



## Overview of Knowledge of Pregnant Women About the Dangers of Covid-19 During Pregnancy

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### Abstract

Corona Virus Disease 2019 (COVID-19) is a disease that attacks the respiratory tract, and one of the groups vulnerable to exposure to the virus is pregnant women due to physiological changes in pregnant women. Case studies conducted with a qualitative method are descriptive, the population used is pregnant women who are less knowledgeable about the dangers of Covid-19 during pregnancy in the form of purposive sampling. The data taken are primary data and calculations of questionnaire results using the guttman scale. Based on a case study that has been carried out on 2 respondents who are in accordance with the inclusion criteria in knowing the Picture of Knowledge of Pregnant Women about the danger signs of Covid-19 during Pregnancy in the Maccini Sawah Puakesmas Work Area which was carried out for 4 days, the case study obtained by the level of knowledge of pregnant women was categorized as good with a value of 95%-100% after being given knowledge with education. The Level of Knowledge of Pregnant Women Regarding the Danger Signs of Covid-19 during Pregnancy is greatly influenced by the level of knowledge and the environment, the lack of information also greatly affects the level of knowledge of pregnant women about the Dangers of Covid-19 during pregnancy. Pregnant women need to understand and know the dangers of Covid-19 to pregnancy, so it is very necessary to increase knowledge to avoid the risk of being infected with Covid-19.

## Introduction

COVID-19 or the abbreviation for Coronavirus Disease 2019 is a pandemic that is still occurring today and is a disease caused by a Virus Acute Respiratory Syndrome that can interfere with the respiratory tract (Decree of the Minister of Health of the Republic of Indonesia, 2020). This virus first appeared in December 2019 and originated in China, in the city of Wuhan to be precise (Levani et al., 2021).

The Indonesian government has implemented a policy on implementing Covid -19 prevention, especially for groups of pregnant women. One of the efforts to prevent exposure to the COVID-19 virus is using disposable medical masks, washing hands 6 steps according to the procedure, maintaining distance (1 meter), avoiding direct contact, maintaining health by consuming nutritious food, and maintaining environmental cleanliness. In this prevention effort, of course, it is related to the level of knowledge of each individual that can influence attitudes and behavior. On September 14 2020, it was reported that pregnant women who were positively infected with COVID-19 were 4.9% of the 1,483 cases in Indonesia. The data obtained is a condition of increasing maternal morbidity and mortality during pregnancy (Ministry of Health

RI, 2020). Pregnant women are one of the vulnerable groups at risk of being infected with the virus. The susceptibility of a pregnant woman to infection with the virus is caused by physiological changes that result in a change in the response mechanism of the immune system in pregnant women. From this, the vulnerability of pregnant women to infection with viruses can occur due to a lack of knowledge (Rohmah et al., 2020).

Pregnancy is a period that tends to be sensitive for women, because there are physiological changes that can result in decreased immunity. Therefore, pregnant women are among the groups that are vulnerable to being infected with COVID-19 (Liang & Acharya, 2020). In addition, pregnant women are very easy to experience physical and mental disorders. During this pandemic, it is certainly very dangerous for pregnant women, and is one of the danger signs of pregnancy during a pandemic, which can cause pregnant women's anxiety to increase dramatically, not only worrying about the condition of the fetus but also worrying about safety when checking their pregnancy at the puskesmas or hospital during a pandemic (Susanna, 2022). If the attitude of anxiety that appears during pregnancy will reduce the immune system of pregnant women and increase the risk of being infected with COVID-19, then it is necessary for pregnant women to have good knowledge in maintaining health to avoid COVID-19 (Susanna, 2022).

Based on research by Anikwe et al in 2020 in (Putri, 2019) it was found that 82% of 430 pregnant women in Nigeria respondents had sufficient knowledge about COVID-19, and most of them also showed good attitudes and practices. While the results of a study conducted by (Hoque, 2021) on 346 pregnant women in South Africa, found 43.5% of respondents still had low knowledge and based on the results of Dewi's research (Patel, 2019) said that there were 58 pregnant women who had good knowledge of achieving (96.7) out of 60 respondents, while 4 out of 60 respondents had less knowledge about the dangers of Covid-19 and did not take proper precautions. This is caused by the presence of several respondents who have a low level of education.

Data obtained by the World Health Organization (WHO) found that as many as 223 countries were affected by COVID-19 and the number of positive confirmed cases of Covid-19 reached 125 million (World Health Organization, 2021). The COVID-19 virus is very susceptible to attacking all ages and pregnant women are one of the groups that are vulnerable to the Covid-19 virus, this is due to physiological changes in pregnant women and causes decreased immunity which can lead to infection susceptibility. (Zaigham & Andersson, 2020). From the results of a study conducted by Elshafeey, et al, there were 385 pregnant women who were infected with COVID-19, 346 pregnant women who underwent a PCR test, of whom were confirmed positive. As many as 7.5% of pregnant women who are infected with COVID-19 do not show symptoms related to COVID-19 (Elshafeey et al., 2020). In Indonesia, on March 26 2021, reported cases of Covid-19 had increased to 1.4 million cases spread across 35 Indonesian provinces (Covid-19 Handling Task Force, 2021).

In South Sulawesi there are 24 regencies/cities, data displayed on the development of Covid-19 transmission, 23 Data released by the Covid-19 task force team in February 2021 showed that there were 54,715 confirmed cases of corona virus in South Sulawesi, 506 new cases, 827 deaths, and a total recovery of 50,255 cases, only 270 recovered and 3,633 active cases, while in the city of Makassar on Sunday 19 July 2020, 60 pregnant women were still being treated at a hospital because as many as 40 of them tested positive for Covid-19, 20 other pregnant women were patients under supervision (Covid-19 Handling Task Force, 2021).

## Methods

In this study using qualitative and descriptive methods, which obtained data in the form of speech or speech from people. The population used in this case study is pregnant women who are less knowledgeable about the dangers of Covid-19 during pregnancy at the Puskesmas in

the form of purposive sampling. In this case study, the interview method was used (before) and the data collected was primary data using a questionnaire (after). Researchers use the Guttman scale in case studies, with “True” or “False” answers with a score of True = 1, False = 0 (Lubis et al., 2022)

Case study case study is to find out the knowledge of pregnant women about the dangers of Covid-19 during pregnancy.

## Results and Discussion

### Case Study Results

This case study describes the results of a case study regarding the measurement of knowledge in pregnant women through interviews and questionnaires in the working area of the Maccini Sawah Health Center in Makassar City which was held on 04 August - 06 August 2022. The general data description of the characteristics of the respondents includes: Pregnant women with a gestational age of 1-9 months, cooperative and willing to be respondents. While specific data includes: Pregnant women with high school education standards and below to be interviewed (before), and given a questionnaire afterwards (after). Then the survey data is displayed in tabular format.

In this case study, 2 pregnant women were selected as case study respondents, namely the respondent (Mrs. S) and the second respondent (Mrs. A). For the application of the method will be conducted interviews and given a questionnaire. Respondents will be interviewed in stages to measure the level of knowledge of respondents for 3 days and afterwards respondents are given a questionnaire to fill in as a final assessment to measure the level of knowledge of respondents. Before conducting research activities to respondents, the researcher previously built a relationship of mutual trust with the respondent to enter into a time contract during the implementation of the case study, and explained the purpose of the researcher to the respondent so that the respondent was willing to sign the consent form provided by the researcher.

The results of the case study are presented as follows:

#### Respondent I (Mrs. "S")

Respondent Mrs. “s” 30 years old, 3 months pregnant, pregnant with her second child, Muslim, last high school (SMA), housewife, lives on Jl. Kemauan IV, Mrs. “S” lives with her husband and children his first.

The results of the description of Mrs. "S"'s knowledge obtained on August 4 2022 about the dangers of Covid-19 during pregnancy, before filling out the questionnaire, based on the results of the interview on the first day the researcher concluded that Mrs. "S" is enough with a value of 65% and after being given knowledge with education, Mrs. "S" increased by 75% and on the second day of August 5, 2022 after carrying out knowledge education increased by 80%. On the third day, 06 August 2022, the results of a questionnaire containing 20 questions and after conducting education, the results of Mrs. The "S" obtained is:

Score Value: True: 1 (Highest Score)

False: 0 (Lowest Value)

20 correct answers  $\rightarrow 20 \times 1 = 20$

0 wrong answers  $\rightarrow 0 \times 0 = 0 +$

Number of correct values =  $20 \times 100\%$

Number of questions = 20

= 100

The knowledge picture of Mrs. "S" increased by 100% means that Mrs. "S" knowledge is good.

Table 1. Results of interview and questionnaire observations on respondents Mrs. "S" for 3 days at the Maccini Sawah Health Center in Makassar city

	<b>Before education</b>	<b>After education</b>
Day First	Mrs.S knowledge in the Sufficient category: 65%.	Mrs.S knowledge in the category is quite 75%..
Day second	Mrs.S knowledge in sufficient category : 75%	Mrs.S knowledge in good category : 80 %
Day Third	Mrs.S knowledge in good category : 80%	Mrs.S knowledge in good category : 100%

### Responen II (Mrs." A")

Respondent Mrs. "A" is 25 years old, 8 months pregnant, pregnant with her first child, is Muslim, last high school (SMA) education, housewife, lives on Jl. Kesatuan 3, Mrs. "A" lives with husband and mother-in-law.

The results of the description of Mrs. "A"'s knowledge about the dangers of Covid-19 during pregnancy on the first day of August 4 2022, before filling out the questionnaire, based on the results of the interview it can be concluded that Mrs. "A"'s knowledge is still lacking with a value of 60%. After providing education, Mrs. "A"'s knowledge increased by 65%. On the second day, August 5, after giving education, Mrs. "A"'s knowledge level increased to 75%. Whereas on the third day, the results of the questionnaire with 20 questions and after education, the level of knowledge Mrs. "A" obtained were:

Score Value : True : 1 ( Highest Score )

False: 0 ( Lowest Value )

18 correct answers → 18 x 1 = 18

0 wrong answers → 2 x 0 = 0 +

Sum of correct values = 18 x 100%

Number of questions = 20

= 90%

A picture of Mrs.'s disappearance." A" increases to 90% means Mrs.'s knowledge." A" Ok.

Table 2. Results of interview and questionnaire observations on respondents Mrs. "A" for 3 days at the Maccini Sawah Health Center in Makassar city

	<b>Before education</b>	<b>After education</b>
Day First	Mrs.A Knowledge in category less : 60%	Mrs.A knowledge is enough 65%.
Day second	Mrs.A knowledge in sufficient category : 65%	Mrs.A knowledge in the category is enough 75%
Day Third	Mrs.A knowledge in sufficient category : 75%	Mrs.A knowledge in good category : 90%

Based on the results of the case studies that have been carried out by the researcher on the respondent Mrs. "S" and the respondent Mrs. "A" in knowing the description of the knowledge of pregnant women about the dangers of Covid-19 during pregnancy in the working area of

the Maccini Sawah Health Center which was carried out for 3 days, the researcher found similarities the level of knowledge of pregnant women towards the two respondents Mrs. "S" and Mrs. "A".

In the first respondent Mrs. "S", it was found that on the first day before the education was carried out, the level of knowledge of Mrs. "S" was categorized as sufficient (65%), after the education was carried out, the knowledge level of Mrs. "S" increased in the good category (100%). Based on the results of the research that has been done, knowledge is categorized as sufficient because of the level of education factor. This is in line with the results of the researcher (Komang, 2021) saying that the majority (81.3%) of pregnant women's knowledge is in the category of sufficient knowledge, the level of knowledge obtained is due to the level of education factor.

In the second respondent Mrs. "A" it was found that the level of knowledge before education was included in the sufficient category (60%), after education the level of knowledge increased in the good category (90%). This happens because the level of education affects the ability to receive information. This is in line with the results of a study (Nadifa et al., 2021) which says that the level of knowledge of pregnant women is influenced by their level of education, there are pregnant women respondents who have graduated from elementary school/equivalent (22%), respondents who have graduated from junior high school education (55.6%) and there were pregnant women who graduated from high school (11.1%).

According to the researcher's assumption that the level of education is one of the factors that influence the level of knowledge. Knowledge of pregnant women about the dangers of Covid-19 is something that respondents really need to know, along with how to prevent it and protect themselves from exposure to the Covid-19 virus. Knowledge plays a very important role for pregnant women in order to protect themselves and the health of their fetus. In this case study, the two pregnant women respondents both had knowledge that was categorized as good after counseling was carried out. Although there was no significant gap in the level of knowledge before and after the education, there was an increase in the level of knowledge in both respondents.

Therefore, in knowing the description of pregnant women's knowledge about the dangers of Covid-19, it is very necessary to monitor and conduct education aimed at increasing knowledge about the dangers of Covid-19 in an effort to prevent the transmission of the Covid-19 virus during the pandemic.

## **Conclusion**

Based on the results of the observation of the case studies conducted, in accordance with the specific objectives that have been determined by the respondents regarding the Description of Knowledge of Pregnant Women About the Dangers of Covid-19 During Pregnancy in the Working Area of the Maccini Sawah Health Center on 04 August 2022 to 07 August 2022, the authors can conclude that: Mrs. "S" and Mrs. "A" have sufficient knowledge. The case studies show that theory and facts have in common, namely education has an influence on low knowledge about the dangers of Covid-19 during pregnancy, while those with higher education also have extensive knowledge about the dangers of Covid-19 during pregnancy, and a lack of information is also very affect the level of knowledge of pregnant women about the dangers of Covid-19 during pregnancy.

## **Suggestion**

It is hoped that this case study will serve as a reference for the community to raise awareness that it is important to increase knowledge by increasing education, both through outreach, the surrounding environment, and receiving education about the danger signs of Covid-19 for pregnant women. The results of this case study are expected to add insight into technology, so

that they can monitor groups of pregnant women in knowing the dangers of Covid-29 during pregnancy. This case study is expected to be a lesson for researchers even though it is hampered by the lack of time to carry out the case study but it becomes a very meaningful lesson for the writer.

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