



The Effectiveness of the Monitoring Card on the Motivation of Pregnant Women with Chronic Energy Deficiency (CED) in Monitoring Pregnancy Development

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Received: 30 January 2021/Accepted: 19 February 2022/Published Online: 28 February 2022
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Abstract

Chronic Energy Deficiency (CED) is a condition in which a person's nutritional status is poor due to a lack of consumption of food sources of energy that contain macronutrients. The results of Basic Health Research 2013, showed that CED in pregnant women was 24.1%, decreased in 2018 by 17.3%, in West Lombok Regency in 2018, the prevalence of CED was 13.36% , and increased in 2019 to 14.0%. This study aims to determine the effectiveness of the monitoring card on the motivation of pregnant women with CED in monitoring pregnancy development in West Lombok Regency. This study is a quasi-experimental study with a total sample of 52 people, which were divided into an intervention group and a control group. The data collected were in the form of pregnancy development monitoring data, pre-test and post-test data on the motivation of pregnant women. The results of the Independent T test statistic in the pre test showed that there was no difference in the mean motivation of pregnant women with CED (p value: 0.828; $p > 0.05$). While the post test results obtained P value: 0.001 it can be concluded that there is a difference in the average motivation score between CED pregnant women who are given a monitoring card and CED pregnant women with the MCH Handbook. Based on the results of the study, it can be concluded that the monitoring card is effective in increasing the motivation of pregnant women with CED in monitoring the progress of pregnancy.

Keywords: Chronic Energy Deficiency; Monitoring Card; Motivation

INTRODUCTION

One of the nutritional problems faced in Indonesia is nutritional problems during pregnancy. The quality of the baby born is very dependent on the nutritional state of the mother before and during pregnancy. The impact of maternal malnutrition before and during pregnancy can cause intrauterine growth restriction (IUGR), low birth weight (LBW), impaired growth and development of

various vital organs of the baby as well as increased risk of infant morbidity and mortality.

CED is a condition in which a person's nutritional status is poor due to a lack of consumption of food sources of energy that contain macronutrients. Women's needs will increase than usual if the exchange of almost all ingredients occurs very actively, especially in the third trimester. Increasing the amount of food

consumption needs to be added, especially the consumption of food sources of energy to meet the needs of the mother and fetus, so consuming less calories will cause malnutrition.(Ely Nur Fauziyah, Sri Dinengsih, 2021)

According to Arisman nutritional adequacy during pregnancy can be monitored through maternal health parameters and fetal birth weight. Low body weight before conception, as well as adequate weight gain are direct assessments that can be used to estimate fetal growth rate. Birth weight is positively correlated with total body weight gain during pregnancy.

The recommended weight gain for pregnant women today is usually based on the mother's body mass index (BMI) before pregnancy. The Sub Committee on Nutritional Status and Weight Gain During Pregnancy, Food and Nutrition Board (IOM, 1990) stipulates recommendations for weight gain for pregnant women in the second trimester and third, each according to body mass index (BMI), for example for pregnant women with normal BMI the average weight gain is 0.4 kg per week, underweight 0.5 kg per week, and obese 0.3 kg per week.(Talahatu, 2006)

The results of research conducted by Eka Nurhayati stated that there was a relationship between weight gain during pregnancy and birth weight with p-value = 0.024 with OR: 3.3, which means that mothers who have weight gain that are not in accordance with the recommendations have the opportunity to give birth to babies with low birth weight compared to with mothers who experienced weight gain according to the recommendations.(Nurhayati, 2015)

Maternal weight gain greatly affects the growth of the fetus in the womb, the greater the mother's weight gain, the larger the fetus will be born. Fetal weight can be predicted using an

approximate fetal weight approach based on uterine fundal height, ultrasound and others. Fetal weight can be measured simply using formulas including the Johnson Toshack formula. This formula is calculated based on the height of the uterine fundus, which is the distance from the top of the pubic bone to the top of the uterus in centimeters minus 11, 12 or 13, the result is multiplied by 155 to get the baby's weight in grams.(Alfi Laili Puspita, 2019)

The results of Baseline Health Research found that CED in pregnant women was 24.1%, a decrease in 2018 which was 17.3%. In the West of Nusa Tenggara, 17.40% of pregnant women experienced CED, higher than the expected target of 15.5%. In West Lombok Regency in 2018, the prevalence of CED was 13.36%, and increased in 2019 to 14.0%. Of the 19 Public health center in the West Lombok district, the Dasan Tapen Health Center ranks first with the most CED incidence, namely 15.04% in 2018 and increased to 20.52% in 2019. Meninting Health Center ranks second with the most CED incidence, namely 16, 08% in 2018 decreased to 15.0% in 2019.(Dikes, 2019)

Various efforts have been made by the government in tackling the problem of CED in pregnant women, namely the existence of the first thousand days of life program by providing additional food, milk and ferrous sulfate tablets to prevent anemia and continuing to communicate information and education to pregnant women, families and communities in order to maintain food intake. good nutrition, maintain a healthy lifestyle and improve health services to the community.

Based on the Decree of the Minister of Health Republic of Indonesia number 369 of 2007 concerning midwifery professional standards regarding maternal intervention pregnant with CED, can be done by: make referrals to nutrition workers and collaborate to help monitor and

evaluate food intake and weight gain. But if not there is a nutritional health worker, the midwife can conduct education on eating patterns, giving additional food, as well as monitoring and evaluation.(Prawita, Arsy, Susanti, Ari Indra Sari, 2017)

Research results from Kathleen and Drora Fraser suggest giving intervention to the mother pregnant with CED has a positive effect on weight baby born. This research reveals that the risk of IUGR or LBW can be decreased with intervention.(Prawita, Arsy, Susanti, Ari Indra Sari, 2017)

To realize family independence in maintaining maternal and child health, one of the government's program efforts is to increase family knowledge and skills through the use of Maternal and Child Health Books. nutritional status of pregnant women with CED which can be seen from the addition of weight gain every trimester or every month.

Motivation is a tendency that arises in a person consciously or unconsciously to do something an act with a certain intention or effort that causes a person or group of people to be moved do something because you want to achieve the desired goal, motivation will create a change in energy. Motivation changes psychological symptoms, emotions, and actions to do something. When the nutritional needs of pregnant women increase, this is due to the high intake of nutrients needed by the mother and fetus, then with good motivation the mother will continue to try to check herself to find out the condition of the fetus. (Puspitasari & Satriyandari, 2019)

The high incidence of CED in each area can be seen because of the recording of the results of examinations during antenatal visits that have been carried out by midwives, but no CED target data

has been detected based on BMI, data on weight gain that must be achieved by pregnant women based on monthly BMI or based on trimester . Pregnant women and their families do not know that weight gain during pregnancy is not the same for every pregnant woman, either per trimester or per month. The information contained in the maternal and child health book which is filled out by the midwife at each visit is the weight at the time of the visit, the height of the uterine fundus, and the information provided by the midwife at the time of the visit, so it is necessary to conduct research on the effectiveness of the Monitoring Card on the motivation of pregnant women with CED in monitoring developments. pregnancy. The purpose of this study was to determine the effectiveness of the monitoring card on the motivation of pregnant women for CED in monitoring the development of pregnancy in West Lombok Regency.

METHODS

This type of research is a quasi-experimental with a non-equivalent pretest-posttest design. This study compares two research groups, namely between the group of CED pregnant women with the Monitoring Card and the group of CED pregnant women with the maternal and child health book.

The monitoring card used contains a table of measurement results for upper arm circumference, weight gain of pregnant women according to BMI, estimated fetal weight and uterine fundal height according to gestational age, which is filled in by KEK pregnant women after checking their pregnancy.

The two existing groups were given a pre-test, then given treatment and finally given a post-test. In this study, the sample size was 52 pregnant

women. The sampling technique in this study was carried out using purposive sampling. The number of samples for each Puskesmas was: 26 pregnant women from the working area of the Dasan Tapen Health Center and 26 pregnant women from the Meninting Health Center working area. The data obtained were analyzed using univariate and bivariate analysis

Medical Faculty of Mataram University has conducted ethical feasibility and provided information on the ethical review decision form number 178/UN18.F/ETIK/2021 and states that this study was ethically. Before collecting data the researcher conducts ethical procedures by explaining important research points including the objectives, research process, benefits, and risks that may occur during the study. Patients who are willing to become participants sign an informed consent sheet as a form of consent without coercion. The measurement of motivation in this study used a motivational questionnaire for pregnant women CED in monitoring the progress of pregnancy.

RESULTS

Table1. Distribution of Respondents by Parity, Education and Employment of Pregnant Women CED

Variable	Group			
	Intervention	%	Control	%
Parity				
Primiparous	8	30,8	14	53,8
Multiparous	18	69,2	12	46,2
Education				
Primary	7	26,9	4	15,4
Junior High School	9	34,6	5	19,2
Senior High School	8	30,8	15	57,7
College Graduate	2	7,7	2	7,7
Respondent Worked				
No Work	3	11,5	4	15,4
Work	23	88,5	22	84,6

Table 2. Distribution of Respondents by Age

Age	Group	
	Intervention	Control
Mean	27	25,4
Min –Max	17 - 35	19 – 39
SD	5,13	5,24

The highest parity of CED pregnant women was 18 people (69.2%), in the control group, the highest number of pregnant women were primiparas as many as 14 people (53.8%). The education of pregnant women in the intervention group was mostly junior high school education as many as 9 people (34.65%), while for pregnant women the control group had the most high school education as many as 15 people (57.7%). The work of pregnant women in the intervention group was more than 23 people (88.5%) as well as the control group, the majority were mothers who did not work as many as 22 people (84.6%). The average age of pregnant women in the intervention group was 27, with a minimum age of 17 and a maximum age of 35, while in the control group the average age of mothers was 25.4, with a minimum age of 19 and a maximum age of 39 years.

Table 3. Weight Gain, Uterine Fundal Height And Estimated Fetal Weight

Respondent Weight	Group	
	Intervention	Control
Mean	6,87	5, 80
Min –Max	5– 9	4 – 8
SD	0,9	1, 29
Uterine Fundal Height	Group	
	Intervention	Control
Mean	10,73	9,77
Min –Max	7 – 15	4 – 14
SD	2,070	3,570
Estimated Fetal Weight	Group	
	Intervention	Control
Mean	2772	2450

Min –Max	2015 – 3410	2015 – 3255
SD	470,80	427,34

The average weight gain of pregnant women in the intervention group was 6.87 with a Min - max weight gain of 5–9 and an SD value of 0.9, while in the control group the average weight gain of the mother was 5.80 with Min – Max weight gain is 4 – 8 and SD value is 1.29. The average increase in uterine fundal height in the intervention group was 10.73 with an increase in uterine fundal height Min-Max was 7-15, SD value was 2.070, in the control group the average uterine fundal height was 9.77, with an increase in uterine fundal height Min – max that was 4 -14, SD value 3,570. The estimated mean fetal weight in the intervention group was 2772, with a min-max estimated fetal weight of 2015 – 3410, the SD value of 470.80, while in the control group the average estimated fetal weight was 2450 with a Min – Max estimated fetal weight of 2015 – 3255, the value of SD 427.34.

Table 4. Pregnancy Progress Monitoring Ability

Pregnancy Progress Monitoring Ability	Group	
	Intervention	Intervention
Mean	6,81	4,38
Min –Max	6 – 7	4 – 6
SD	0,40	0,80
Total	26	26

The average of mother's ability to monitor pregnancy progress in the intervention group was 6.81 with a Min - max value of 6-7 and an SD value of 0.40, while in the control group the average mother's ability to monitor pregnancy progress was 4 .38 with a Min – Max value of 4 – 6 and an SD value of 0.80.

Table 5. CED Pregnant Women's Motivation Before and After Intervention

Pre Test	Group	
	Intervention	Intervention
Mean	62,5	62,23
Min –Max	56-69	54 – 69
SD	4,27	4,6
Total	26	26

Post Test	Group	
	Intervention	Intervention
Mean	69,62	66,12
Min –Max	61 – 75	57 – 72
SD	2,81	0,80
Total	26	26

The average mother's ability to monitor pregnancy progress in the intervention group was 6.81 with a Min - max value of 6-7 and an SD value of 0.40, while in the control group the average mother's ability to monitor pregnancy progress was 4 .38 with a Min – Max value of 4 – 6 and an SD value of 0.80.

Table 6. Motivation for CED Pregnant Women Before and After Intervention

Group	Group	
	Intervention	Intervention
Mean	62,5	62,23
Min –Max	56-69	54 – 69
SD	4,27	4,6
Total	26	26

Group	Group	
	Intervention	Intervention
Mean	69,62	66,12
Min –Max	61 – 75	57 – 72
SD	2,81	0,80
Total	26	26

The average motivation of CED pregnant women before being given the intervention was 62.5 with a Min-max value of 56-69 and in the control group an average value of 62.23 was obtained with a Min-Max value of: 54-69, and

based on the results post test mother's motivation increased after being given the intervention with an average value of 69.62 and a Min-max value of 61-75, and in the control group the average value was 66.12 with a Min-max value of 57-72.

Table 7. Analysis Of The Motivation Of Pregnant Women Before And After The Intervention

Group	Mean	SD	CI	P Value	
Pretest- posttest of Intervention	-7,115	3,53	-8,54	-5,62	0,0001
Pretest – post test of Control	-3,845	4,31	-5,65	-2,14	0,0001

Based on the results of statistical tests with a paired T test with a significance level of 95% ($\alpha = 0.05$), the p-value is 0.0001 so it can be concluded that there is an effect of the monitoring card on the motivation of pregnant women for CED in pregnancy monitoring, and in the control group the results of the test are obtained. statistic with P value 0.0001 means that there is an influence of Maternal and Child Health books on the motivation of pregnant women CED.

Table 8. The Effectiveness of Monitoring Cards on the Motivation of Pregnant Women CED

Pre Test	Mean	SD	CI	P Value	
Monitoring Card	62,50	4,27	-2,208	2,74	0,828
Maternal And Child Health Book	62,23	4,61	-2,209	2,74	

Post Test	Mean	SD	CI	P Value	
Monitoring Card	69,62	2,81	1,575	5,42	0,001
Maternal And Child Health Book	66,12	3,99	1,570	5,43	

The independent T test in the pre test showed that the p value was 0.828 because the P value > 0.05, so there was no difference in the mean

motivation of CED pregnant women between groups of CED pregnant women with monitoring cards and maternal and child health books before being given the intervention where the motivation score of CED pregnant women was with monitoring cards and maternal and child health books are almost the same. While the post test results obtained P value: 0.001, it can be concluded that there is a difference in the average motivation score between CED pregnant women who were given a monitoring card and CED pregnant women with the Child's Maternal Health Book where the motivation score of pregnant women with the monitoring card is higher than the motivation score. in the control group.

DISCUSSION

During pregnancy, the mother's weight is expected to increase by ± 12.5 kg, depending on body size and pre-pregnancy weight. The expected weight gain in the first trimester is an increase of 2-4 kg, in the second trimester there is an increase of 0.4 kg per week, in the third trimester there is an increase of 0.5 kg or less per week (Asplun, 2008; Morgan, 2009).

Akbar Shiddiq's research (2014) found an increase in body weight during pregnancy from mothers who were the most research subjects in the range less of 10 kg as many as 39 people with an average of 7.46 kg ($\pm 1,274$ SD) while mothers with an increase in body weight of more than 12 ,3 kg obtained by 27 people with an average of 17.39 kg (± 5.792 SD). Overall, the average weight gain of pregnant women was 11.29 kg (± 5.194 SD).(Akbar Shiddiq, 2014)

Maternal fat storage during pregnancy will reach its peak in the second trimester and then will decrease further as the needs of the fetus increase at the end of pregnancy. This of course will affect the

weight of the mother during pregnancy. Disruption of the mother's food intake will affect the storage and energy needs of the mother and the growing fetus. In addition to increased deposits, maternal weight gain during pregnancy is also caused by the growth of the uterus and its contents.(Yongki, 2017)

The average increase in uterine fundal height in the intervention group was 10.73 with an increase in uterine fundal height Min-Max was 7-15, SD value was 2.070, in the control group the average uterine fundal height was 9.77, with an increase in uterine fundal height min – max that was 4 -14, SD value 3,570.(Akbar Shiddiq, 2014)

Research by Rika Anggrenisa (2018) Based on the results of the analysis, the average picture of TFU at the Nurhalma and Pratama Jannah clinics in the Tembung area is 32.76 cm, the maximum minimum value is 26 cm and 38 cm with a standard deviation of 3.083. The average birth weight of babies is 3,050 grams, the maximum minimum value is 2000 and 4200 grams.(Ely Nur Fauziyah, Sri Dinengsih, 2021)

Uterine fundal height measurement is used as an indicator of fetal growth progress by calculating the estimated fetal weight. The difference in the position of the uterine fundal height measurement causes different results. If an error occurs in measuring the height of the uterine fundus, there will also be an error in calculating the estimated fetal weight so that it will affect the accuracy in early detection of fetal growth and development and accuracy in delivery (Sakinah, 2019 in Ely Nurfauziyah, 2021)

The measurement of the uterine fundal height above the symphysis pubis is used as an indicator to determine the progress of fetal growth and can be used as an estimate of gestational age (Mufdillah, 2009). Measurement of uterine fundal height can

replace ultrasound measurements but this measurement is influenced by race and parity. Measurement of uterine fundal height using a tape measure gives consistent results between individuals. Measurement of uterine fundal height in pregnancy has been shown to provide more precise results so that it is often used in estimating gestational age, besides measuring uterine fundal height in this way is easy to do and does not require large costs. (Ely Nurfauziyah, 2021)

Research conducted by Hana Islamiyah, et al (2011) found that the estimated fetal weight based on the height of the uterine fundus showed an average newborn weight of 3.35 kg as many as 95 babies (95%) while the lowest baby weight was 2.32 kg as many as 1 baby (1%) and the heaviest 4.03 kg as many as 4 babies (4%) so that the average weight of newborns is normal, namely 3.35 kg as many as 95 babies (95%).(Hana Islamiyah Santjaka, 2011)

The use of the Johnson Tohsach formula in estimating fetal weight has a higher accuracy but the principle of caution needs to be increased in measuring uterine fundal height to interpret fetal weight. Factors that can affect the measurement or estimate and are not expected to be corrected such as hydramnios, multiple pregnancies, uterine tumors, placenta previa will not give high accuracy. (Mardeyanti, 2013)

Pregnancy monitoring or known as ante natal care is a planned program in the form of observation, education, and medical treatment for pregnant women, to obtain a safe and satisfying pregnancy and delivery process. The purpose of antenatal care is to keep mothers healthy during pregnancy, childbirth and the puerperium as well as to make babies born healthy, monitor possible pregnancy risks and plan optimal management of high-risk pregnancies and reduce perinatal maternal

and fetal morbidity and mortality. Antenatal care is a service that women receive during pregnancy and is very important in helping ensure that the mother and fetus are safe during pregnancy and delivery. The approach to antenatal care is emphasized on quality, not quantity at the time of visit. (Azizah, 2017)

In this study, pregnancy monitoring carried out by health workers, the results of the examination can be understood and understood by pregnant women related to weight gain during pregnancy, weight gain that must be achieved at the next visit, examination of the peak height of the uterus and estimated fetal weight. . Motivation is a factor that encourages someone to do a certain activity, therefore motivation is often interpreted as a factor driving a person's behavior. Every activity carried out by someone must have a factor that drives these activities in general, needs and desires (Sutrisno, 2011)

Motivation is a condition in a person's personality that encourages an individual's desire to carry out certain activities in order to achieve a goal. The existence of wants and needs in individuals motivates the individual to fulfill them. Efforts to check pregnancy and monitor the progress of pregnancy from each individual pregnant mother can be achieved when individuals are motivated to seek needs at a higher stage, so that individuals will have the ability to solve problems.(Sigit Prasoj, Umi Fadilah, 2015)

Research conducted by Muhammad Tahir et al. (2018) states that there is a relationship between knowledge, attitudes and family support with the mother's motivation to perform prenatal check-ups. Another study conducted by Sigit Prasoj, et al, (2015) found that most of the pregnant women who had high motivation to do a pregnancy check-up were 53% of the respondents and a small

proportion of pregnant women who had low motivation to do a pregnancy check-up were 47% of the respondents.(Muhammad Tahir, Hasnah, 2018)

In this study, respondents in the intervention group were given a monitoring card and the control group was given a MCH handbook, before explaining how to use the monitoring card, a pretest was given to the respondents. The monitoring card provided stimulated the mother's motivation and enthusiasm to improve her ability to monitor the progress of pregnancy. pregnant women can estimate how much weight to achieve during pregnancy, how much weight gain should be achieved at the next visit and can find out the estimated fetal weight based on the results of the examination by health workers. higher level of information regarding the development of her pregnancy (health of mother and baby).(Azizah, 2017)

The results of research conducted by Sigit Prasoj (2015) show a not too big difference between those with high motivation and low motivation, which is 6%. In reality in the field, pregnant women are faced with conditions that sometimes require pregnancy check-ups, so even though they are less motivated for antenatal care, pregnant women still do it. The reason pregnant women continue to do antenatal care even though their motivation is low is partly because they are exposed to information about the importance of health checks. In addition, the cost of checking the health of pregnant women at the Community Health Center is very affordable by the community so that the community can afford it.(Sigit Prasoj, Umi Fadilah, 2015)

The results of research by Peter Friel in America show that when monitoring is carried out on a person's activity, eating will be closely related

to a person's motivation and behavior. Some researchers have focused recently on using strategies such as self-monitoring and feedback tailored to behavioral changes at the personal and interpersonal levels, (Burke, Wang, & Sevick, 2011; Chan & Woo, 2010). While strategies were implemented previously with mixed results, new technologies such as wearable activity monitors are enabling key elements to be delivered in a more efficient manner.(Friel, 2018)

Antenatal care (ANC) provides space for essential health care functions, including health promotion, screening and diagnosis, and disease prevention including CED. By applying the appropriate time and with proper evidence-based practice, ANC can save lives. Most importantly, ANC also provides opportunities for communicate with and support women, families and communities at critical times in women's journeys life. The process of developing these recommendations at the ANC has highlighted the importance of providing effective communication about physiological, biomedical, behavioral and socio-cultural issues, and effective support, including social, cultural, emotional and psychological support, to pregnant women in a respectful manner. This ANC communication and support function is key, not only to save lives, but also to improve lives, utilization of health services and quality of care. A woman's positive experiences during ANC and delivery can create foundation for being a healthy mother.(WHO, 2016)

Motivation is influenced by physical, mental, environmental factors, age maturity, facilities and infrastructure and media. Motivation is a process that does not just happen, but there is a need that underlies the emergence of the motivation. Pregnant women who experience disturbances in one of these factors, of course it is difficult to make

a decision that examination and monitoring of pregnancy is a necessity because of disturbances in the thought process.(Christine Dunkel Schetter and Lynlee Tanner, 2015)

Media is a means to convey messages or health information. With this Monitoring Card media, pregnant women become more aware of the development of pregnancy and in the end it can be a motivation to carry out examinations and monitor the progress of their pregnancy.

Research by Nery Ermaya, et al, (2015) found a positive correlation between motivational variables and perceptions of service on the regularity of antenatal care. In other words, the higher the mother's motivation and the better the mother's perception of the service, the more regularly the mother performs antenatal care. Motivation has a positive and significant effect on the regularity of antenatal care. The influence of motivational variables on the regularity of antenatal care is 0.234 (23.4%), meaning that the mother's regularity in doing antenatal care is influenced by motivation of 23.4%.(Nery Ermaya, Djoko Nugroho, 2015).

Qualitative evidence suggests that women in various settings tend to see ANC as a source knowledge and information and that they really appreciate any advice (including diet or nutrition) that can produce healthy and positive pregnancy experience (high self confidence in evidence). It also shows that women may be less likely to engage with healthcare if advice delivered hastily or didactic (high confidence in evidence).(WHO, 2016). The monitoring card that must be filled in for mothers with CED through regular ANC checks is a tool that can increase the mother's motivation because by being recorded completely and regularly the mother will know the progress of her pregnancy well.

A meta-analysis by S Neupane showed that neonatal mortality was significantly lower among children of women who received good quality ANC by skilled personnel.(Subas Neupane, 2019). A frequent number of ANC visits would likely be necessary, but not sufficient to improve infant and maternal health outcomes without a significant focus on quality of care.(Kanyangarara M, Munos MK, 2017)

CONCLUSION

The Monitoring Card is effective to increasing the motivation of CED pregnant women in monitoring the progress of pregnancy. There was no difference in the mean motivation of CED pregnant women between groups of CED pregnant women with monitoring cards and MCH books before being given the intervention. While the post test results obtained P value: 0.001 it can be concluded that there is a difference in the average motivation score between CED pregnant women who are given a monitoring card and CED pregnant women with the MCH Book. So it can be concluded that the Monitoring Card is effective in increasing the motivation of CED pregnant women in monitoring the progress of pregnancy.

The monitoring card can be used as a practical guide in providing better care and services for pregnant women, especially in monitoring the progress of pregnancy in pregnant women with CED.

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