLUSION

Based on the results of this processing, it can be concluded that partograph training has a great influence on the knowledge and attitudes of midwives in the application of partographs in childbirth mothers.

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REFERENCES

1. Dinkes Propinsi, *Data Profil NTT tahun 2017*, Kupang, 2017.
2. Dinkes Kota Kupang, *Data Profil NTT tahun 2017*, Kupang., 2017.
3. Kemenkes RI, *Profil Kesehatan Indonesia tahun 2015*, Jakarta, 2015.
4. JNPK-KR, *Buku Acuan Pelatihan Klinik Asuhan Persalinan Normal*, Jakarta, 2017.
5. -----, *Pengantar Kuliah Bidan*, Jakarta, EGC, 2007.
6. Nursalam, *Konsep dan Penerapan Metode Penelitian Ilmu keperawatan*, Jakarta, Salemba Medika.2009.
7. Notoatmodjo, Soekidjo, *Promosi Kesehatan dan Ilmu Perilaku*, Jakarta, Rineka Cipta.2010.
8. Rosanti, *Keterampilan Pengisian Partograf Pada Mahasiswa Akademi Kebidanan di Wilayah Kota Jakarta Timur*. Jakarta.2015.
9. Mubarak, Nurul, Rozikin, Supradi, *Promosi Kesehatan*, Yogyakarta, Graha Ilmu.2007