

An Overview of The Level of Knowledge of Medical Student of Universitas Sumatera Utara about High Risk-Pregnancies

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Abstract. Background. One indicator of a country's health status is the Maternal Mortality Rate (MMR). Every pregnant woman has potential dangers during pregnancy, childbirth, and puerperium. Until now, in all parts of the world, risky pregnancies, especially high-risk pregnancies, are still a problem in health services, especially in developing countries. In Indonesia, MMR decreased during the period 1991-2015 from 390 to 305 per 100,000 live births. However, this is still far from the MDGs target goal, which is 102 per 100,000 live births. Many women are still pregnant or giving birth at a risky age. This condition leads to many complications (especially high-risk pregnancies) such as miscarriage, premature birth, genetic disorders, and even death. This may occur due to the lack of knowledge and education of general practitioners who serve pregnant women, especially in peripheral areas. **Objective.** This study aims to determine the knowledge level of Medical students of Universitas Sumatera Utara about risky pregnancy. **Methods.** This research was conducted in a quantitative descriptive study with a cross-sectional design. This research was conducted at the Faculty of Medicine, Universitas Sumatera Utara. The number of samples was 84 medical students of Universitas Sumatera Utara, which were taken by proportionate stratified. Primary data was collected using a questionnaire containing 21 true and false questions. **Result.** It was found that the knowledge of students from the Faculty of Medicine, Universitas Sumatera Utara class 2018 and 2019 regarding risky pregnancies was good (85.7%). **Conclusion.** Students of the Faculty of Medicine, Universitas Sumatera Utara, class of 2019 have better knowledge than students of class 2018.

Keyword: High risk pregnancy, risk factor, level of knowledge

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1 Introduction

Indicators of a country's health status can be seen from 3 aspects, namely the Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), and Child Nutritional Status (CNS). These three indicators are important aspects in determining the level of public health. The success of health development plays an important role in improving the quality of a country's human resources.^[1]

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The success of maternal health programs can be assessed through the main indicators of the Maternal Mortality Rate (MMR). Maternal mortality in this indicator is defined as all deaths during the period of pregnancy, childbirth, and the puerperium caused by pregnancy, childbirth, and the puerperium or their management but not due to other causes such as accidents or incidents. Maternal Mortality Rate (MMR) is all deaths within that scope in every 100,000 live births. In addition to assessing maternal health programs, this indicator is also able to assess the degree of public health, because of its sensitivity to improving health services, both in terms of accessibility and quality.^[2]

In general, there was a decrease in maternal mortality during the period 1991-2015 from 390 to 305 per 100,000 live births. Although there is a tendency to decrease maternal mortality, the MDGs target that must be achieved is 102 per 100,000 live births in 2015. In 2015 the maternal mortality rate was three times higher than the MDGs target.^[3]

The number of maternal deaths compiled from the recording of family health programs at the Ministry of Health in 2020 shows 4,627 deaths in Indonesia. This number shows an increase compared to 2019 of 4,221 deaths.^[4]

Many factors cause of death in pregnancy, one of them is lack of knowledge regarding those types of complications in pregnancy and limited knowledge of the importance of ANC to health service. Knowledge is the key to overcoming a risky pregnancy. The purpose of this study was to examine the knowledge of medical student of Universitas Sumatera Utara about High-risk pregnancy.

2 Methods

This study is a descriptive study with a cross-sectional design. This research was conducted online through the g-form. In this study using a questionnaire that has been validated and used by Koehtae, A.S (2015). The inclusion criteria were students from the medical faculty of Universitas Sumatera Utara who had passed the reproductive block, while the exclusion criteria were respondents who did not complete the questionnaire. The total number of respondents in this study amounted to 84 people. Sampling is done by randomizing on the computer system and then respondent who has been selected will be contacted personally. The data of this study were obtained from questionnaires distributed to respondents. Characteristics of respondents were obtained from the questionnaire in the form of gender and the academic year or the generation of respondents. After the respondent fills out the questionnaire, the result will be processed and scored so that we can know the level of student knowledge about high-risk pregnancy.

3 Result

In this study, the majority of respondents were female as many as 56 people with a percentage of 66.66% and the most respondents were 43 people from the 2019 batch with a percentage of 51.19%. Complete data regarding gender characteristics and academic year can be seen in the table below.

Table 1. Characteristics of respondents based on the academic year and gender.

Academic Year	Gender		Total (percentage)
	Men	Woman	
2018	16 (19,05%)	25 (29,76%)	41 (48,81%)
2019	12 (14,29%)	31 (36,9%)	43 (51,19%)
Total (percentage)	28 (33,34%)	56 (66,66%)	84 (100%)

In this study, it was also found that the source of information accessed by respondents to gain knowledge about risky pregnancies was mostly through the internet with a frequency of 69 people with a percentage of 28.8%. For sources of information, respondents may choose more than 1 source of information so that the frequency of information sources is found to be more than the number of respondents.

Table 2. Resources about risky pregnancies.

Resources	Frequencies	Percentage (%)
Internet	69	28,8%
Newspaper	2	0,83%
Book	55	23,01%
Lecture Material	68	28,45%
Television	13	5,43%
Others	32	13,38%
Total	239	100%

In this study, the respondent's level of knowledge was assessed using a questionnaire whose scores were divided into 3 categories, namely good, sufficient, and poor. From a total of 84 respondents, the highest level of knowledge was obtained, namely good knowledge obtained from 72 respondents with a percentage of 85.7%. The level of knowledge of students regarding risky pregnancies can be seen in the table below

Table 3. Student level of knowledge

Level of Knowledge	Frequencies (n)	Percentage (%)
Good	72	85,7%
Sufficient	12	14,3%
Total	84	100%

4 Discussion

Based on the table above, from a total of 84 respondents, 72 people (85.7%) have good knowledge and 12 (14.3%) have sufficient knowledge. The results of this study are in line with research conducted by Luxy (2021)^[5] that most of the respondents have good knowledge with a percentage of 55%. However, there is a slight difference in the research conducted by Wijayanti (2015)^[6] that most of the respondents have a sufficient level of knowledge with a percentage of 61% and in the research conducted by Lathifah (2017)^[7], most of the respondents have a low level of knowledge with a percentage of 50%. This is due to differences in the characteristics of the respondents. In a study conducted by Corneles and Losu (2015)^[8] it was found that the difference in the level of knowledge has a close relationship with the level of someone's knowledge. The higher level of education, the higher a person's level of knowledge, and vice versa. This is also similar to the research conducted by Hawari (2016)^[10] which states that a person's thought process can be influenced by the level of education so that someone in receiving a better information.

In this study, if the level of knowledge is categorized based on the academic year, it can be concluded that the level of knowledge about high-risk pregnancies in class 2018 in the good category as many as 34 people (82.9%) and sufficient category as many as 7 people (17.1%). Meanwhile, students from the class of 2019 with a good category were 38 people (88.4%) and sufficient category as many as 5 people (11.6%). Based on the results research, it can be concluded that class of 2019 have a level of better knowledge about high-risk pregnancies than class 2018. This can happen because students from class 2019 received lectures on high-risk pregnancy 2 semesters ago while the 2018 students received lectures on high-risk pregnancies 4 semesters ago. Too long and a lot of incoming information will cause someone to forget.

5 Conclusion

The level of knowledge of students of the Faculty of Medicine, Universitas Sumatera Utara about risky pregnancies is generally good knowledge as many as 72 respondents with a percentage of 85.7%. When viewed based on the academic year, class 2019 students have better knowledge about risky pregnancies than students from class 2018. Respondents get the most sources of information about risky pregnancies via the internet.

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