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Research Article

Pregnant Women's Knowledges, Attitudes, and Practices (KAP) Regarding COVID-19 Prevention

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A B S T R A C T

Background: Pregnant women have heightened vulnerability during the COVID-19 pandemic due to the need for regular health facility visits for prenatal care and the added responsibility of caring for family members who have contracted COVID-19. The Knowledge, Attitudes, and Practices (KAP) score of pregnant women in relation to COVID-19 prevention can be utilized as input to determine the intervention strategy.
Objective: The purpose of this study is to examine the KAP scores of pregnant women. This study employs a quantitative approach and utilizes a descriptive survey methodology.
Method: The study included a total of 93 pregnant women who sought medical care at the Pagar Jati Health Center in Deli Serdang Regency in 2022. The sample methodology employed was the method of total sampling. The data collection process involved distributing questionnaires to pregnant women, followed by an analysis that included calculating the frequency distribution of demographic data such as the mother's age, education level, and number of children. Additionally, variables related to the knowledge, attitudes, and practices of pregnant women were also examined.
Result: The findings indicated that a majority of individuals possessed inadequate knowledge (62.4%). The predominant sentiment among pregnant women is negative, accounting for 60.2%. A majority of pregnant women (53.8%) fail to adhere to health protocols. Pregnant women between the ages of 20 and 35 exhibit low KAP scores.
Conclusion: Similarly, consider the educational attainment of women. Pregnant women with a parity of more than 2 persons also exhibited low KAP scores.

INTRODUCTION

Pregnant women have been identified as a vulnerable population at high risk of getting the COVID-19 pandemic, which has affected all countries worldwide since the start of 2020 [1], [2]. As of October 2022, there were 159,861 confirmed cases of COVID-19 in North Sumatra, with a total of 3,303 deaths [3]. The rapid transmission rate of COVID-19 has a profound psychological impact and induces concern across all sectors of society, especially pregnant women. The numbers 4, 5, 6, 7, and 8. The mother's susceptibility to COVID-19 infection is increased due to a partial loss in immunity resulting from physiological and hormonal changes during pregnancy [9]. The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) have implemented various strategies to reduce the spread of COVID-19. These include isolating individuals with confirmed cases, contact tracing, maintaining physical distance, using masks or respirators, and expediting the vaccination process [10], [11]. There are concerns that routine pregnancy screenings conducted at health services may increase the risk of mothers contracting a COVID-19 infection [12], [13]. A study conducted in China found that pregnant women exhibited altered behavior and responses, including self-isolation and alterations in transportation methods [14]. In light of this condition, it is

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crucial for pregnant women to be aware of the measures they should take to avoid contracting COVID-19, particularly when engaging in activities outside their residence, such as attending prenatal appointments at healthcare institutions [15]. Furthermore, it is imperative for pregnant women to get knowledge on the proper methods of providing safe care for affected family members [16], [17]. Hence, it is crucial to ascertain the characteristics associated with preventive behavior in order to gain insight and offer recommendations for health interventions among the community [18].

Existing literature demonstrates that the KAP model, which assesses an individual's knowledge, attitude, and behaviors, is a useful tool for evaluating fundamental parts of health education. Understanding these factors can offer insights into identifying effective health behavior treatments [19], [20]. KAP studies investigating the preventive behavior against COVID-19 in pregnant women have been completed in various regions of Indonesia [21]-[24]. However, no studies have been specifically conducted on the population of pregnant women in Deli Serdang [15], [25]. The research goal of this study is to investigate the knowledge, attitudes, and precautions regarding COVID-19 among pregnant women at the Pagar Jati Health Center, Deli Serdang Regency in 2022. The findings of this study can offer supplementary insights into the preventive measures against COVID-19 in pregnant women. These insights can serve as valuable input for health authorities in formulating prevention policies for susceptible groups.

METHOD

1. Research Design

This study is a quantitative-research that utilizes a descriptive survey method. It involves a single observation and simultaneous measurements to understand the behavior of pregnant women in preventing COVID-19 infection at the Pagar Jati Health Center in Deli Serdang Regency in 2022. The research variables encompassed the maternal characteristics, including the age of the expectant mother, her level of education, the number of children she has, as well as her knowledge, attitude, and practices throughout pregnancy.

2. Research Site

The study was conducted at the Pagar Jati Health Center in Deli Serdang Regency in 2022.

3. Population

The population for this study consisted of 93 pregnant women who were attending the Pagar Jati Health Center in Deli Serdang Regency in 2022.

4. Collection Data

The survey was carried out by the direct distribution of questionnaires to pregnant women, inquiring about their measures taken to mitigate the risk of contracting COVID-19. The questionnaire contained a knowledge variable comprising of ten items, each with answer alternatives of yes = 1 and no = 0. The attitude survey comprises 10 statements, each with a corresponding rating scale ranging from strongly agree (5) to strongly disagree (1). The variable "practices" comprises 5 statements, each associated with answer choices "yes" (with a value of 1) and "no" (assigned a value of 0). Prior to completing the questionnaire, all respondents were provided with an informed consent form, which indicated their voluntary agreement to participate in this study.

5. Analysis Data

The data from this study were examined using descriptive methods to identify the frequency distribution of all research variables, including demographic factors as well as variables related to knowledge, attitude, and practices. The findings are shown as a percentage and can be viewed in either a table or a graph.

6. Processing Data

The process commences with examining the data collected from the field, which is presented as a compilation of respondents' inquiries or responses to the survey questionnaire they completed. Returns the response code of the questionnaire completed by the respondent during the survey. Next, employ Microsoft Office Excel to transcribe the respondent's answers and move the data to a computer software product. The data inputted into the computer program is subsequently verified to determine its accuracy. During the last stage, the data is presented in the form of visual representations and tables that show the frequency of occurrence [26]. The data analysis employed a univariate analysis, which commenced by computing frequency distributions of mother demographics, such as

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maternal age, maternal education, and number of children. Additionally, it encompassed the variables of knowledge, attitudes, and practices of pregnant women.

RESULT AND DISCUSSION

Table 1. The Frequency of Characteristic of Pregnant Women (n=93)

Variables	n	%
Age		
≤ 20 years	5	5.4
21-35 years	62	66.7
> 35 years	26	28
Education		
Elementary	27	29
Junior High	43	46.2
Senior High	17	18.3
Bachelor	6	6.5
Parity		
≤ 2 people	36	38.7
> 2 people	57	61.3

The characteristics of pregnant women were derived using a frequency distribution. Specifically, 66.7% of the most pregnant women fell within the age range of 20-35 years, while 27.9% were above the age of 35. Moreover, the predominant level of education among pregnant women was junior high school, accounting for 46.2%, while elementary school education constituted 29%. According to Table 1, the majority of pregnant women, specifically 61.3%, have more than two children, including those who are aged two or younger.

Table 2. The Frequency Distribution of The KAP of Pregnat Women (n=93)

Variable	n	%
Knowledges		
Good	35	37.6
Poor	58	62.4
Attitudes		
Positive	37	39.8
Negative	56	60.2
Practices		
Complying	43	46.2
Not Complying	50	53.8

Table 2 presents the COVID-19 preventative actions of pregnant women, categorized according to their knowledge, attitudes, and practices. The study findings indicated that a majority of pregnant women possessed limited awareness on the prevention of COVID-19 (62.4%). Furthermore, a significant majority of pregnant women, specifically 60.2%, possess a poor level of awareness. A majority of pregnant women, approximately 53.8%, do not adhere to health protocols, whereas the remaining 46.2% of pregnant women do comply with these procedures.

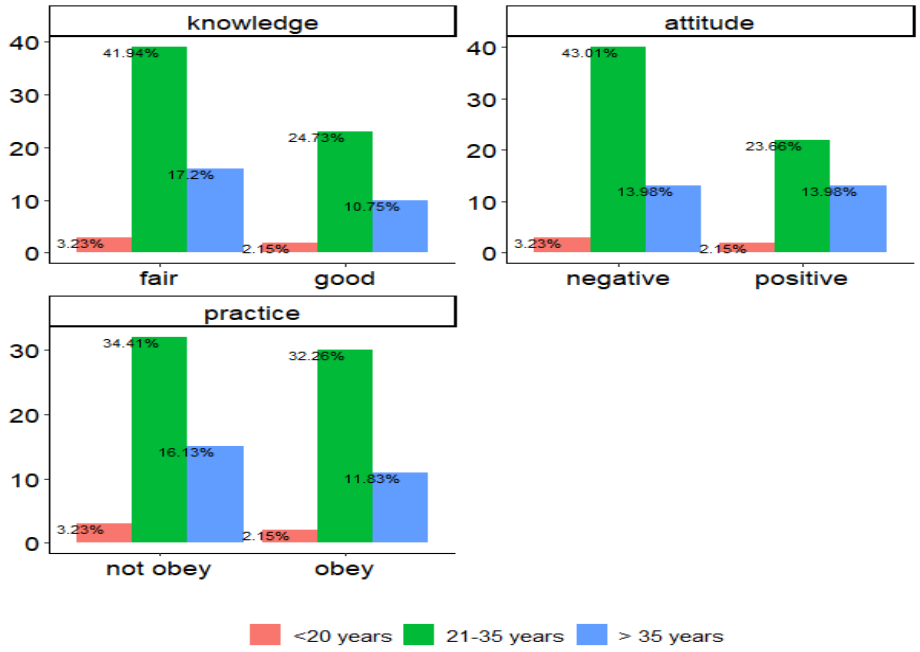

Figure 1. Knowledges, Attitudes and Practices Based on The Age of Pregnant Women

Figure 1 displays the frequency distribution of the Knowledge, Attitudes, and Practices (KAP) of pregnant women. The frequency distribution of the Knowledge, Attitudes, and Practices (KAP) of pregnant women, categorized by age group, reveals that the majority of women aged 21-35 exhibit a less satisfactory level of knowledge (41.9%). Similarly, negative attitudes are most prevalent among women aged 20-35, accounting for 43% of the sample. Furthermore, non-compliance with health protocols is most commonly observed among mothers aged 20-35, representing 34.4% of the population. The findings of this study contrast with recent research that indicated that most pregnant women in the age group of 20-35 years followed effective COVID-19 preventive methods [27].

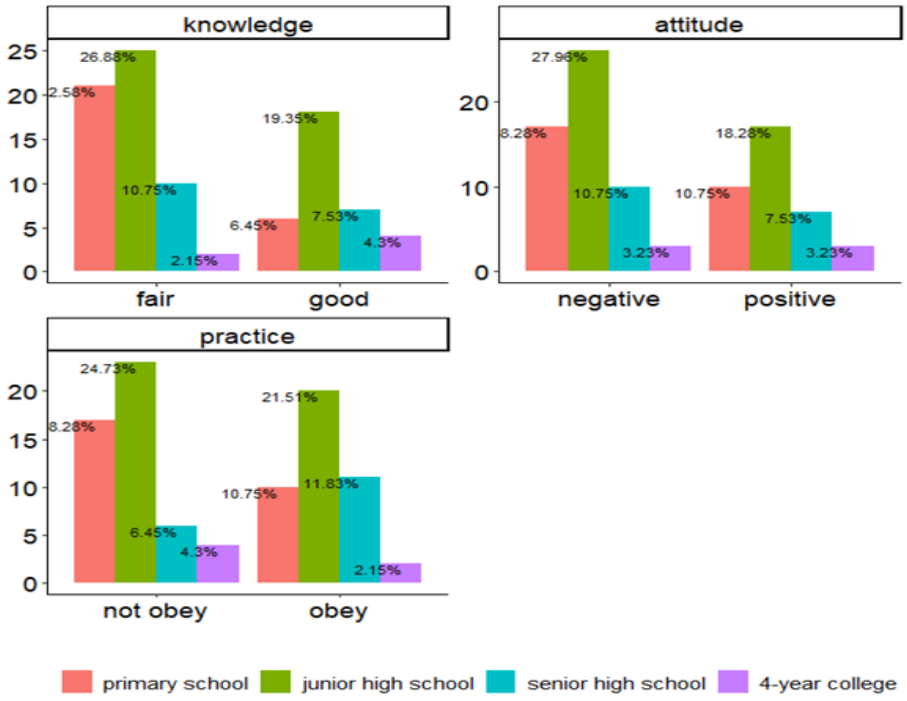

Figure 2. Knowledge, Attitudes and Practices Based on the Education of Pregnant Women

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Figure 2 illustrates the frequency distribution of The KAP (Knowledge, Attitudes, and Practices) of pregnant women, categorized by the education level of each mother. The data reveals that knowledge is predominantly classified as poor in the junior high school education group (26.8%). Negative attitudes are most prevalent in the junior high school education group (27.9%), followed by the elementary education group (8.28%). Additionally, the majority of mothers who do not adhere to health protocols are found in the junior high school (24.7%) and elementary education groups (8.28%). The findings diverge from the results of the study conducted by Kamal et al. [28] and Darmawati et al. [29], which indicated that the KAP score of the tested population fell within the fairly excellent range. The variation in the educational attributes of the participants accounts for the disparity in KAP scores observed in this study, as compared to the features of prior investigations. The study found that most of the participants completed their education at the junior high school level. The degree of education significantly influences the knowledge, attitudes, and practices (KAP) of pregnant women. Higher levels of education are associated with improved KAP [30].

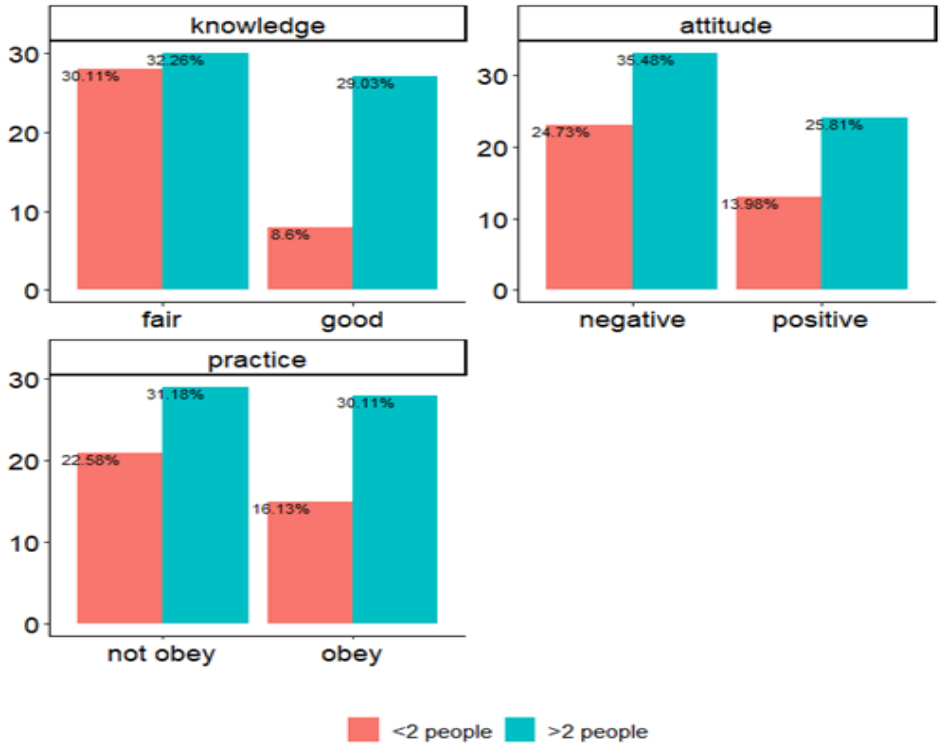

Figure 3. Knowledge, Attitudes and Practices Based on The Number of Children of Pregnant Women

Figure 3 illustrates the frequency distribution of the Knowledge, Attitude, and Practices (KAP) of pregnant women based on the number of children they have. The data reveals that the unfavorable category of knowledge was predominantly observed in mothers with more than 2 children, accounting for 32.3%. Similarly, the negative attitude was most prevalent among mothers with more than 2 children, representing 35.5%. On the other hand, mothers with less than 2 children accounted for 24.7% in the unfavorable knowledge category. Regarding practices, mothers who did not adhere to health protocols were mostly found in the category of having more than 2 children, with a percentage of 31.2%, followed by those with less than 2 children, with a percentage of 16.1%.

CONCLUSION

A significant proportion of pregnant women exhibit a low level of awareness (62.4%), a negative attitude (60.2%), and non-compliance with health regulations (53.8%). Pregnant women between the ages of 20 and 35 exhibit low KAP scores. Similarly, this applies to the educational level of pregnant women. Pregnant women with a parity of more than 2 persons also exhibited low KAP scores. Utilizing health promotion media for health education interventions is strongly advised to enhance the KAP score.

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