

Readiness of girls aged 10-12 years for an early menarche: a transtheoretical model of behavioural change analysis

Ni Made Diaris,^{1,2*} Rina Listyowati,^{2,3} Pande Putu Januraga^{2,3}

ABSTRACT

Background and purpose: Studies have revealed that girls are now having menarche much younger. An early menarche put young girls at higher risk for physical and psychological problems. This study aims to explore stages of readiness of girls aged 10-12 years for an early menarche.

Method: A qualitative study was conducted in Denpasar City. A total of 20 students both from primary school and junior high school aged between 10 and 12 years were purposively selected to participate in the study. Ten students had menarche while the other 10 were yet to have menarche. Data were collected through in-depth interviews at the schools after approval from parents was obtained. Data were analysed using a thematic approach.

Results: All informants have conceded the pre-contemplation and contemplation stages. Most of them were at the preparation stage.

Some children were at the action stage though some were just entered the action stage. In-depth interviews revealed that the majority of informants understood the basic knowledge of menstruation. Their mother provided information and supports after they had menarche. However, some informants stated that they were panic, ashamed, and anxious during their menarche. They also believed that several activities including washing hair, drinking icy beverages, and eating sweets were forbidden.

Conclusion: Some girls are not fully at the action stage leading to fear and shame when they had menarche. This suggests that a more comprehensive education program and psychological supports especially from mother should target younger girls to prepare them for an early menarche.

Keywords: readiness, early menarche, Denpasar

¹Faculty of Health Sciences and Technology Dhyana Pura University, Bali,

²Public Health Postgraduate Program Udayana University,

³School of Public Health Faculty of Medicine Udayana University

INTRODUCTION

Adolescent period requires special attention, especially related to reproductive health and psychological transition from childhood to teenage life.¹ Teenage girls in particular require specific support systems for their reproductive health issues, including the early menarche. Menarche or the first menstruation for girls tends to happen in younger age due multiple factors.² Studies have shown that the early menarche is associated with endogenous and exogenous factors which also related to obesity among children.¹ Studies have also found that the majority of girls (67.4%) had their menarche between aged 10 and 11 years.³

During the menstruation period, girls will experience a number of reactions which include biological, hormonal, and psychological. Some may also encounter 'internal rejection' to these physical changes.^{4,5} The lack of knowledge among girls who about to have menarche leads to fear, anxious, shame, and shock when they actually had it.^{6,7,8} A study exploring readiness of teenage girls for early menarche found that as many as 42.5% had negative attitudes toward menarche or denied that they actually had it.⁹

The unreadiness for early menarche is associated to several reproductive health problems among teenage girls including pre-menstrual syndrome, social interactions, personal hygiene, psychological issues such as anxiety and fearness as they do not accept their physical and biological changes, which can also lead to depression and confusion.¹⁰

This study aims to explore experiences of teenage girls and social contexts of early menarche, particularly looks at readiness and associated problems faced by them when they had early menarche.

METHODS

A phenomenological study was conducted between March and April 2016 in Primary School and Junior High School of Kristen Harapan, Denpasar City. A total of 20 girl students aged of 10-12 years were purposively selected and consisted of 10 students who have had menarche and another 10 students who have not had menarche. Prior to data collection, approval was obtained from the parent. In addition, informed-consent was also obtained from the respondents prior to in-depth interviews. Privacy and anonymity were guaranteed by using only their initials in any written materials.

*Correspondence to: Ni Made Diaris, Faculty of Health Sciences and Technology Dhyana Pura University, Bali
diaris.ade@gmail.com

Data were collected through in-depth interviews. Data were analysed thematically using a qualitative and verificative approach. Data firstly were classified into several themes, which then were verified by looking at existing theories and literature to generate conclusion. This study protocol has been approved by the Human Research Ethics Committee of Faculty of Medicine Udayana University and Sanglah General Hospital Denpasar.

RESULTS

Findings of this study were presented using a narrative approach. Data mainly explored determinants of readiness for early menarche among teenage girls.

Generally, the level of knowledge among teenage girls in this study was fairly good. They confidently defined the menstruation as monthly event experienced by girls and it is an indication of teenage life. Specifically related to personal hygiene, informants who already had their menarche relatively had better knowledge than those who have not had their menarche. Sources of information regarding to menarche were from mother, friends, teachers and health providers.

"...As a woman, if no fertilization happen, it will out, blood from our vagina..."
(IN, had menarche, 12 years)

"Menstruation is basically the blood out... [it is] a sign of our teenage life..."
(DW, not yet menarche, 11 years)

Most of informants who already had their menarche received supports from the mother. In contrast, for those who have not had their menarche rarely received support or information from their mother. These supports were in terms of providing information on menstruation which include the signs, cycle, and care during menstruation, several restrictions during menstruation, and other psychological supports.

"... My mother said it is normal... It happens between aged of 9-12 years or maybe the latest at age 14 years. Mother also told me not to be scared, because it is normal for girls to experience this... meaning we must act more mature now..."
(AI, had menarche, 12 years)

Furthermore, informants also received information from their friends. The most frequent

question they asked their friends was their experiences with menstruation as can be seen in the following quote:

"...My friends said they were shock and afraid of going to school... They said if we already had menstruation, the boys will start to bully us... some girls were even cried because of it..."
(AN, not yet menarche, 12 years)

This quote illustrated that information from the peers were mostly associated with their experiences with menarche ranging from uncomfortable feeling, abdominal pain during menstruation, and fear to face boys at schools.

However, information from the peers were not always correct, some of them acquired incorrect information, for example menstruation is a process of releasing 'dirty blood', it is forbidden to wash the hair or to eat ice cream during the menstruation period.

"...my friends told me that we cannot eat ice cream, and also we are not allowed to wash our hair... I asked my friend few days ago, she said that we might loss our hair if we wash them during the menstruation period and she also said we cannot eat ice cream..."
(AL, had menarche, 11 years)

"Menstruation is the release of 'dirty blood' from our body"
(MR, not yet menarche, 12 years)

In relation to experiences of menarche, the majority of informants said that they were afraid, anxious, confuse, shock, and panic when they had it. Some even did not know that they were having menarche when it happened.

"I am shock... I thought it was a disease. It is blood right... then my mother said that I already a teenager and remind me to be aware of my behavior. She also teach me several things... for example I must use a dry menstrual pad, and frequently change it in the bathroom, and keep it clean too... Initially I was scared, but after my mother said those to me, I felt more relied... She also told me not to tell other people, only tell my girl friends, or to her and my other female relatives..."
(AL, had menarche, 11 years)

Some informants also experienced unpleasant stories from their friends which made them scared.

For example when their friends told them about the abdominal pain during the menstruation.

"I heard about the pain, it made me scared... My friend often complained about her abdominal pain, then she mentioned it was associated with the menstruation... I imagine if I have to experience the same pain, It scares me..."

(AL, had menarche, 11 years)

"I am scared of being bullied, scared about the pain like my friend, also I am scare of blood... I am also afraid of being teenager, I am just scared..."

(DI, not yet menarche, 10 years)

However, some informants responded positively towards these unpleasant experiences as can be seen in the following quote:

"If they had menarche, it means soon it is going to be my turn, so I feel I am more prepared for it..."

(AN, had menarche, 12 years)

The majority of informants in this study were having negative attitudes towards menstruation in general. They stated that it made them scared and anxious. These feelings were generally associated with the abdominal pain, bully from the boys at school, and also afraid if the menstrual pad is leaking.

"Wherever I go, I am always anxious about the leaking, so I should bring menstrual pads too... I am also scared of the abdominal pain..."

(VR, had menarche, 11 years)

"I am scared of being bullied, also the abdominal pain like my friend, I am also afraid of blood... and anxious of being a teenager too..."

(DI, not yet menarche, 10 years)

Respondents were also ashamed to tell other people that they had menarche already especially their peers. In addition, they were particularly afraid if the school boys found out as they might be bullied by them at schools as can be seen in the following quote:

"Ya I feel ashamed, they will bully me if they find out..."

(MR, not yet menarche, 12 years)

Furthermore, respondents often associated menstruation as being disgusting, dirty, and generally uncomfortable. These opinions were expressed

by most of respondents who already had menarche in this study.

"Very uncomfortable... I feel dirty and disgusted too... You can see the red colour on your pants... Its weird..."

(NI, had menarche, 12 years)

A number of informants were not ready for menstruation, especially those who have not had their menarche yet. For those who said they were ready for menstruation were generally equipped with sufficient knowledge and information. They also said that girls will eventually experience menstruation as a sign of a teenage life.

"Ya I am ready... I already know everything about it, I have been told... When you had your menarche means that you are a teenager..."

(NI, had menarche, 12 years)

"I am ready now, I already had it for several times... My mother provided me with lots of motivation... If you already had it, you are a teenager now..."

(NI, had menarche, 12 years)

This study revealed that for those who have not had it, they were not ready for menstruation. Most of them were anxious, scared, uncomfortable, and ashamed to talk about their menstruation experiences.

"I was anxious, afraid of the leaking too... Also feeling not comfortable when walk around... It is hard to run too..."

(AY, had menarche, 12 years)

"I am still scared about it... They said the first one is very painful..."

(DW, not yet menarche, 11 years)

All informants generally had negative perceptions and attitudes towards menstruation, which indicated that they were not yet ready for menstruation period. These negative attitudes were associated to their experiences and other people stories about menstruation.

DISCUSSION

Findings of this study are discussed from the readiness stages of school aged girls for menstruation based on the transtheoretical model of behavior. This theory is an integrated model consisting of five stages: pre-contemplation, contemplation, preparation, action and maintenance. This theory

illustrates how certain behavior is modified through several stages.¹¹ Several informants are not fully at the action stage indicated by their negative attitudes towards menstruation.

This study found that school aged girls were having fairly good knowledge about menstruation. They understood that they will eventually experience it and they sought information from various sources. They also understood that menstruation is an indication of a teenage life and the maturity of their reproductive organ. This finding is consistent with other study which found that teenagers were having a solid understanding that all women will eventually experience menstruation.¹² Knowledge is a product of object sensing, and is also influenced by level of education, saturation of information and personal experiences. Knowledge is a critical domain for an overt behavior. When behaviour is based on knowledge, it tends to be more sustainable.¹³ Girls who already prepared themselves for menstruation actively look for more information on menstruation.

Their awareness on menstruation is influenced by their surrounding environments. They may acquire information from people who already experienced it for example their mother, teacher, health provider and their peer. This study found that the main source of information was the mother. Other study also found that mothers are the main source of information for 88.6% teenage girls.¹⁴ Even though their basic knowledge on menstruation was relatively good, they also received a number of incorrect information from their peer. These included that menstruation is to release the dirty blood from the body, it is forbidden to wash your hair during menstruation or they are not allowed to consume sweet food because they may lose more blood. As the primary source of information for these girls was their mother, it is substantial to provide education programs targeting their mother to ensure correct and consistent information about menstruation are delivered to their daughter. In addition, supports from family is another key determinant to preparing children for their teenage life, especially dealing with physical and psychological changes. Girls who are supported by their parents in entering a teenage life tend to have positive attitudes on menstruation.¹⁰

As they also seek information from their friends, girls are infused with negative experiences about menstruation from their peers. These were ranging from abdominal pain, being bullied by school boys, and myths associated with menstruation such as not allow to wash hair, not allow to eat ice cream or icy drinks or sweet food. These experiences both acquired from family members and their peers

influence the attitudes of teenage girls towards menstruation.¹⁵

Girls who have not had their menarche may feel scared of menstruation if they were saturated with negative information or experiences related to menstruation. A study also found that negative experiences related to menstruation results in negative perceptions and attitudes towards menstruation which include fear, anxiety, and shame.¹⁵

This study found that school aged girls were aware that they will experience menstruation and also they acquired sufficient basic knowledge about menstruation. Based on the transtheoretical model, they conceded the pre-contemplation and contemplation stages. Children who are at contemplation stage started to gain insight about problems they will face up and also started to think about the solutions for those problems however they gain very little commitment to execute these solutions.¹¹ Given the fact that informants in this study actively sought for more information and supports from multiple sources, it can be said that they are at the preparation stage.

This study also confirmed that children who already at the preparation stage started to prepare themselves for menstruation. People at the preparation stage characterized by a desire to change their behavior and have done several preparations that include seeking for information, attending education program, organizing consultation, and learning on how to deal with the problem.¹¹ This study found that children who have had their menarche were likely at the preparation stage.

Children perceptions towards menstruation as being uncomfortable experiences lead to anxiety among those who have not had their menarche. In addition, information from their peers about the abdominal pain during the menstruation leads to fear among children towards menstruation. Furthermore, experiences of bullying from school also lead to a shame to disclose their menstruation status to other people. These circumstances indicate that they viewed these experiences in a negative frame which influences their readiness for menstruation. It can be said that most of children still view menstruation as a negative experience which indicate the majority of children in this study have not fully entered the action stage.¹¹

A number of behaviours that characterize the action stage are performing selfcare during the menstruation period, more assertive towards supports from other people, and seeking for help during menstruation if needed. However, these behaviours also occurred in parallel with negative perceptions towards menstruation. It can be concluded that they are not fully entering the action

stage yet. This suggests that an early education program and psychological support for children are essential to preparing them for menstruation, especially to build a positive attitude towards menstruation.¹¹

CONCLUSION

Children aged 10-12 years have conceded the pre-contemplation and contemplation stages, but they have not fully entered the action stage because they still perceive menstruation as negative experiences. An early education program targeting primary school girls as well as providing psychological supports are critical to preparing them for early menarche, especially to build a positive attitude towards menstruation.

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