

## Kombinasi Diskusi Kelompok Kecil dan Pemodelan sebagai Metode Alternatif untuk Menurunkan Kecemasan Primigravida Menghadapi Persalinan

### *Combination of Buzz Group and Modelling Method to Reduce Primigravida Anxiety*

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#### ABSTRAK

Kehamilan pertama bagi seorang ibu merupakan periode krisis dalam kehidupannya. Kecemasan dapat muncul karena masa panjang menanti kelahiran dan ketidakpercayaan diri Ibu merawat bayinya. Oleh karena itu, primigravida membutuhkan informasi yang memadai tentang persiapan persalinan. Kombinasi diskusi kelompok kecil dan pemodelan merupakan metode pembelajaran yang bermanfaat dalam meningkatkan derajat kesehatan ibu, salah satunya dengan menurunkan kecemasan dalam menghadapi persalinan. Penelitian ini bertujuan membuktikan pengaruh penerapan kombinasi metode diskusi kelompok kecil dan pemodelan terhadap kecemasan primigravida dalam menghadapi persalinan. Desain penelitian adalah true eksperimen dengan rancangan *randomized subject, pretest-posttest control group design*. Penelitian dilakukan di Puskesmas Poka Rumah Tiga Kota Ambon. Sampel dalam penelitian ini sebanyak 24 responden yang dibagi 2 kelompok yaitu kelompok intervensi dan kontrol. Pengukuran kecemasan primigravida menghadapi persalinan menggunakan *Hamilton Anxiety Rating Scale* (HARS). Data dianalisis dengan uji *paired t-test* dan *independent t-test* dengan  $\alpha=0,05$ . Hasil penelitian menunjukkan terdapat perbedaan yang signifikan kecemasan primigravida menghadapi persalinan sebelum dan setelah penerapan kombinasi metode diskusi kelompok kecil dan pemodelan serta antara kelompok intervensi dan kelompok kontrol ( $p=0,000$ ). Dapat disimpulkan bahwa penerapan kombinasi metode diskusi kelompok kecil dan pemodelan dapat menurunkan kecemasan primigravida dalam menghadapi persalinan.

**Kata Kunci:** Diskusi kelompok kecil, kecemasan, pemodelan, persalinan, primigravida

#### ABSTRACT

*For mother, first pregnancy is a critical period in her life. Anxiety may come up due to a long period to wait for the baby birth and self-distrust feeling insecure of the mother to take care the baby. Therefore, primigravida needs sufficient information on delivery preparation. Combination of buzz group and modelling methods is a useful instructional method to improve mothers' health level, one of them is by reducing their anxiety toward delivery. This study aimed at proving the effect of applying combination of buzz group and modelling methods on primigravida anxiety in facing delivery. The research design was true experiment with randomized subject design with pre-test post-test control group design. The study was conducted at Poka Rumah Tiga Public Health Center in Ambon. The samples in this study were 24 respondents divided into 2 groups, namely intervention and control group. Measurement of primigravida anxiety facing childbirth was using Hamilton Anxiety Rating Scale (HARS). Data were analyzed using paired t-test and independent t-test with  $\alpha=0.05$ . The results show that there are significant differences in primigravida anxiety in facing delivery before and after the application of a combination of small group discussion and modeling methods and between the intervention group and the control group ( $p=0.000$ ). It can be concluded that the application of a combination of small group discussion and modeling methods can reduce primigravida anxiety in the facing the delivery.*

**Keywords:** Anxiety, buzz group, delivery, modelling, primigravida

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## INTRODUCTION

Pregnancy is one of the most important periods in a woman's life because it brings a lot of changes. Changes that occur can be either physical or psychological. Along with the increase in gestational age, anxiety of an expectant mother, especially in primigravida, will also increase (1,2). Anxiety of pregnant women can be associated with prolonged labor, preterm labor, low birth weight, and labor with unplanned Caesarea section (2). Anxiety during pregnancy varies in each woman. Research in Spain revealed that 174 women in third trimester pregnancy had higher level of anxiety than the average level of general population (3). The number of anxiety in Indonesia shows a number that varies in each region. Several studies have shown that the prevalence of anxiety in primigravida is higher compared to multigravida (4,5). According to a study conducted by Kalayil et al. in 2015, 93% of pregnant women with anxiety faced childbirth in the third trimester (2).

These problems require attention from health workers, especially midwives, in improving midwifery service quality. The services provided can be in a form of Ante Natal Care (ANC) services. By getting the right information from the ANC service about preparing childbirth, it will affect the mother's anxiety level in facing childbirth especially in primigravida (6,7). In addition to the methods applied to the implementation of pregnant women classes, there are still many other learning methods that can increase the knowledge and skills of pregnant women which can affect the mother's anxiety. One method of health education recommended by UNICEF is buzz groups. Buzz groups are a fast and efficient method of gathering feedback on a particular topic and can solve a problem together (8). According to Ernest W. Brewer, to get more efficient results, buzz group methods are often used in combination with other health education methods (9). One method in health education that can improve abilities and skills is modeling (10).

The advantages of the combination of buzz group and modeling method are helping participants to be able to express their opinions or ideas in groups and avoiding participants who chat too much and do not pay attention to the material presented (11,12). Based on the results of a preliminary study conducted at Poka Rumah Tiga Health Center in Ambon, the researchers found that most primigravidas experienced anxiety in facing childbirth. The purpose of this study was to prove the effect of applying a combination of buzz group and modeling method on primigravida anxiety in facing childbirth.

## METHOD

The research design used was the true experiment with a randomized subject, pretest-posttest control group design. This research was conducted at Poka Rumah Tiga Health Center in Ambon from November to December 2017. Sample was taken based on inclusion criteria which included: (1) aged 20-35 years and willing to become respondents; (2) first pregnancy, gestational age  $\geq 28$  weeks; (3) hold at least senior high school education; (4)

low risk pregnancy; (5) not taking anxiety drugs; (6) higher than 6 anxiety score. Besides, the exclusion criteria was having a history of mental disorders. Dropout criteria included: (1) respondents who were absent at the research period; (2) respondents did not complete buzz group sessions and modeling. The sample size in this study used a minimum sample according to experimental research which meant each group had as many as 10 respondents. To anticipate a drop out in the study, the researcher added a number of subjects, so the sample size was still met by using the following calculation:  $n' = n/(1-f)$  (13,14). The total sample was 24 respondents with 12 respondents in each group.

Sampling was done using consecutive sampling technique (14). After the number of samples was fulfilled, the samples were divided randomly using lottery and divided into two groups, namely the intervention group as many as 12 respondents who were given the application of a combination of buzz group and modeling method, and the control group of 12 respondents who were only given modules on childbirth preparation and skills of baby care. The instrument used in measuring primigravida anxiety in facing childbirth was the Hamilton Anxiety Rating Scale (HARS) questionnaire (4,15). The application of a combination of buzz group and modeling method was given in accordance with the standard operational procedures (SOP) in both methods and the teaching event unit.

The application of a combination of buzz group and modeling method was given once (1 meeting) in a duration of  $\pm 120$  minutes. The aids used included flipcharts, leaflets, stationeries and teaching aids together with the equipment. The measurement of primigravida anxiety in facing childbirth was done twice (pre-test and post-test). To avoid bias in this study, measurement of primigravida anxiety in facing childbirth was helped by enumerators. Before the measurement was carried out, training and perceptual equations for the enumerators had been conducted.

Data were analyzed and interpreted by hypothesis testing using SPSS 23.0. Bivariate data analysis was using paired t-test and independent t-test. Paired t-test was used to analyze differences in primigravida anxiety in facing childbirth before and after the intervention was given. Whereas the independent t-test was used to analyze differences in the primigravida anxiety delta values in facing childbirth in the intervention and control groups.

## RESULTS

### *Characteristics of Respondents*

In this study, the characteristics of respondents based on age, education, and gestational age were restricted according to inclusion criteria. The age of the respondents was 20-35 years old and graduated from senior high school, and gestational age was more than 28 weeks. The characteristic of occupation showed that most of them were housewives, both in the intervention group and the control group as many as 10 people (83.3%) and 9 people (75.0%), respectively (Table 1).

**Table 1. Characteristics of respondents based on work**

Variable	Category	Intervention Group		Control Group	
		Total (n)	Percentage (%)	Total (n)	Percentage (%)
Occupation	Housewife	10	83,3	9	75,0
	Civil servant	1	8,3	1	8,3
	Employee	1	8,3	2	16,7

Note: -

#### *Primigravida Anxiety in Facing Childbirth*

The measurement of anxiety scores of primigravida mothers in facing childbirth based on the Hamilton Anxiety Rating Scale (HARS) in the intervention group and the control group (pre-test and post-test) at Poka Rumah Tiga Health Center in Ambon showed a significant difference. The results of paired t-test in the intervention group obtained  $p = 0.000$ , which means that there were significant differences in primigravida anxiety in facing childbirth before and after the application of a combination of buzz group and modeling method. In the control group, the results of the paired t-test obtained  $p=0.394$ , which means there were no differences in primigravida anxiety in facing childbirth before and after the provision of modules on childbirth preparation and skills of baby care (Table 2).

**Table 2. Primigravida anxiety scores (pre-test and post-test) in the intervention group and the control group**

Measurement Group		Mean	SD	Min-Max	CI 95%	p-value
Intervention	Pre-test	10,416	2,778	7-15	8,651 – 12, 182	0,000
	Post-test	6,333	2,015	4-10	5,053 – 7,613	
Control	Pre-test	10,250	2,179	8-15	8,865 – 11,634	0,394
	Post-test	9,916	1,729	6-13	8,817 – 11,015	

Note: SD: Standar Deviasi; CI: Confidence Interval

The statistical analysis results on differences in anxiety scores between intervention group and control group based on delta values are presented in Table 3. Based on the independent test results of the t-test, the intervention group had a greater and significant difference in anxiety compared to control.

The delta value of primigravida anxiety between the pre-test and post-test in the intervention group given the application of a combination of buzz group and modeling method was  $4.083$  ( $SD = 2.466$ ). The difference in scores showed that there was a significant decrease in primigravida anxiety in facing childbirth of the respondents after being given the application of a combination of buzz group and modeling method.

**Table 3. Test of primigravida anxiety score differences between intervention groups and control groups based on delta values**

Group	N	$\Delta$	p-value
Intervention	12	$4,083 \pm 2,466$	0,000
Control	12	$0,333 \pm 1,302$	

Note:  $\Delta$ : delta

The results of this study indicate that there was a significant decrease in primigravida anxiety in facing childbirth after being given the application of a combination of buzz group and modeling method. The results of this study are in line with the research conducted by Azadi et al. in 2016 who found that there was an influence of buzz group on primigravida anxiety in facing childbirth (16). In addition, a study by Devilata et al. also explained that health education before delivery (prenatal) in primigravida can reduce anxiety to face childbirth. Anxiety that occurs includes anxiety in dealing with childbirth, general conditions, pain in childbirth, childbirth costs, possible complications, family support, and anxiety about the baby. Therefore pregnant women need adequate information and guidance about childbirth during their pregnancy (7).

Study by Swaroopa et al. revealed that antenatal education in the intervention group could reduce primigravida anxiety in facing childbirth compared to the control group that was not given antenatal education. Childbirth is considered a natural process in a woman's life. Mothers who are in the first pregnancy or primigravida will experience fear and anxiety. This fear is caused by a lack of knowledge about childbirth. Antenatal education provided during pregnancy will provide knowledge and insight into childbirth and can teach how to deal with pain during childbirth and things to do at each stage of childbirth, so primigravida anxiety in facing childbirth will decrease (17). However, this is not in line with the research conducted by Kim et al., 2011 that there was no significant difference between the anxiety of pregnant women in facing childbirth in the intervention group given basic training in the delivery program compared to the control group (18). Many causative factors that can affect the occurrence of anxiety and are inter-correlated include: (1) dissatisfaction during pregnancy; (2) medical disorders and complications that may be experienced during pregnancy from the mother and the complications for the baby (19).

Most primigravidas doubt their abilities as mothers and feel anxious about their delivery. Pregnancy and childbirth is a major change in life, and most of them do not know the roles and changes that occur in their pregnancy and preparation to make when becoming a mother (7). According to Entsieh et al., respondents wanted early realistic information about skills to become parents and needed support and assistance from health practitioners, especially in the pre-natal period (20).

A buzz group is a discussion in a short time session to avoid boredom among participants but has very effective results (8). The advantage of buzz group and modeling method is a method that allows all participants to participate and bring up new ideas or thoughts from the participant, so it can solve a topic or problems faced. Modeling or demonstration can directly improve maternal abilities and skills (8,10). Health education with a right method can increase mother's knowledge of the problem faced (21).

The combination of buzz group and modeling method in this study consisted of components in the forms of text, pictures in flip charts, leaflets, and properties or phantoms which were displayed directly in front of the respondents in a form of small discussions. With these learning media aids and the right methods such as buzz groups and modeling, it



can provide a good cognitive stimulus for primigravidas. This can improve primigravida knowledge about childbirth and the skills of the mother to care for her baby. Discussing a problem together in a group can allow each participant to express the anxiety in facing childbirth with their friends who have the same feelings. This can help them understand the problems faced during the process of pregnancy and childbirth. Besides that, the activities to demonstrate the delivery process and baby care skills can increase the knowledge and skills of the mothers, thus the anxiety of facing childbirth can be reduced.

According to a study conducted by Shahhosseini et al. in 2015, anxiety during pregnancy has a very large and serious effect on the health of both mother and baby. The effects of anxiety can be in the form of biological, mental,

behavioral and medical effects. Therefore, integrated prenatal care is needed for pregnant women who experience anxiety (22). This study proves that the application of a combination of buzz group and modeling method can further reduce primigravida anxiety in facing childbirth, when compared to just giving a module.

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