

Relationship between Self-Readiness and Anxiety Level in Facing *Menarche* in Elementary School Students in Donoharjo Area

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ABSTRACT

Background: Children perceive *menarche* as a scary thing because *menarche* will cause discomfort. *Menarche* is the first menstruation that usually occurs aged 10 - 16 years. One of the psychological risk factors for *menarche* is readiness, because unpreparedness causes feelings of anxiety.

Objective: Knowing the relationship between the level of self-readiness with the level of anxiety in facing *menarche* in elementary school students in the Donoharjo area.

Methods: This study is a quantitative study with a *cross-sectional* design. The sampling technique used *simple random sampling* of 71 respondents. And using the *Gamma* test.

Results: The majority of respondents were 10 years old (50.7%), the majority of students who lived with their parents (91.5%), the majority of respondents (70.4%) had not received menstrual education. The *r* value was 0.692 while the significance value of 0.030 was smaller than $p = \leq 0.05$.

Conclusion: There is a significant and strong relationship between the relationship between self-readiness and anxiety level in facing *menarche*. It can be said that if the readiness is good, then the respondent will not be anxious in facing *menarche*.

Keywords: Anxiety Level; *Menarche*; Self-readiness

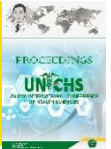
INTRODUCTION

Primary schools in Indonesia in 2022, there are around 394 thousand school units in Indonesia, with 87.74% being public primary schools (Geograf, 2023). Students in the age range of 10-12 years old are early adolescents. In Sleman Regency, the number of female adolescents in 2023 is estimated to reach 1.2 million people, while in Ngaglik District it is 53.4 thousand people (BPS, 2022).

During the adolescents, there were physiological changes such as widening hips, growing hair around the genitals and enlarging breasts (Aisyaroh, 2020) and menstruation cycles (Wahab et al., 2020). Adolescence or puberty is a stage of development in which physical maturity occurs, the development of sexual organs, and the achievement of reproductive abilities (Timiyatun & Okta, 2021). These physiological changes have an impact on the lack of self-confidence of an adolescent girl (Madya, 2023). Other changes that occur are psychological changes in the form of anxiety, low self-esteem disorders, self-image disorders and social disorders (Bunga, 2023; Hidayatus Sholeha, 2016).

Beside psychological, cognitive changes also interfere the readiness of *menarche*, because of learning, memory, reasoning, thinking, and language changing (Nur et al., 2017). Research conducted by Bharatwaj et al, (2014) stated that of 101 female early adolescent respondents, 61.3% of early adolescent respondents did not have knowledge about menstruation. Based on research there is 12% of adolescents who did not prepare for the arrival of *menarche* revealed that they felt dirty, embarrassing, and disgusting because they found their pants full of menstrual blood stains (Marhamatunnisa, 2012). However, this process is basically natural things related to their growth (Nur et al., 2017).

Adolescents who are not ready to face *menarche* may have the desire to reject these physiological, psychological, biological and cognitive processes and feel that menstruation is cruel and scary (Sainah et al., 2022). Elvina's study (2021) on factors related to facing *menarche*, the results of low knowledge (47.9%), negative attitudes (40.9%), parental support is not supportive (44.7%), not ready (64%). Meanwhile, Simon's research (2021) found the results of poor knowledge (41.2%) and negative attitudes (38.6%), not ready (52.4%), this means that the majority of female students are not ready to face *menarche*.



The impact of unpreparedness in facing *menarche* in adolescent girls can cause anxiety, causing pathological symptoms such as fear, headache, dysmenorrhea, aches in the legs and back (Winarti et al., 2017; Yeung & Retnaningsih, 2020; Retnaningsih et al 2020). The psychological health problems as the result unreadiness are social isolation, low self-esteem, early adolescents who have not accepted physical changes and cognitive changes in themselves will feel inferior or lack of self-confidence (Retnaningsih et al. 2020).

According to the results of a preliminary study at elementary schools in the Donoharjo area that I conducted by 17 students in grades 4 and 5, out of 17 students 40% of students said they were able to change pads correctly and 50% of students said they did not know how to change pads, 30% of students said they knew what menstruation was and 60% of students said they did not know what menstruation was, 70% of students said that menstruation was a taboo and 20% of students said that menstruation was a mandatory thing for a woman. Therefore, to ascertain whether there is a relationship between self-readiness and anxiety level in facing *menarche*, researchers are interested in conducting this study on the relationship between self-readiness and anxiety level in facing *menarche* in elementary school students in the Donoharjo area in 2024 to complement previous research. The elementary schools that I will conduct research on are SD Negeri Brengosan 1, SD Negeri Brengosan 2 and SD Negeri Banteran 1 which is one of the elementary schools in Sleman Regency which is in the working area of the Ngaglik Health Center. From the search results, no research was found in the elementary school related to the relationship between self-readiness and anxiety level in facing *menarche*.

From the description above, the problem that will be analyzed in this study is "Is there a relationship between self-readiness and anxiety level in facing *menarche* in elementary school students in the Donoharjo area?"

MATERIALS AND METHODS

The research design used in this study is a non-experimental analytic descriptive method with a *cross-sectional* approach, which aims to see a picture and study the dynamics of the correlation between the relationship between elementary school students' self-readiness about menstruation and the level of anxiety in facing *menarche*. The population is the students who had in grade IV and V elementary school students at SDN Brengosan 1, SDN Brengosan 2, and SDN Banteran 1. The sample size used in this study was 67 respondents.

The instrument in this study used 2 (two) questionnaires, namely the self-readiness questionnaire and the anxiety level questionnaire. The readiness questionnaire in this study took from previous research, namely from researchers (Andayani, 2022). The anxiety questionnaire uses the *Zung Self-Rating Anxiety Scale* (Z-SAS).

RESULT

Table 1. Characteristics of early adolescent respondents in facing *menarche* in elementary school students in the Donoharjo area.

Variables	N (N = 67)	%	Mean \pm SD
Age			10 \pm 0.66
Living Together:			
Parents	64	91,5	
Mom	3	4,2	
Menstrual Education:			
Already	19	29,6	
Not Yet	48	70,4	

Source: Primary Data 2024

In Table 6 the results of the respondent characteristics are explained as follows: Based on Table 6. The mean of the respondents' age was 10 years old. It was found that the majority of 64 respondents (91.5%) lived with their parents. The majority of respondents as many as 48 (70.4%) had not received education about menstruation.

Table 2. Frequency distribution of students' readiness

Menarche readiness	Frequency (n)	Percentage (%)
Ready	55	83,1
Not ready	12	16,9
Total	67	100,0

Source: Primary Data 2024

Based on the distribution results in Table 7, it shows that most of the female students have a level of readiness to face *menarche*, namely 55 respondents (83.1%).

Table 3. Frequency Distribution of Anxiety Level

Anxiety Level	Frequency (n)	Percentage (%)
Normal	7	15,5
Mild	54	76,1
Medium	6	8,5
Total	67	100,0

Source: Primary Data 2024

Based on Table 8, the majority of respondents (76.1%) experienced mild anxiety as many as 54 respondents.

Table 4. The readiness and anxiety level

Readiness	Anxiety			Total	p-value	R-sign
	Normal	Lightweight	Medium			
Ready	7	44	4	56	0,030	0,692
Percentage (%)	15,4	61,9	5,6	82,9		
Not ready	0	10	2	12		
Percentage (%)	0,0	14,0	2,8	16,9		
Total				67		

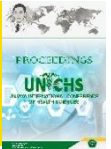
Source: Primary Data 2024

Based on Table 4, it can be seen that the majority of respondents experienced mild anxiety as many as 44 respondents. In the *Gamma* test, the *r* value is 0.692, this means that there is a significant and strong relationship between the relationship between self-readiness and anxiety level in facing *menarche*.

DISCUSSION

The results showed that mean of the ages was 10 years old. The results of Lutfiyah's research (2020) show that the percentage of unpreparedness in facing *menarche* decreases with age. This shows that physical development should be followed by psychological development, one of which is in order to mentally prepare for puberty. Jayanti & Purwati's research (2019) shows that the younger the age of female students, the more unprepared they are to face *menarche*. At a very young age they have not received complete information about menstruation. So that *menarche* will be considered a burden by children, and cause unpreparedness to face *menarche*.

When facing *menarche*, mental readiness is very necessary, because feelings of anxiety and fear will arise if adolescent girls lack understanding about *menarche*. For this reason, adolescents need to prepare themselves in facing the arrival of *menarche* (Sukarni & Wahyu, 2020). Self-acceptance in adolescents in facing *menarche* can be obtained by getting social emotional support. Emotional, moral, spiritual support, such as forms of support, information, and appreciation are indispensable instruments during the period of facing *menarche*. This support is obtained both from the family environment, especially parents, siblings, peers, the environment, teachers and also the community. Several factors can affect the readiness of adolescent girls in facing *menarche*, including knowledge, age, maturity, and



also those closest to them (namely parents, especially mothers). Emotional, instrumental and informational support is needed by adolescent girls in preparing for the arrival of *menarche*, where the family is the first and most important place to provide support and education in child development (Permatasari, 2020).

Parents should provide an explanation about *menarche* to their daughters early on, so that adolescent girls can understand and prepare themselves for *menarche*. In general, adolescent girls tell their mothers when they have their first period. Septianingrum & Wardani (2020), Kharunia Khazani's (2019), and Cahyani (2019) explain that in facing *menarche*, adolescent girls need to make behavioral adjustments that they cannot always do, especially without the support of parents, especially mothers. Parental support is very important in helping adolescent girls understand about their menstrual cycle. Mothers are often best equipped to provide support and guidance. This study explained that most of the students had not received information about menstruation 70.4%. Ningrum & Indriyanti (2018) stated that the source of adolescents obtaining information about menstruation and how to maintain their hygiene comes from parents. Family members, especially parents, play an important role in children's readiness to face their first menstruation (*menarche*), for example mothers who provide information openly and are not shy to ask or tell their children.

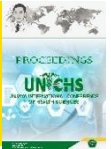
The results showed that 83.1% was ready to face *menarche*. It is in line with Nurul & Sara (2018) and Fajri & Khairani (2019) states that most the students are ready to face *menarche* at the age of ten to sixteen years. The results in this study found that there was highest readiness in facing *menarche* because most of them saw their mothers and sisters (93%). One of the readiness of female students to face *menarche* is also influenced by sources of information from the family. The family is the closest and main source of information for adolescent development Indarsita & Purba, 2019).

There are three aspects of readiness according to Fajri (2019), the first aspect is understanding, namely a person's experience of the events they experience. When someone understands and knows about the events they experience, this can help them to feel ready to deal with things that happen. Besides the adolescences also need appreciation and spiritualism. They need to know that it is natural, normal and nothing to worry about. In addition, individuals also feel high confidence, especially regarding religious views (Islam). God Almighty has given a gift to women in the form of menstrual experience. Yusuf et al. (2014) said that a woman is said to be baligh when menstruation arrives, which means that she already has an obligation to religious law. Someone who empathizes means that they can transfer positive feelings towards someone who experiences events similar to them.

The level of anxiety facing *menarche* had mild anxiety 76.1%. In the research, the majority of primary school students experienced mild anxiety. The symptoms of anxiety felt by respondents are sweaty hands, easy body fatigue, confusion and anxiety. Based on the research, the highest average percentage of statements is item number 17, namely my hands are warm and dry as usual with an average of (2.92) and the least statement item is item number 12, I often faint or feel like I want to faint with an average of (1.21). The individual feels uncomfortable or afraid or may have a premonition of impending doom even though they do not understand why these threatening emotions occur. There is no object that can be identified as a stimulus for anxiety (Rista, 2020).

Student anxiety in facing *menarche* is strongly influenced by several factors. According to Rista (2020), one of the factors is the schoolgirl's knowledge about *menarche* itself. If the schoolgirl's knowledge is good, it is less likely that she will experience anxiety. Apart from the results of the study above, the reason why girls experience *menarche* earlier than in previous years is due to the rapid development of information technology lately. In addition to the free association of children now, it is also due to the frequent access of children to pornographic sites, which can affect the psychological condition of the girls themselves. From this it can cause the age of *menarche* to increase every year. This experience underlies research conducted by Rizanna Fajrunni'mah (2018) which examines the factors that influence the readiness of adolescent girls to face *menarche* at SMPN 1 Karangrayung with the result that factors that influence the readiness of adolescent girls are the level of emotional maturity, environment, and knowledge. In other words, good knowledge does not cause anxiety to face anything. In this case is the anxiety of facing *menarche*.

The relationship between readiness and anxiety level based on the results of cross tabulation



in this study, out of 71 respondents at SDN Brengosan 1, SDN Brengosan 2 and SDN Banteran 1 with p value (0.030) < 0.05 . The results of readiness with mild and moderate anxiety were 59 respondents (83.1%) and unpreparedness and normal, mild and moderate anxiety were 12 respondents (16.9%). The readiness of children in facing *menarche* according to Suryani and Widiasih (2018), namely the younger the age of the child, the more he is not ready to accept *menarche* because he considers it a burden. But it is different for those who are ready to face *menarche*, they will feel happy and proud, because they consider themselves biologically mature. Cognitive theory states that anxiety reactions arise due to mental errors. This mental error is due to an error in interpreting a situation that for individuals is something threatening. An individual factor that greatly affects anxiety levels is readiness. If the student has high readiness, it is very likely that the student will have low anxiety. Whereas students who have low readiness, it is very likely that these students will have a high level of anxiety.

Adolescents who are ready to face *menarche* have mild anxiety with 44 respondents (62%). This is because according to Desi, Ferika (2016) anxiety factors that influence in facing *menarche* include knowledge, age of *menarche*, maternal support, information sources, unpreparedness. Based on the results of preliminary studies conducted by researchers in December 2016, Negeri Plalangan 01 Semarang obtained interview results from 7 5th grade students, namely 2 students said they had experienced *menarche* and 5 students had not experienced *menarche*. Of the 5 students, 4 students said they were anxious, nervous and there was a feeling of fear about facing *menarche* and 1 student said she was confused about facing *menarche*. They feel that the blood that comes out of the body will cause pain so that it makes them afraid and anxious in facing *menarche*.

Students who have mild and normal anxiety are characterized by students who are ready to face menstruation because they see their mothers and sisters also menstruating, but based on research it also appears that students are ready to face *menarche* but have moderate anxiety, namely (5.6%). Based on this data, some female students have problems when thinking about menstruation, characterized by the statement I feel more restless and anxious than usual (1.87), I feel afraid for no apparent reason (1.84) and I feel panic (1.81). Based on the results of research conducted by Rista (2020) from 10 female students who have experienced *menarche*, information was obtained that 6 students (60%) felt anxious when facing *menarche*. This is due to their ignorance of what to do and they feel worried about being penetrated at school later. This concern is caused by their ignorance of how to use sanitary napkins. Meanwhile, as many as (40%) felt afraid in facing *menarche* because they were embarrassed if known by male friends for fear of being ridiculed.

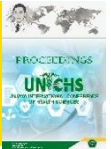
Based on the *Gamma* test, the p value (0.030) < 0.05 and the correlation coefficient value of 0.692, there is a relationship between self-readiness to face *menarche* and anxiety levels in elementary school-age children in the Donoharjo area. This means that there is a significant relationship between self-readiness and anxiety level in facing *menarche* in elementary school students in the Donoharjo area. It can be said that if the readiness is good, then the respondent will not be anxious in facing *menarche*.

CONCLUSION

There is a relationship between self-readiness and anxiety level in facing *menarche* in elementary school-age children in the Donoharjo area with an r value of 0.692 while the significance value of 0.030 is smaller than the significance level $p = \leq 0.05$ (0.030 < 0.05). This means that there is a significant relationship between self-readiness and anxiety level in facing *menarche* in elementary school students in the Donoharjo area.

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