

# Analysis of Differences in Knowledge of Pregnant Women About 4t Risks in the Work Area of the Pinembani Community Health Center, Pinembani District, Donggala Regency through Health Education

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## ABSTRACT

The mortality rate for pregnant women occurs due to direct and indirect causes. The immediate cause of maternal death is usually closely related to the condition of the mother's health since pregnancy, childbirth and the puerperium. While the indirect reasons are more connected to social, economic, educational, cultural needs and lack of knowledge, the attitudes of the community, especially pregnant women, about the risk of 4T (too young, too old, too many children, too close to pregnancy) and Three Too Late (again late making decisions, late in bringing to health facilities, late in getting health services). The purpose of this study was to determine the differences in knowledge before and after about the risk of 4T in the working area of the Pinembani Public Health Center, Pinembani District, Donggala Regency through Health Counseling. This type of research is analytic with an experimental research type approach using a one-group pretest-posttest design. Namely, before doing counselling, the respondents were given a questionnaire (pretest) then after the counselling was carried out, the respondents were provided with a questionnaire for the second time (posttest) then the researcher compared the pretest-posttest results. The results showed that the mean value before (pretest) was 70.98 with a standard deviation of 15.460. At the same time, the mean value after (posttest) was 89.51 with a standard deviation of 11.169. The results of statistical tests show that the value of p (p-Value) = 0.000, which means ( $p > 0.05$ ), there is a difference in the knowledge of pregnant women about the risk of 4T through health education. This research is expected for health workers at the Pinembani Public Health Center to provide more counselling or information about health at the posyandu to increase the knowledge of pregnant women.

**Keywords** - Knowledge, Pregnant Women, Age, Pregnancy Distance

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## INTRODUCTION

Health status, especially maternal and child health, is an indicator of the health status of a nation, where the progress of health services in a country is reflected in the high and low rates of maternal and infant mortality. There are several indicators used to measure

the health status of mothers in an area, one of which is the maternal mortality rate (MMR). MMR is an indicator that is sensitive to the quality and accessibility of health service facilities (Ministry of Health, 2015). WHO estimates that every day in 2015, around 830 women die from complications of pregnancy and childbirth (WHO, 2016).

According to the definition of the World Health Organization (WHO), maternal death is the death of a woman who occurs during pregnancy, childbirth, or 42 days after delivery with causes related directly or indirectly to childbirth, WHO estimates that 585,000 women die every day from complications of pregnancy and childbirth. Almost all cases of these deaths can be prevented. WHO also reports, about 80% of maternal deaths are the result of increased complications during pregnancy, childbirth, and after delivery (WHO, 2016).

In 2012 the Indonesian Demographic and Health Survey (IDHS) again recorded a significant increase in MMR (related to pregnancy, childbirth and postpartum), from 228 to 359 per 100,000 live births. Therefore, in 2012 the Ministry of Health launched the Expanding Maternal and Neonatal Survival (EMAS) program to reduce maternal and neonatal mortality by 25%. This program is implemented in provinces and districts with a large number of maternal and neonatal deaths, namely North Sumatra, Banten, West Java, Central Java, East Java, and South Sulawesi (Ministry of Health, 2015).

Based on the Ministry of Health of the Republic of Indonesia in 2015, the cause of maternal death is still dominated by classical causes reaching 100%, namely bleeding, hypertension, and (indirect causes) are quite broad including the causes of non-obstetric diseases. Meanwhile, based on the 2012 population census, the cause of maternal death was almost 100% due to complications of childbirth in the form of bleeding, premature rupture of membranes, fever, seizures and fainting, prolonged labour, and other complications (Ministry of Health, 2015).

Based on data from the Central Sulawesi Provincial Office, the maternal mortality rate related to pregnancy, childbirth and childbirth is 359 per 100,000 live births. In 2014 221 people died, in 2015 there were 181 people, in 2016 there were 245 people, in 2017 there were 215 people, and in 2018 there were 208 people (Profile of Central Sulawesi Health Office, 2018).

Data from the Donggala District Office that MMR in 2016 amounted to 15 cases that occurred at Ogoamas Health Center (2 points) due to bleeding and preeclampsia, Tambu Community Health Center (1 issue) due to bleeding and infection, Tompe Health Center (2 cases) due to abortion and hypertension, Puskesmas Batusuya (2 points) was caused by bleeding, Puskesmas Wani (2 issues) was caused by bleeding, Puskesmas Donggala (2 cases) was caused by bleeding and infection, Puskesmas Lembasada (2 cases) was caused by bleeding, Puskesmas Lalundu (1 point) was due to infection and Puskesmas Pinembani (2 cases) caused by bleeding and eclampsia (Profiles of the Donggala District Health Office, 2017).

Pregnant women are at risk of complications. Moreover, the high-risk group of women, namely women with 4T, pregnancies that occur at too young (<20 years), too old (> 35 years), birth intervals are too close, and the order of the children is > 3. This high-risk

category of women has too considerable a risk of complications compared to other types. In the high-risk category is the risk interval between pregnancy. (BKKBN, 2012).

The mortality rate for pregnant women occurs due to direct and indirect causes. The immediate cause of maternal death is usually closely related to the condition of the mother's health since pregnancy, childbirth and the puerperium. While the indirect reasons are more connected to social, economic, educational, cultural needs and lack of knowledge, the attitudes of the community, especially pregnant women, about the risk of 4T (too young, too old, too many children, too close to pregnancy) and Three Too Late (again late making decisions, late in bringing to health facilities, late in getting health services)

Suppose a pregnant woman has good knowledge about the risk of 4T. In that case, the mother will likely think about determining attitudes, behaviour to prevent, avoid or overcome the risk of pregnancy, and the mother will have the awareness to check her pregnancy, and this is an effort to reduce maternal and infant mortality rates (Notoatmodjo, 2014).

Data from the Pinembani Health Center, the number of pregnant women in 2018 was 72 people, in 2019 from January to August there were 41 people. In 2018 11 pregnant women married at a young age, seven people were too old, too many children numbered 14 and also closed the birth distance was six people. In 2019, from January to August five pregnant women married at a young age, two people too old, too many children, 12 people and seven people too close to birth (Puskesmas, Pinembani).

From the initial survey, the results of interviews conducted on 29 June 2019 with four pregnant women about the risk of 4T and its impact on maternal mortality, one pregnant woman stated that she knew the meaning of 4T risk. Three mothers had never heard the term 4T and did not understand at all what the impact of the 4T risk is.

The purpose of this study is to determine the Analysis of Differences in Knowledge of Pregnant Women About 4T Risks in the Work Area of the Pinembani Community Health Center, Pinembani District, Donggala Regency through Health Education.

## **METHODOLOGY**

This type of research is the type of this research is analytic with a quasi-experimental research type approach one group pretest-posttest. with the intention that before counselling respondents / pregnant women were given a questionnaire (pretest) then after the counselling was done, the respondents were given a questionnaire for the second time (posttest) then the researcher compared the pretest-posttest results. This research was conducted in June-July 2020 and was carried out in the working area of the Pinembani Community Health Center, Pinembani District, Donggala Regency.

## RESULT

**Table 1. Distribution of Respondents Based on Knowledge of Pregnant Women Before Extension**

No	Knowledge	Mean	SD	N
1	Before Extension ( <i>pretest</i> )	70,98	15,460	41

Based on table 1, it shows that the mean knowledge of pregnant women before counseling (pretest) is 70.98 with a standard deviation of 15.460.

**Table 2. Distribution of Respondents Based on Knowledge of Pregnant Women After Extension**

No	Knowledge	Mean	SD	N
1	After Extension ( <i>posttest</i> )	89,51	11,169	41

Based on table 2, it shows that the mean knowledge of pregnant women about the risk of 4T before counseling (pretest) is 89.51 with a standard deviation of 11.169.

Based on the data table 5.11, the mean value of knowledge before extension was 70.98 with a standard deviation (SD) of 15.460, while the mean value of knowledge after counseling was 89.51 with a standard deviation of 11.169. The result of statistical test showed that the value of  $P = 0.000$ , it was concluded that there was a significant difference in knowledge between before and after counseling.

## DISCUSSION

Based on table 1, it shows that the knowledge of pregnant women about the risks of (4T) being too young, too old, too close to births, too many children, before counselling the mean was 70.98 with a standard deviation of 15.460.

According to the researchers' assumptions, this could happen because respondents did not have enough information about 4T risks and also the location was far from health facilities and lack of education. This shows that if pregnant women do not have enough knowledge, they will have a negative attitude about the risk of 4T, and have malicious behaviour such as being silent if there are signs of complications or danger during pregnancy and taking medication if there are complaints to themselves. The factor that causes pregnant women to lack knowledge is that pregnant women rarely make visits to posyandu. And the lack of counselling is one of the means for pregnant women to get information about pregnancy. Poor knowledge of pregnant women about the risk of 4T can lead to complications that occur during pregnancy and at delivery.

According to Fishbein and Ajzen, followed by Wiryo (2014), knowledge will shape attitudes and further the intention to take action. The behaviour carried out by the community has been carried out for years and is usually locally specific, occurring in a particular group, race or area.

Knowledge is the result of "knowing", and this occurs after a person senses a particular object. Sensing occurs through the five human senses, namely: sight, hearing, smell, taste

and touch. Most of the human knowledge is obtained through the eyes and ears, which is the process of seeing and hearing. Also, through the eyes and ears, namely the process of seeing and hearing, then the process of experience and learning in formal and informal education (Isnaeni et al., 2019).

The mortality rate for pregnant women occurs due to direct and indirect causes. The immediate cause of maternal death is usually closely related to the condition of the mother's health since pregnancy, childbirth and the puerperium. While the indirect reasons are more connected to social, economic, educational, cultural needs and lack of knowledge, the attitude of the community, especially pregnant women, about the risk of 4T (too young, too old, too many children, too close to pregnancy) and Three Too Late (again making decisions, late bringing to health facilities, late in getting health services) (Manuaba, 2009). Meanwhile, based on table 2, the knowledge of pregnant women after counselling about the risks (4T) of too young, too old, too close to births, too many children, the mean number is 89.51 with a standard deviation of 11.169.

According to the researchers' assumption, this can be increased at the time of counselling because pregnant women listen to counselling well and begin to understand the risks of 4T so that pregnant women can plan the right pregnancy and avoid things that will threaten the mother and her baby. Knowledge, in general, can affect individual attitudes in a person and influence his actions in everyday life. If a woman's perspective is optimistic, it can cause someone to anticipate the risk of 4T well.

This is influenced by information obtained through interviews with several pregnant women; useful knowledge is obtained from counselling provided by health workers, related to counselling carried out on the theme of 4T risks, in the Pinembani Health Center area.

Based on the results of research, the knowledge of pregnant women both before and after counselling was high; this indicated that respondents already knew about the risk of 4T. These data can reduce the risk of 4T to pregnant women because one of the factors that affect the risk of 4T is the knowledge factor. A person's level of knowledge affects behaviour.

The results of this study indicate that there is an increase in knowledge about the risks of 4T through health education. As the opinion (Efendi, 2009) states that the success of an extension includes preparation, mastery of the material, appearance, language used, and delivery of various materials. Then the target factors include the level of education, beliefs and customs. Furthermore, the extension process factors include counselling time, and the methods used.

## **CONCLUSIONS**

Based on the results of research and discussion, it can be concluded that there is an increase in knowledge about differences in understanding of pregnant women about the risk of 4T (too young, too old, too close to births, too many children) before health education, the results obtained an average value (mean) of 70.98 with a standard deviation

of 15,460. After counselling was given, the mean value increased to 89.51 with a standard deviation of 11.169. Based on statistical analysis, it was obtained p-value (0.000)  $< \alpha$  (0.05), it can show that there are differences in the knowledge of pregnant women about the risk of 4T (Too Young, Too Old, Too Close to Birth Distance, Too Many Children) through health education.

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