

Relationship between knowledge level and readiness to face menarche with anxiety in grade v and vi students at sd inpres tello baru 1/1



Juwita^a  

^aBachelor Of Midwifery and Midwifery Profession, Megarezky Univercity, Makassar, Indonesia

Abstract

Background: Menarche is the first menstrual period marked by the emergence of physiological changes that include physical and mental changes. Indonesia has experienced a decline in menarche rates based on the results of the 2014 Riskesdas, there were 5.2% of children in Indonesia entering menarche under the age of 12 years. The arrival of menarche actually makes some young women afraid or anxious and consider menstrual blood to be a disease. Lack of knowledge and unpreparedness to face menarche can be the cause of this. **Objective:** To determine the relationship between the level of knowledge and readiness to face menarche with anxiety in female students in grades V and VI at SD Inpres Tello Baru 1/1. **Method:** This study uses quantitative descriptive with a cross-sectional analytical study approach. The population in this study was 70 respondents. The sampling technique used was total sampling, with a sample size of 70 respondents. **Results:** The results of the study showed that the level of knowledge about menstruation in grades V and VI at SD Inpres Tello Baru 1/1 was included in the good category, which was 72.9%, and readiness to face menarche was 87.1%, and anxiety was found in female students of 62.9%. The results of the Chi Square test showed that there was a significant relationship between the level of knowledge and readiness to face menarche with anxiety in female students ($p = 0.000$, $p = 0.000$). **Conclusion:** there is a significant relationship between the level of knowledge and readiness to face menarche with anxiety in female students in grades V and VI at SD Inpres Tello Baru 1/1.

Keywords: Knowledge, Readiness, Menarche, Anxiety

1. Introduction

Adolescence is a transitional phase from childhood to adulthood that involves biological, psychological, and socio-cultural changes (Zuliyanti, 2015). WHO sets the age of adolescence between 12-24 years, while the Indonesian Ministry of Health and BKKBN sets it at 10-19 years (Sari, R. J., 2018). Adolescents are a large population globally, with around 22% of the total population of Indonesia aged 10-19 years (BPS Makassar City, 2024).

One of the biological changes experienced by adolescent girls is menarche, which is the first menstruation that can cause anxiety depending on the information received and the individual's readiness (Sholeha, Y., 2016). Riskesdas 2014 recorded that 5.2% of children in Indonesia experienced menarche before the age of 12, with a trend of increasingly early menarche (Ministry of Health, 2014). This shifts risks triggering emotional stress in adolescent girls (Fajriannor, 2018).

Research by Afifah & Hastuti (2016) showed that 80% of girls reacted negatively to menarche, with 48.9% feeling afraid and anxious. Another study found that this anxiety is often caused by a lack of knowledge about menstruation (Nilawati, 2015). Readiness factors, including mother-child communication, play a role in reducing anxiety during menarche (Fajriannor, 2018).

Based on a study at SD Inpres Tello Baru 1/1 Makassar, it was found that most fifth and sixth grade female students did not understand menarche due to the lack of reproductive health education in schools and families. From interviews with six female students, one admitted that she was not ready, two were afraid of getting pregnant and being teased, and three felt ashamed of experiencing menarche. Therefore, this study aims to analyze the relationship between the level of knowledge and readiness to face menarche and anxiety in fifth and sixth grade female students at SD Inpres Tello Baru 1/1.

2. Materials and Methods

Type of Research

This study uses a quantitative descriptive research type with a cross-sectional analytical study approach that aims to determine the relationship between the level of knowledge with readiness to face menarche on the level of anxiety in elementary school students (Sugiyono, 2013).

Place and Time of Research Plan

This research was conducted in September-February 2025, This research was conducted at SD Inpres Tello Baru 1/1

Population and Sample

The population in the study used were all female students in grades V and VI of SD Inpres Tello Baru 1/1 who had not experienced menarche, totaling 70 female students. The sample size in this study was 70 female students who met the inclusion criteria.

Data Collection Method

Data collection using primary data and secondary data (analysis of research tests using the Chi Square Test with a p value = <0.05).

3. Results

3.1 Level of Knowledge About Menstruation

Table 1. Frequency Distribution of Knowledge Levels on Menstruation

Level of Knowledge	Frequency	Percentage (%)
Good	51	72.9
Medium	11	15.7
Poor	8	11.4
Total	70	100.0

Based on table 1. shows that the largest number of respondents is those who have a good level of knowledge as many as 51 (72.9%) students, while the lowest is those who have a low level of knowledge as many as 8 (11.4%) students.

3.2 Readiness to Face Menarche

Table 2. Frequency Distribution of Respondents' Readiness in Facing Menarche

Readiness	Frequency	Percentage (%)
Ready	61	87.1
Not Ready	9	12.9
Total	70	100.0

Based on table 2. showed that almost all respondents had readiness to face menarche, namely 61 (87.1%) female students, while respondents who did not have readiness were obtained 9 (1.6%) female.

3.3 Anxiety of Students, Facing Menarche

Table 3. Distribution of Respondents' Anxiety Frequency in Facing Menarche

Anxiety	Frequency	Percentage (%)
Mild Anxiety	44	62.9
Moderate Anxiety	17	24.3
Severe Anxiety	7	10.0
Very Severe Anxiety	2	2.9
Total	70	100.0

Based on table 3. showed that the largest number of respondents were those who had mild anxiety as many as 44 (62.7%) students, while the lowest was very severe anxiety as many as 2 (2.9%) students.

3.4 The Relationship between the Level of Knowledge About Menstruation and the Anxiety of Female Students Facing Menarche

Table 4. The Relationship Between the Level of Knowledge About Menstruation and Students' Anxiety in Dealing with Menarche

Level of Knowledge	Anxiety								Total	P Value	
	Mild Anxiety		Moderate Anxiety		Severe Anxiety		Very Severe Anxiety				
	N	%	N	%	N	%	N	%			
Good	41	80.4	9	17.6	0	0.0	1	2.0	51	100.0	0.000
Medium	3	27.3	8	72.7	0	0.0	0	0.0	11	100.0	
Poor	0	0.0	0	0.0	7	87.5	1	12.5	8	100.0	
Total	44	62.9	17	24.3	7	10.0	2	2.9	70	100.0	

Based on table 4, it shows that from the total number of respondents as many as 70 (100.0%) female students, the total number of knowledge levels with the good category was obtained as much as 51 (100.0%), with the results for the mild anxiety category as much as 41 (80.4%), moderate anxiety as much as 9 (17.6%), and severe anxiety 0 (0.0%), while very severe anxiety was obtained 1 (2.0%). Meanwhile, for the level of knowledge with the category of less, a total of 8 (100.0%) were obtained, with the results for the category of mild anxiety were obtained 0 (0.0%), moderate anxiety was also obtained 0 (0.0%), and for severe anxiety as much as 7 (87.5%), while for very severe anxiety the results were obtained as many as 1 (12.5%) respondents.

Based on the results of data analysis, it was shown that the Chi Square value using the Fisher's Exact Test test was known that the magnitude of the p-Value = 0.000 which means the relationship between the level of knowledge and anxiety of the students where $p < \alpha$ (alpha = 0.05) with an error rate of 0.05. because the p-value is $0.00 < 0.05$, it can be concluded that there is a relationship between the level of knowledge about menstruation and the anxiety of female students in grades V and VI at SD Inpres Tello Baru 1/1.

3.5 The Relationship between Menarche Readiness and Student Anxiety

Table 5 Relationship between the Level of Knowledge About Menstruation and Anxiety of Female Students in Dealing with Menarche

Readiness to Face Menarche	Anxiety								Total	P Value	
	Mild Anxiety		Moderate Anxiety		Severe Anxiety		Very Severe Anxiety				
	N	%	N	%	N	%	N	%			
Ready	44	72.1	16	26.2	0	0.0	1	1.6	61	100.0	0.000
Not Ready	0	0.0	1	11.1	7	77.8	1	11.1	9	100.0	
Total	44	62.9	17	24.3	7	10.0	2	2.9	70	70.0	

Based on table 5. showed that from the total number of respondents as many as 70 (100.0%) female students, the total number of readiness to face menarche was obtained as many as 61 (100.0%), with the results for the mild anxiety category as many as 44 (72.1%), moderate anxiety as many as 16 (26.2%), and severe anxiety obtained 0 (0.0%), while very severe anxiety obtained 1 (1.6%). And the readiness to face menarche with the category of not ready was obtained by a total of 9 (100.0%) respondents, with the number for the category of mild anxiety obtained 0 (0.0%), moderate anxiety as much as 1 (11.1%), and severe anxiety as much as 7 (77.8%), while very severe anxiety was also obtained by 1 (11.1%) respondent.

Based on the results of data analysis, it was shown that the Chi Square value using the Fisher's Exact Test test was known that the magnitude of the p-Value = 0.000 which means that there was a relationship between readiness to face Menarche and anxiety of female students where $p < \alpha$ (alpha = 0.05) with an error rate of 0.05. because the p-Value is $0.00 < 0.05$, it can be concluded that there is a relationship between readiness to face Menarche and the anxiety of students in grades V and VI at SD Inpres Tello Baru 1/1.

4. Discussion

4.1 The Relationship between the Level of Knowledge about Menstruation and the Anxiety of Female Students Facing Menarche

Based on the results of data analysis, the Chi Square value using the Fisher's Exact Test in table 5.7 shows that the value of $p = 0.000$ where $p < \alpha$ (alpha = 0.05), which means that there is a relationship between the level of knowledge and anxiety of female students in facing menarche in grades V and VI at SD Inpres Tello Baru 1/1, so it can be concluded that the hypothesis

that states that there is a significant relationship between the level of knowledge and anxiety of female students in facing menarche in Grades V and VI at SD Inpres Tello Baru 1/1, then statistically it means that H_0 is rejected and H_a is accepted.

So the researcher assumes that the level of knowledge about menstruation is closely related to the anxiety experienced by students in grades V and VI at SD Inpres Tello Baru 1/1, if the level of knowledge of students is good, namely through the level of knowledge in the cognitive domain, it will produce a more comfortable attitude (not anxiety). The level of knowledge in the cognitive domain has 6 levels, namely knowing, understanding, application, analysis, synthesis, and evaluation. By going through these 6 levels, it is hoped that a person's attitude can be better because it is based on correct knowledge. With this anxiety, it will trigger students in grades V and VI at SD Inpres Tello Baru 1/1, to seek more in-depth information and references about menstrual knowledge.

However, there are still respondents who have very severe anxiety even though they have good knowledge of menarche. This can be affected by information. The lack of information obtained from their mothers so that young women only get knowledge about menarche based on experiences seen in the family (mother/older sister) and in the surrounding environment.

4.2 The Relationship between Menarche Readiness and Student Anxiety

Based on the results of data analysis, the Chi Square value using Fisher's Exact Test in table 5.8 shows that the value of $p = 0.000$ where $p < \alpha$ ($\alpha = 0.05$), which means that there is a relationship between readiness to face menarche and anxiety of students in grades V and VI in SD Inpres Tello Baru 1/1, so it can be concluded that the hypothesis that states that there is a significant relationship between readiness to face menarche and anxiety in grades V and VI in elementary school Tello Presidential Instruction is only 1/1, so statistically it means that H_0 is rejected and H_a is accepted.

So the researcher assumes that readiness to face menarche is closely related to the anxiety experienced by students at SD Inpres Tello Baru 1/1. Thus, education about menstruation must be provided from an early age, so that a woman who experiences menstruation for the first time does not feel insecure or embarrassed so that she has the readiness to face menarche and considers that the arrival of menarche or the first menstruation is a natural thing experienced by every normal woman and does not need to feel anxious, so as to produce a more comfortable attitude (not anxious).

However, there are still respondents who have moderate anxiety and even very severe anxiety even though they have readiness to face menarche. This can be due to maturity (changes in behavior due to growth and development) and thinking power (intelligence). A person with normal intelligence will be better prepared to overcome the problems faced than a person with less intelligence.

5. Conclusions

Based on the results of the study, it is known that the majority of students at SD Inpres Tello Baru 1/1 Makassar City have a good level of knowledge about menstruation, namely 51 respondents (72.9%). In addition, readiness to face menarche is also relatively high, with 61 respondents (87.1%) in the ready category. The level of anxiety experienced by most female students was in the mild category, namely 44 respondents (62.9%). Statistical analysis showed that there was a significant relationship between the level of knowledge about menstruation and anxiety of female students, as well as between the readiness to face menarche and the anxiety of female students, based on the results of Fisher's exact test which showed a significance value of $0.000 < 0.05$. This indicates that the higher the knowledge and readiness of students for menarche, the lower the level of anxiety they experience.

Conflict of Interest

There is no conflict of interest

References

- Afifah, A. & Hastuti, T. P. (2016). *Hubungan Tingkat Pengetahuan Tentang Menstruasi Dengan Kesiapan Menghadapi Menarche Pada Siswi Kelas V Dan VI Di SD Negeri Dangkel Parakan Temanggung*. Jurnal Kebidanan. Vol.5 No.11. ISSN: 2089-7669.
- Anggreini, W. & Indriyanti, K. (2018). *Hubungan Pengetahuan Remaja tentang Menstruasi dengan Tingkat Kecemasan dalam Menghadapi Menarche pada Siswi Kelas IV dan V SDI Darul Hikmah Krian Sidoarjo*. Jurnal Nurse and Health. Vol.7. ISSN: 2088-9909.
- Herwati & Muchtar, M. (2017). *Model Pendidikan Kesehatan Terhadap Pengetahuan Dan Sikap Dalam Kesiapan Menghadapi Menarche Di Sekolah Dasar*. Jurnal: Menara Ilmu. Vol. XI. e-ISSN: 2528-7613.
- Mukhoirotn, & Qomari, P. N. (2017). *Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan Dan Kesiapan Dalam Menghadapi Menarche Di Min Rejoso Peterongan Jombang*. JURNAL EDUnursing. Vol.1 No.1. e-ISSN: 2579-6127
- M. Fajriannor TM. (2018). *Hubungan Persepsi Anak Terhadap Peran Ibu dengan Tingkat Kecemasan Saat Menstruasi Pertama (Menarche) Pada remaja putri di kota Banjarmasin*. *Dinamika Kesehatan*. [Jurnal]. Vol.9 No.1
- Notoatmodjo, S. (2010). *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta

- Sari., R. J. (2018). *Hubungan Pengetahuan Tentang Menarche Dengan Sikap Menghadapi Menarche Pada Remaja Putri Kelas VII Di SMP Swasta Hangtuah Stabat*. Excellent Midwifery Journal. Vol.2 No.1. e-ISSN: 2620-9829.
- Setyawati, I. & Wijayanti (2015). *Hubungan antara Kesiapan dengan Kecemasan Menghadapi Menarche pada Siswi kelas IV di SD di Madrasah Ibtidaiyah Negeri Sroyo Jaten Karanganyar*. [Jurnal]. Surakarta: Sekolah Tinggi Ilmu Kesehatan PKU Muhammadiyah.
- Sholeha, H. (2016). *Hubungan kesiapan menghadapi menarche dengan tingkat kecemasan pada siswi sekolah dasar negeri (SDN) di desa ajung kecamatan kalisat kabupaten jember* [skripsi]. Jember: Program Studi Ilmu Keperawatan Universitas Jember.
- Sisilia, S. & Taqwallah, S. (2017). *Hubungan Persepsi Anak Terhadap Peran Ibu dengan Tingkat Cemas Saat Menstruasi Pertama (Menarche) Pada Pelajar Kelas VII SMPN 1 Simpang Kiri Subulussalam*. Jurnal Ilmiah Mahasiswa Kedokteran. Vol.2 No.1 (42-48).
- Sugiyono. (2013). *Metode Penelitian Kombinasi (Mixed Methods)*. Bandung: Alfabeta