

## THE EFFECT OF FIELD TRIP TO THE DELIVERY ROOM IN PRIMIGRAVIDA ON ANXIETY AND LENGTH OF LABOR

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### ABSTRAK : PENGARUH FIELD TRIP KAMAR BERSALIN PADA PRIMIGRAVIDA TERHADAP KECEMASAN DAN LAMA PERSALINAN

Latar Belakang: Kecemasan menjelang persalinan merupakan respons emosional dan kognitif akut yang dialami ibu hamil, dan dapat memengaruhi proses persalinan.

Tujuan: menganalisis pengaruh field trip kamar bersalin pada primigravida terhadap kecemasan dan lama persalinan.

Metodologi: Desain penelitian ini menggunakan metode penelitian kuantitatif dengan rancangan penelitian two group pre test-post test design dengan menggunakan kelompok intervensi dan kelompok kontrol

Hasil: Kelompok intervensi diberikan kunjungan lapangan ke ruang bersalin yang dipandu oleh bidan dengan 4x intervensi, dimulai pada usia kehamilan 32-33 minggu. Terdapat 60 responden yang akan dibagi menjadi 2 kelompok, yaitu kelompok kontrol dan kelompok intervensi. Pada pre-test (T1), kuesioner GAD-7 digunakan untuk menilai kecemasan kehamilan, dan post-test dilakukan untuk menilai kecemasan setelah kunjungan rumah bersalin selama 4 minggu. Terdapat perbedaan yang signifikan secara statistik ( $p < 0,05$ ) pada tingkat kecemasan pada T1 dan T2 atau sebelum dan sesudah intervensi antara kelompok kontrol dan kelompok intervensi.

Kesimpulan: Intervensi *field trip* kamar bersalin berpotensi menjadi strategi non-farmakologis yang efektif untuk mengurangi kecemasan pada ibu hamil pertama kali.

Saran :Bagi peneliti selanjutnya disarankan menambahkan pemeriksaan laboratorium sebagai biomarker indikator kecemasan, menguji pemberian field trip kamar bersalin pada tingkat Klinik hingga rumah sakit dengan fasilitas dan ruangan yang lebih besar dibandingkan penelitian ini.

Kata Kunci : Field trip, Kecemasan, Lama Persalinan, Primigravida.

### ABSTRACT

Background: Prenatal anxiety is an acute emotional and cognitive response experienced by pregnant women, and can affect the labor process.

Aim: To analyze the effect of a birthing room field trip for primigravida on anxiety and duration of labor.

Methodology: This research design uses quantitative research methods with a two group pre test-post test design using an intervention group and a control group.

Results: The intervention group was given a field visit to the delivery room guided by a midwife with 4x interventions, starting at 32-33 weeks of gestation. There are 60 respondents who will be divided into 2 groups, namely the control group and the intervention group. At pre-test (T1), the GAD-7 questionnaire was used to assess pregnancy anxiety, and post-test was conducted to assess anxiety after the 4-week maternity home visit. There was a statistically significant difference ( $p < 0.05$ ) in anxiety levels at T1 and T2 or before and after the intervention between the control group and the intervention group.

Conclusion: The maternity ward field trip intervention has the potential to be an effective non-pharmacological strategy to reduce anxiety in first-time pregnant women.

Suggestions: Future researchers are advised to add laboratory tests as biomarkers of anxiety indicators, test the provision of maternity room field trips at the Clinic level to hospitals with larger facilities and rooms than this study.

Keywords : Anxiety, Field trip, Length of labor, Primigravida.

## INTRODUCTION

A field trip is a visit to a place with the aim of providing education and information about the place visited. Field trip is a field trip that can be done outside the building or inside the building with the aim of education, gaining experience, adding information, and correcting misunderstanding of information about the place visited. Therefore, a field trip is bringing a group of people to visit only one place in one visit (Eka Kustrianawati, Dwi Setiyadi 2021).

Special attention was paid to participants to explore perceptions of how field trip participation works. Stories showed that despite differences among participants' socio-demographic background, personality, performance, current employment status, and professional goals, all agreed that field trips provided many benefits at the academic, professional, and personal levels. While in the short term participating in field trips helped them succeed in courses, in the long term knowledge gained during this journey makes it possible to feel more empowered and confident (Sotomayor 2021).

Conducting a site visit to the patient before the procedure to improve perioperative anxiety, which is a state of acute emotional or cognitive reaction of the patient. A conversation between the nurse and the patient, witnessing the preparation and possibly creating a strange feeling for the patient regarding the state of the room (Vogt et al. 2021).

In relation to labor preparation, the environment of the place of delivery has an important meaning for the mother and the discussion of the place of delivery services. In terms of labor preparation, the environment of the place of delivery is important to the mother, which is two abstract spaces, where there are 2 (two) views for the birth mother about the selection of the place of delivery. The first is the delivery room in government facilities, where the mother considers childbirth as a critical event, and the birth mother feels unfamiliar. The second is a private room or at home, where birth is perceived as a physiological event because it is in a room they are familiar with. Midwives have the opportunity to provide information to mothers about where they choose to give birth. However, pregnant women are sometimes unaware of all the options available. There is a need for pragmatic and comprehensible place of birth dialogs containing standardized content to ensure midwives provide low-risk mothers with adequate information about place of birth options (Goldkuhl et al. 2022; Henshall, Taylor, and Kenyon 2016a). Across healthcare, the design of facilities or rooms of action

has been shown to significantly influence the quality of care, in addition to providing a healing space for patients (Lavender et al. 2015; Plough et al. 2019).

According to the World Health Organization (WHO), pregnancy can be defined as an intense process of biological, psychological and social modification that affects not only the life of the pregnant woman, but also the fetus. The experience of pregnancy causes women to experience exacerbations (respiratory disorders) and this can make them vulnerable to several emotional disorders (Ferreira et al. 2015). Approximately 20% of pregnant women will experience negative antenatal mental health issues such as depression and anxiety, both of which are associated with birth outcomes (Deutsch et al. 2022).

Anxiety in laboring women can affect the labor process. Pregnancy-related anxiety refers to worry or distress during pregnancy, including labor and birth. The implementation of a field tour before the act can reduce anxiety (Vogt et al. 2021).

Filed trip bringing pregnant women to visit the delivery room is a new innovation that is carried out as part of complementary activities to correct pregnant women's misperceptions about the delivery room to overcome worries and anxiety before the delivery childbirth.

The difference between this research and other filed trip research, here visiting the delivery room environment by bringing pregnant women to visit and get to know directly the atmosphere of the delivery room and the equipment in the delivery room where the mother is expected to give birth in the future normally in that place. Meanwhile, before childbirth, pregnant women also need to know the new place or room where the labor process will take place. Because for the mother will feel strange in a new room that will later be the place where the labor process takes place so that it can cause anxiety. From the above description of anxiety before childbirth and the introduction of the place of labor through a tour of the visit to the delivery room, the researcher is interested in introducing a filed trip to pregnant women with the introduction of the delivery room in health facilities to find out "The effect of field trips on the anxiety of primigravida pregnant women and the length of labor".

## RESEARCH METHODS

This study was conducted from November 25, 2022 to February 25, 2023 and the research location was in the Walmas area, at 4 Puskesmas, namely Lamasi, East Lamasi, Walenrang and West Walenrang Puskesmas in Luwu Regency, South Sulawesi.

This research design uses quantitative research methods with a quasi experiment approach with a two group design pre test- post test design using an intervention group and a control group.. The technique used in this study was purposive sampling. There were 60 respondents to be divided into 2 groups, namely the control group and the intervention group.

The research was conducted by giving treatment to one group of third trimester primigravida pregnant women. Before treatment, primigravida mothers were given a pre-test to assess pregnancy anxiety using the GAD-7 questionnaire. Respondents filled out the questionnaire with the results in the form of scores 0-4 not anxious/minimal, 5-9 mild, 10-14 moderate, 5-20 severe. After that, pregnant women were taken on a field trip to the delivery room guided by a midwife for 4 interventions. After the intervention with a field trip to the delivery room, pregnant women will be given a pre-test to assess their anxiety. Meanwhile, to determine the relationship between anxiety and the length of labor process in stage I and stage II, an assessment was carried out after the mother gave birth using a partograph observation sheet.

In the control group, pregnant women only received information about planning for childbirth and preventing complications (P4K) and signs of labor from the KIA book once during the first meeting in the third trimester at 32-33 weeks of gestation. The intervention group was given a field trip to the delivery room guided by a midwife with 4x interventions, starting at 32-33 weeks of gestation. Filed tirp delivery room is done 4x outside the ANC schedule. In season 1 to season 4, it was carried out by inviting pregnant women to visit the delivery room at intervals of once a week.

Field trips were conducted in accordance with the contents of the delivery room booklet and

evaluated using a check list sheet. Conduct a post-test using the GAD-7 questionnaire to assess anxiety after a 4-week maternity ward field trip is completed in the intervention group. Conduct a post-test assessment using the GAD-7 questionnaire to assess anxiety after 4 weeks in the control group. Assessing the length of labor process in the first and second stages after the mother gave birth using a preview observation sheet in all groups. Conduct a second post-test assessment, using the GAD-7 questionnaire to assess anxiety after delivery in all groups at postpartum visit I (KN I = 6-48 hours).

The analysis technique used Saphiro-Wilk data normality test was used with consideration of the sample size <50 participants. In univariate analysis of respondent characteristics using independent t-tests. Bevariate analysis to determine differences in anxiety levels of the control group and intervention group using independent t-tests. To determine differences in pre-post tests using Friedman and Wilcoxon (post hoc) tests. Knowing the relationship of confounding variables in the intervention group using the Kruskal wallis test. Management uses a computer with the Statistical Product and Service Solution (SPSS) version 25 program, then the results of the analysis are displayed in the form of tables or narratives.

Ethical approval in this study was obtained from the Ethics Committee of the Faculty of Public Health, Hasanuddin University with number 5799/UN4.20.1/PT.01.04/2022. The ethical principle in this study is to respect human dignity, where researchers provide informed consent as a form of participation. Data validity carried out in this study is credibility, dependability, transferability, confirmability, and authenticity.

## RESEARCH RESULTS

### Univariate Analysis

**Table 1**  
**Descriptive Analysis Of Research Participants**

Group	Control	Intervention	P value
	Mean ± SD		
Age (Years)	23.77 ± 3.19	23.50 ± 2.76	0.752 a
Distance from Home, n (%)			
< 2 Km	13 (59.1%)	14 (53.8%)	0.94 b
> 2 Km	9 (40.9%)	12 (46.2%)	
Residence Status, n (%)			
Independent	2 (9.1%)	3 (11.5%)	0.56 b
Parents	18 (81.8%)	18 (69.2%)	
In-Laws	2 (9.1%)	5 (19.2%)	

\*p value > 0.05 test: a. Independent T-Test, b. Mann-Whitney

The descriptive analysis table shows no statistically significant difference ( $p>0.05$ ) between the control group and the intervention group in the characteristics components of age, distance from home and participant residence status. This means that the control group and the intervention group do not have significant differences in terms of participant characteristics, indicating low bias in research participants.

#### Bivariate Analysis of the Effect of Field Trip to Delivery Room on Anxiety in Primigravida

Participants who rated the field trip as optimal had an average anxiety level of  $10.75 \pm 2.22$  in the first measurement or before the

intervention,  $8.35 \pm 2.56$  in the second measurement or after the intervention, and  $3.0 \pm 0.72$  after delivery. Participants who rated the field trip as not optimal had an average anxiety level of  $11.67 \pm 0.81$  in the first measurement or before the intervention,  $8.67 \pm 1.96$  in the second measurement or after the intervention, and  $3.50 \pm 1.04$  after delivery. All comparisons of the average anxiety levels of participants who rated the field trip as optimal or not optimal in measurements 1, 2, and 3 did not have statistically significant differences ( $p>0.05$ ), which means there was no difference between participants who rated it optimal and participants who rated it not optimal in changes in their anxiety levels.

**Table 2**  
**Comparison Of Means Evaluating Field Trips To Delivery Rooms On Anxiety Levels In Primigravida**

Field trip evaluation	Duration of Labor	
	Phase I (Hour)	Phase II (Minutes)
Optimal (Mean $\pm$ SD)	$9.85 \pm 1.84$	$45.00 \pm 9.73$
Not Optimal (Mean $\pm$ SD)	$11.83 \pm 1.60$	$43.33 \pm 9.83$
p-value	0.02*	0.71

\*Independent T-Test

**Table 3**  
**Comparison Of The Percentage Of Evaluation Of Delivery Room Field Trips On Anxiety Levels In Primigravida**

Anxiety	Field Trip Evaluation (n, %) Level		p-value
	Optimal	Not Optimal	
Anxiety Level 1			
Minimal	0 (0%)	0 (0%)	0.42
Light	2 (10%)	0 (0%)	
Medium	18 (90%)	6 (100%)	
Heavy	0 (0%)	0 (0%)	
Anxiety Level 2			
Minimal	2 (10%)	0 (0%)	0.70
Light	11 (55%)	4 (66.7%)	
Medium	7 (35%)	2 (33.3%)	
Heavy	0 (0%)	0 (0%)	
Anxiety Level 3			
Minimal	19 (95%)	5 (83.3%)	0.34
Light	1 (5%)	1 (16.7%)	
Medium	0 (0%)	0 (0%)	
Heavy	0 (0%)	0 (0%)	

\*Uji Pearson Chi-Square

Of the 20 participants who rated the field trip as optimal, at anxiety level 1, 2 (10%) of them had minimal anxiety and the remaining 18 (90%) had moderate anxiety. Meanwhile, of the 6 participants who rated the field trip as not optimal, at the first anxiety level measurement or before the

intervention, all participants (100%)

Of the 20 participants who rated the field trip as optimal, at the second anxiety level measurement or after the entire series of interventions were carried out, 2 (10%) of them had minimal anxiety, 11 (55%) of them had mild anxiety,

and the remaining 7 (35%) had moderate anxiety. Meanwhile, of the 6 participants who rated the field trip as not optimal, at the second anxiety level measurement, 4 (66.7%) participants had mild anxiety and 2 (33.3%) participants had moderate anxiety.

Of the 20 participants who rated the field trip as optimal, at the third anxiety level measurement

or after delivery, 19 (95%) of them had minimal anxiety and 1 (5%) of the remaining had mild anxiety. Meanwhile, of the 6 participants who considered the field trip to be not optimal, in the third anxiety level measurement, 5 (83.3%) participants had a minimal level of anxiety and 1 (16.7%) participant had a mild level of anxiety.

**Table 4**  
**Comparison Of The Average Evaluation Of The Delivery Room Field Trip On The Length Of Labor In The First And Second Stages**

Field trip evaluation	Duration of Labor	
	Phase I (Hour)	Phase II (Minutes)
Optimal (Mean $\pm$ SD)	9.85 $\pm$ 1.84	45.00 $\pm$ 9.73
Not Optimal (Mean $\pm$ SD)	11.83 $\pm$ 1.60	43.33 $\pm$ 9.83
p-value	0.02*	0.71

\*Independent T-Test

Participants who considered the field trip to be optimal had an average duration of the first stage of labor of 9.85  $\pm$  1.84 and the second stage of labor of 45.00  $\pm$  9.37. Meanwhile, participants who considered the field trip to be not optimal had an average duration of the first stage of labor of 11.83

$\pm$  1.60 and the second stage of labor of 43.33  $\pm$  9.83. There was a significant difference between the average duration of the first stage of labor in participants who considered the field trip optimal and those who did not.

**Table 5**  
**Comparison Of Anxiety Levels**

Group	Control (n=22)	Intervention (n=26)	p-value
T1 (pre tets)	9.64 $\pm$ 3.01	10.96 $\pm$ 2.01	0.76
T2 (post tets)	11.32 $\pm$ 2.27	8.42 $\pm$ 2.40	0.001*
T3 (post tets)	4.23 $\pm$ 1.19	3.12 $\pm$ 0.81	0.001*
Nilai p	0.001*	0.001*	

\*p value < 0.05

test: - Parametric: Independent T-Test of all variables.

- Non-parametric paired 3 groups: Friedman, and Post hoc Test: Wilcoxon

Based on table 5 above, in the 22 respondents in the control group who were not given treatment, the anxiety value in the pre-test (T1) experienced mild anxiety (score 5-9) with an average value of 9.64 (SD 3.01), in the first post-test (T2) it became moderate anxiety (score 10-14) with an average value of 11.32 (SD 2.27) meaning that there was an increase in the anxiety value, but in the second post-test after delivery (T3) the anxiety value decreased to minimal anxiety (score 0-4) with an average value of 4.23 (SD 1.19). For

the Intervention group, the anxiety level of 26 respondents in the intervention group in the pre-test (T1) had a moderate anxiety score (score 10-14) with an average score of 10.96 (SD2.01), then in the first pre-test (T2) the anxiety score decreased to mild anxiety (score 5-9) with an average score of 8.42 (SD 2.42) and in the second post-test after delivery (T3) the anxiety score also decreased to minimal anxiety (score 0-4) with an average score of 3.12 (SD 0.81).

**Table 6**  
**Comparison Of Changes In Anxiety Levels**

Group	Control	Intervention	p-value
ΔT2-T1	1.68 ± 2.33	-2.54 ± 1.33	0.001*
ΔT3-T1	-5.41 ± 3.71	-7.85 ± 2.22	0.01*
Δ T3-T2	-5.41± 3.71	-5.31 ± 2.58	0.91

\*p value < 0.05 test: t-test

In the table above, it can be seen that the change in anxiety levels at T1 and T2 or before and after the intervention between the control group and the intervention group has a statistically significant difference of 0.001 (p <0.05). Likewise, the comparison of changes in anxiety levels between T1 and T3 or before the intervention and after delivery also has a statistically significant difference

of 0.01 (p <0.05). In addition, it should be noted that some average values have negative values, which means that the values at the time of measuring the anxiety level after the intervention (T2) and after delivery (T3) have lower values than the previous measurement, so that the difference is negative

**Table 7**  
**Time Of Delivery**

Duration of Labor	Group		p-value
	Control (n=22)	Intervention (n=26)	
Phase I Normal	7 (31.8%)	23 (88.5%)	0.00**
Phase I Extends	15 (68.2%)	3 (11.5%)	
Phase II Normal	22 (100%)	26 (100%)	-
Phase II Extends	0 (0%)	0 (0%)	

\*Test: Continuity Correction

There was a statistically significant difference in the duration of KALA I labor between the Control group and the intervention group 0.00 (p<0.05).

Comparison could not be made between the control and intervention groups in the duration of KALA II labor.

**Table 8**  
**Descriptive Analysis Of Duration Of Labor**

Group	Control (n=22)	Intervention (n=26)	p-value
	Mean ± SD		
Phase I of Labor (Hours)	13.73 ± 2.69	10.31 ± 1.95	0.00*
Phase II of Labor (Minutes)	60.68 ± 14.25	44.62 ± 9.58	0.00*

\*\*p value < 0.05 test: Independent T-Test

The characteristics components of labor time have statistically significant differences (p<0.05) between the control group and the intervention group. This shows that the treatment or intervention in this study has an impact on the components of labor time, so that the control group and the intervention group have significant differences in the components of labor time.

Based on table 9 above, in the 22 respondents in the control group who were not given treatment, the anxiety value in the pre-test (T1) experienced mild anxiety (score 5-9) with an average value of 9.64 (SD 3.01), in the first post-test (T2) it became moderate anxiety (score 10-14)

with an average value of 11.32 (SD 2.27) meaning that there was an increase in the anxiety value, but in the second post-test after delivery (T3) the anxiety value decreased to minimal anxiety (score 0-4) with an average value of 4.23 (SD 1.19). For the Intervention group, the anxiety level of 26 respondents in the intervention group in the pre-test (T1) had moderate anxiety (score 10-14) with an average value of 10.96 (SD2.01), then in the first pre-test (T2) the anxiety value decreased to mild anxiety (score 5-9) with an average value of 8.42 (SD 2.42) and in the second post-test after delivery (T3) the anxiety value also decreased to minimal anxiety (score 0-4) with an average value of 3.12

(SD 0.81).

Table 9  
Effect Of Anxiety On Duration Of Labor

Group	Control (n=22) (Mean±SD)	Intervention (n=26)	p-value
T1 (pre tets)	9.64 ± 3.01	10.96 ± 2.01	0.76 *
T2 (post tets)	11.32 ± 2.27	8.42 ± 2.40	0.001**
T3 (post tets)	4.23 ± 1.19	3.12 ± 0.81	0.001**
Phase I of Labor (Hours)	13.73 ± 2.69	10.31 ± 1.95	0.00**
Phase II of Labor (Minutes)	60.68 ± 14.25	44.62 ± 9.58	0.00**

\*nilai  $p > 0.05$     \*\*nilai  $p < 0.05$

## DISCUSSIONS

### Sample Characteristics on Age, Distance from Home and Residence Status

Characteristics of 48 study participants who were all women who were pregnant for the first time or primigravida with a gestational age of 32-36 weeks with an age range of 18-33 years. A total of 26 participants received intervention in the form of a field trip to the delivery room and 22 participants did not receive intervention.

The distance from home to the place of delivery was categorized into <2km and >2km. In the control group, participants with a distance from home to the place of delivery <2km were 13 participants (59.1%) and the intervention group with a distance from home to the place of delivery >2km were 9 participants (40.9%). While in the intervention group, participants with a distance from home to the place of delivery <2km were 14 participants (53.8%) and the intervention group with a distance from home to the place of delivery >2km were 12 participants (46.2%). The results of the study showed that there was no effect of distance from home on anxiety and duration of labor, because there was easy transportation to reach the location of the delivery service and the demographic location that brought health facilities in the form of health centers and village health posts closer to areas far from the health center.

The status of the participant's residence was categorized as living independently, with parents and with in-laws. In the control group, there were 2 participants living independently (9.15%), with parents 18 participants (81.8%), and with in-laws 2 participants (9.1%). While in the intervention group, there were 3 participants living independently (11.5%), with parents 18 participants (69.2%) and with in-laws 5 participants (19.2%). The results of this study showed that there was no significant difference between the control group and the intervention group regarding the status of residence. This is because the intervention group had a greater

number of pregnant women living with their in-laws, but there was a decrease in anxiety due to treatment during the third trimester of pregnancy. This shows that the status of residence does not affect the anxiety of primigravida pregnant women.

### The Effect of Field Trip to Delivery Room on Anxiety in Primigravida

The results of the study on the percentage of field trip evaluation in the intervention group of 26 participants, there were 20 participants (76.9%) who were categorized as assessing the sustainability of the field trip as optimal and as many as 6 participants (23.1%) participants still considered the field trip not to be running optimally. Field trip evaluation was carried out by filling out a seasonal questionnaire given after each field trip session ended. The optimal category was obtained if there were more than 2 conclusive YES answers and it was said to be not optimal if there were the same as 2 or more NO answers on the seasonal questionnaire sheet given each time the field trip session was completed.

At the anxiety level of measurement 1, participants who assessed the field trip as optimal had an average anxiety level of  $10.75 \pm 2.22$ , while participants who assessed the field trip as not optimal had an anxiety level of  $11.67 \pm 0.81$ . It can be concluded that both participants with optimal assessments and participants with non-optimal assessments are at the same level of moderate anxiety with a score of 10 - 14.

At the anxiety level of measurement 2, participants who assessed the field trip as optimal had an average anxiety level of  $8.35 \pm 2.56$ , while participants who assessed the field trip as not optimal had an anxiety level of  $8.67 \pm 1.96$ . This shows that participants are at the same level of mild anxiety with scores between 5 - 9.

At the anxiety level of measurement 3, participants who assessed the field trip as optimal had an average anxiety level of  $3.0 \pm 0.72$ , while

participants who assessed the field trip as not optimal had an anxiety level of  $3.50 \pm 1.04$ . This shows that participants are at a minimal anxiety level with a score between 0 - 4, which was assessed after delivery.

All comparisons of the average anxiety levels of participants who assessed the field trip as optimal or not optimal at measurements 1, 2, and 3 did not have statistically significant differences ( $p>0.05$ ). It can be concluded that the field trip intervention in the delivery room has an effect on reducing anxiety levels in primigravida.

Anxiety to fear in pregnant women in the third trimester is common compared to the first and second trimesters. Anxiety can increase the hormone catecholamines which will have a negative impact on pregnant women and fetuses until delivery (Batey et al. 2022). Anxiety is one of the most common psychological responses among people waiting for certain medical procedures (eg surgery).

The presence of anxiety, closely related to stress, activates the hypothalamic-paroxysmal neuroendocrine system (Zahara et al. 2019). In a study of virtual field trips by (Zemla et al. 2019) it was stated that field trips before the exam can reduce anxiety. Conducting field trips to patients before the procedure to improve perioperative anxiety, namely the patient's acute emotional or cognitive reaction state (Vogt et al. 2021). The results of other health studies have shown that pre-procedure orientation tours (eg before surgery and anesthesia) have a positive effect on anxiety. Therefore, orientation tours can be used as a very effective technique to relieve anxiety and accelerate recovery. The reason is that patients who take the tour become familiar with the operating room or special care unit, which helps them adapt to the new environment and feel safe. It was revealed that the tour had reduced anxiety levels (Niknejad et al. 2019).

Pregnancy-related anxiety is a clinical phenomenon that can be distinguished from conventional symptom measures by assessment using a pregnancy-related anxiety scale to childbirth (Blackmore et al. 2016). This also shows a more positive attitude by conducting field visits through field trips to delivery rooms to increase motivation, knowledge and experience of pregnant women, from these results showing the level of fear of giving birth in primigravida mothers with field trip interventions in delivery rooms experienced a decrease in anxiety compared to primigravida mothers in the control group (Behrendt and Franklin 2014; Cheng and Tsai 2019; Mudra et al. 2020). In

the field trip to the delivery room season 1 introduction to the room, season 2 introduction to the equipment and season 4 preparation and readiness for childbirth and family support that has been given to respondents allows them to learn many things about the delivery room, which may be a strange and uncomfortable place for some primigravida. This is where the role of midwives in psychological preparation for pregnant women (Çankaya and Şimşek 2020) is to study the environment of pregnant women and provide health information and education (reducing negative influences and strengthening positive influences around the delivery room and preparation for childbirth).

### **The Effect of Field Trip Delivery Room on the Length of Labor Stage I and Stage II**

Overall, there were 20 (76.9%) of the 26 research participants who were categorized as assessing the sustainability of the field trip as optimal and as many as 6 (23.1%) of the 26 participants still considered the field trip to be not running optimally. Field trip evaluation was carried out by filling out a seasonal questionnaire given after each field trip session ended. The optimal category was obtained if there were more than 2 conclusive YES answers, and not optimal if 2 or more conclusive NO answers were given on the seasonal questionnaire sheet after each field trip session. The normal duration of the first stage is 10-14 hours and the normal duration of the second stage is <120 minutes, so the first stage of labor >14 hours and the second stage >120 is stated as prolonged labor (Manuaba, 2010; Prawirohardjo, 2018; Djamhoer et al., 2019). In the Intervention group, there were 26 respondents who were given a field trip to the delivery room, this study obtained the results of 20 participants who considered the field trip to be optimal had an average duration of the first stage of labor of 9 hours ( $9.85 \pm 1.84$ ) and the second stage of labor of 45 minutes ( $45.00 \pm 9.37$ ). Meanwhile, participants who considered the field trip not optimal had an average duration of the first stage of labor of 11 hours ( $11.83 \pm 1.60$ ) and the second stage of labor of 43 minutes ( $43.33 \pm 9.83$ ). There was a significant difference between the mean time of the first stage of labor in participants who rated the field trip as optimal and those who rated it as non-optimal.

In the measurement of the duration of the first stage of labor specifically for the intervention group in 26, out of 20 participants who considered the field trip optimal, 19 (95%) of them experienced



a normal duration of the first stage of labor or <14 hours and 1 (5%) of the rest experienced a prolonged duration of the first stage of labor or >14 hours. Meanwhile, out of 6 participants who considered the field trip not optimal, 4 (66.7%) of them experienced a normal duration of the first stage of labor or <14 hours and 2 (33.3%) of the rest experienced a prolonged duration of the first stage of labor or >14 hours. Measurement of the second stage of labor from 20 participants who considered the field trip optimal, a total of 20 or all participants (100%) experienced a normal duration of the second stage of labor or <120 minutes, out of 6 participants who considered the field trip not optimal, a total of 6 or all participants (100%) also experienced a normal duration of the second stage of labor or <120 minutes.

Labor is a series of physiological events that end with the expulsion of a full-term or nearly full-term baby from the uterus, followed by the expulsion of the placenta. The physiological process that regulates labor is the onset of labor is a collection of biochemical changes that occur in the uterus and cervix. These biochemical changes come from endocrine and paracrine signals produced by the mother and her fetus. These stages are initiation of labor, onset of labor, labor, and recovery. There are 3 factors that influence labor, namely Power, the energy to push the baby out in the form of his and the mother's pushing power., Passage, changes in the uterus and birth canal in the labor process, Passenger, the baby's movement during the labor process. The labor process can be divided into Kala I or also called the opening period starting from when the first labor contraction appears until the cervical opening is complete. Kala II or also called the expulsion period, starts from the time the opening is complete until the baby is born. The length of the labor process and time are certainly different between primigravida and multigravida (Manuaba 2010; Prawirohardjo et al. 2016; Wirakusumah, Mose, and Krisnadi 2010)

In the third season of the field trip delivery room where the midwife informs what things pregnant women can do while in the delivery room when the time for labor arrives, such as having to eat and drink, having to move like simple yoga movements that can help speed up the descent of the fetal head by utilizing a chair or patient bed as a tool to support the patient's body. the importance of getting enough rest between contractions to reduce fatigue during labor. This is done according to the circumstances and conditions of each delivery room at each health facility. The role of midwives in

psychological preparation for pregnant women includes encouraging physical exercise by encouraging pregnant women to do pregnancy exercises to strengthen the pelvic floor muscles, train breathing, good pushing techniques and relaxation exercises. This also includes adaptation to the environment of the delivery room/delivery room by conducting orientation by introducing the delivery room, obstetric equipment, and health workers (Geko et al. 2023).

### Effect of Anxiety Level on Duration of Labor

The duration of labor varied between the control and intervention groups. In the control group, the duration of the first stage ranged from 8-16 hours with an average value of 13 hours (SD 2.69) and the second stage 45-80 minutes with an average value of 60 minutes (SD 14.25). In the intervention group, the duration of the first stage ranged from 6-14 hours with an average value of 10 hours (SD 1.95) and the duration of the second stage ranged from 30-60 minutes with an average value of 44 minutes (SD 9.58). These results show that there is a difference in the time span of the first and second stages of labor between the control and intervention groups. Although the time span in the labor process in the first and second stages is still within physiological limits, namely the first stage with a time span of 10-14 hours and the second stage with a time span of 50-120 minutes (Wirakusumah et al. 2010). In the intervention group, treatment was given from the beginning, which led to more discussions between the midwife and the pregnant woman, making the pregnant woman confident in choosing the place of delivery and gaining experience in the delivery room (Henshall, Taylor, and Kenyon 2016b; Locatelli, Turcios, and LaVela 2015).

Related to the length of labor in the control group, the duration of labor stage I was between 8-14 hours ( $13.73 \pm 2.69$ ) and the duration of labor stage II was 60-80 minutes ( $60.68 \pm 14.25$ ). This shows a difference in the time span between the two variables. In line with research on labor anxiety in Pontianak in the study of primigravida in the first active phase showed a relationship between anxiety levels and labor duration (Difarissa 2016). There is also a significant relationship between the level of anxiety of primigravida mothers and the duration of the first stage of labor at the Babakan Health Center in Mataram City, which states that the higher the level of anxiety of pregnant women in the labor process, the longer the progress of labor and vice versa. Because this is because anxiety can affect the condition of the mother during labor and affect

uterine contractions and cervical dilation which are determinants of the length and smoothness of the labor process (Mila, Prabantoro, and Wattimena 2021). The normal duration of the second stage is influenced by maternal factors as seen from the mother's physical ability, namely the mother's strength to push her baby out, which is related to the mother's psychological condition at the level of anxiety that can be seen during the labor process. Because in mothers with high anxiety values from previous values, it has an impact on uterine contractions during the labor process. In addition, it is also influenced by fetal factors, namely the position and presentation of the fetus and the weight of the fetus which is based on data from all respondents with a head presentation and with a normal body weight <4000 grams so that they can pass through the second stage smoothly (Astuti, Wulandari, and Yogyakarta 2019).

There is a relationship between anxiety levels and the duration of the second stage of labor in mothers giving birth. Although in both groups the duration of the second stage was still within the physiological limits of 50-120 minutes, the intervention in the form of a field trip to the delivery room made the second stage in the intervention group shorter than the second stage in the control group. Like a study on mothers giving birth at the Anugerah Medical Center Hospital, Metro City in 2017, it is recommended that health workers play an active role in reducing maternal anxiety levels during the labor process (Sagita 2018). Evidence shows that pregnancy-related anxiety is more strongly associated with maternal and child outcomes than general anxiety. Anxiety during pregnancy is associated with several maternal and child outcomes including the labor process (Bayrampour et al. 2016; Mudra et al. 2020). Fear of giving birth requires intervention to reduce anxiety levels, with treatment that can minimize anxiety related to labor, especially in primigravida (Molgora et al. 2018).

### **The Effect of Family Support on Anxiety Levels in Primigravida**

In the intervention group of 10 questions in the Family support questionnaire, 7 questions were answered with the same answers by all participants. Questions 1, 2, 3, 4 and 5 were answered Yes by 26 (100%) participants and No by 0 (0%) participants.

Questions 6 and 7 were answered Yes by 3 (11.5%) participants and No by 23 (88.4%) participants. Question 8 was answered Yes by 4 (15.3%) participants and No by 22 (84.6%)

participants. Questions 9 and 10 were answered Yes by 0 participants (0%) and No by 26 participants (100%). Comparative Test of Family Support in the Intervention Group found that all questions that had different answers did not have statistically significant differences ( $p < 0.05$ ). This shows that family support as a confounding variable does not have a significant impact so that it does not affect the intervention and research results.

In the control group, participants who lived independently were 2 participants (9.15%), with parents 18 participants (81.8%), and with in-laws 2 participants (9.1%). While in the intervention group, participants who lived independently were 3 participants (11.5%), with parents 18 participants (69.2%) and with in-laws 5 participants (19.2%). The results of this study indicate that the status of pregnant women's residence does not affect anxiety and the labor process. Because the intervention group had good answers to their husbands and family members. The different answers to question no. 6 were because the mother was not accompanied by her husband because she worked outside the area, questions no. 7 and 8 even though they lived with their parents and in-laws, on average pregnant women had good interactions and relationships.

Giving birth is a life-changing event, especially for primigravida becoming parents. This transition involves physical and psycho-social (Clark 2020). Support can be provided from one's own social environment (such as family, friends, or significant others), namely social support or by professional professionals (such as midwives or nurses) (Ekström-Bergström, Thorstensson, and Bäckström 2022).

### **CONCLUSIONS**

Based on the results of the research and data analysis conducted by the researcher, it was concluded that there is an effect of providing a delivery room field trip on reducing anxiety in primigravida with information about the delivery room from season 1 introduction to the room, season 2 introduction to the equipment and season 4 information on preparation and readiness and family support regarding preparation for childbirth; There is an effect of a delivery room field trip on shortening/reducing the time of the first and second stages of labor through information and activities carried out in season 3 in the delivery room field trip book in the form of information on fulfilling food intake during the labor process, teaching several yoga movements that can help lower the fetal head, getting enough rest in between contractions, all of

which are carried out in the form of simulations in the delivery room in the third trimester of primigravida. Specifically, yoga movements can be practiced independently at home by pregnant women until the time of delivery arrives; Anxiety in primigravida can affect the time of labor, especially in primigravida mothers; Assessment of anxiety through a questionnaire on family support does not affect the intervention given

## SUGGESTIONS

Further research on the field trip of the delivery room in the assessment of anxiety adds laboratory examination as a broker indicator of anxiety assessment; Further research can be tested by providing field trips to the delivery room at the clinic level to hospitals with more complete facilities and larger rooms, compared to this study which was conducted at the assistant health center (Pustu) and village health center (Poskesdes); In further research, it is better to make a yoga exercise guide in the form of a video in season 3.

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