

## Diabetes, Obesity &amp; Metabolic Disorders Open Access

# Perspectives of Adolescent Girls in Maintaining Their Reproductive Health in Bogor Rural Area, West Java, Indonesia: A Qualitative Study

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Unwanted pregnancy, abortion among girls are the most problems in Indonesia. This condition are due to the lack of understanding in maintaining reproductive health (RH). This qualitative study aimed to identify and describe adolescent girls' perceptions of their needs to maintain their reproductive health. The study was conducted in and around junior high school, senior high school, and diploma program. Participants was purposively selected into four focus group discussions in 23 participants involved of adolescent girls (13–19 years old), mothers, nurses, and teacher. Thematic content analysis identified eight themes: 1) Girls' have good understanding of changing in reproduction health (RH); 2) Girls protect themselves against negative environmental influences; 3) Maintaining RH by personal hygiene, nutrition and exercise; 4) Parents, teachers and health providers as information sources; 5) Feel a shame and tiredness are the most problems; 6) Friends are their convenience partner for discussion 7) The need of nurses who can provide RH education properly; 8) Expectation of accessible mobile health in RH. Conclusions: the girls in Bogor rural area need comprehensive information of RH that can be accessed easily and attractive. The study recommend to develop a media application of RH.

**Keywords:** Adolescent Girls, Reproductive Health, Rural Area**Introduction**

Sustainable development/ SDGs provides new directions and encouragement to pay more attention to important issues in improving global health, especially women, children and adolescents. Women, children, and adolescents have become important issues because evidences show that healthy and educated adolescent girls and young generations will contribute to the development of the economic and social growth, population growth, and reduce the rate of infant and maternal mortality in the future [1]. The result of the Indonesia Demographic Surveys 2017 showed the rate of adolescent girls giving birth at the age of 15-19 years old reached 48 per 1,000 girls, and adolescent girls becoming a mother and being pregnant with their first child increased from 8.5% to 9.5% [2]. Adolescent girls in rural area are faced with very complex problems, especially at the age of 15- 19 years old. Bogor Regency, West Java Indonesia with a youth population of 28.16% of 5,840,907 where almost half are adolescent girls placing them in a condition prone to reproductive health problems. The news reported by delivered the number of cases of adolescents in Bogor Regency in 2014 that were served in 28 primary health adolescent friendly services including premarital sex, unwanted pregnancy, childbirth, abortion, anemia, and malnutrition [3].

The adolescent girls problems are as the result of their natural behavior. As adolescents, they tend to have a great curiosity, to be very adventurous, to take up on challenges and be a risk-taker, however, they also tend to have a low awareness towards the consequences reported his study that due to cognitive immaturity, adolescents could not control their emotions properly. When resolving conflict in a wrong way, they will likely to show inappropriate behavior which causes risks to their lives (sexuality, narcotics, HIV/ AIDS) and may bear the consequences in the form of various physical and psychosocial health problems for a lifetime [4].

For this reason, this studi needs to identify the needs of young women in maintaining their reproductive health in rural areas of Bogor. Thus this is the basis for developing health education models for adoecent girls in rural area.

**Method**

A qualitative descriptive approach was conducted to gain a deep understanding about adolescents' perception of RH and the need of health education. The sample consist of 23 participants from junior high school, senior high school, and diploma three program students in rural Bogor area, as well as five mothers, three teachers, and three nurses who willing to participate in this study. Purposive sampling are used to select the sample. The participants were

divided into four focus group discussion (FGD). First FGD consist of 12 girls with the age between 13 to 19 years old, second FGD consist of five mothers who have adolescent girls, the third FGD consist of three teachers, and three nurses who works in primary health care service.

This research was conducted in Bogor Regency, West Java Indonesia between September to November 2017. All interviews data were recorded by audio-tape then transcribed in bahasa Indonesia. Thematic content analysis was used to analysis the data. To enhance the rigor of the qualitative data, two researcher completed the coding and analysis processes and discussed to an agreement about the coding.

### Ethical Aspects

The Ethics consideration of this research was approved by the Ethics Committee of the Faculty of Nursing, Universitas Indonesia Number 254/UN2.F12.D/HKP.02.04/2017, and research permission from the Bogor Regency/City Government. The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Results

Participants characteristic this study showed in Table: 1

**Table 1: Characteristic of Participant**

Participant		Characeristic	
A. Adolescent girls'	Age (year)	First Periode (Years old/yo)	Education level (grade in class)
P1	15 <sup>th</sup>	Almost 12 yo	9 <sup>th</sup> grade
P2	15 <sup>th</sup>	Almost 12 yo	9 <sup>th</sup> grade
P3	14 <sup>th</sup>	13 yo	8 <sup>th</sup> grade
P4	17 <sup>th</sup>	13 yo	11 <sup>st</sup> grade
P5	13 <sup>th</sup>	13 yo	7 <sup>th</sup> grade
P6	15 <sup>th</sup>	12 yo	9 <sup>th</sup> grade
P7	16 <sup>th</sup>	13 yo	10 <sup>th</sup> grade
P8	17 <sup>th</sup>	15 yo	11 <sup>st</sup> grade
P9	16 <sup>th</sup>	11 yo	10 <sup>th</sup> grade
P10	18 <sup>th</sup>	13 yo	12 <sup>th</sup> grade
P11	19 <sup>th</sup>	13 yo	1 <sup>st</sup> level Diploma3
P12	19 <sup>th</sup>	14yo	1 <sup>st</sup> level Diploma3
A. Mothers	Age (years old/yo)	Number of the children	Gender of children M=male, F=female with age
M1	38 yo	2	M-F (13 yo)
M2	35 yo	3	F (14 yo)-M-M
M3	43 yo	3	F (19 yo)-M-F (14 yo)
M4	39 yo	1	F (16 yo)
M5	50 yo	4	M-M-F (18 yo)-F (15 yo)
B. Teachers	Age (years old/yo)	Works length as a councelor teacher	
T1	36 yo	5	
T2	38 yo	5	
T3	39 yo	7	
C. Nurses	Age (years old/yo)	Works length as a ners	
N1	39 yo	6	
N2	34 yo	5	
N3	41 yo	7	

### Thematic Content Analysis Result

Content analysis yields 8 themes which can be seen in Figure 1



**Figure 1:** Thematic Content Analysis Result

**Theme one: Girls have good understanding of changing in reproduction health (RH)**

All participants showed their understanding about physical change by mentioning breasts enlargement, hair growth in the genital area, and menstruation. Four out of 12 participants said that once adolescent girls undergo a menstruation process, they are able to get pregnant. Behavior change is also understood by participants as a sign of puberty. The following statements are as the evidence: “Having breasts, uterus and menstruation. As far as I know, those are the signs of puberty” (P11). “When adolescent girls started to have menstruation, that means they are able to get pregnant... so...you have to be careful” (P9).

**Theme two: Girls Protect Themselves Against Negative Environmental Influences**

Five out of 12 participants thought that free dating would cause problems so it had to be controlled. Four participants argued that the environment is very influential in maintaining RH, so they must be careful. This was expressed by the participant’s statement as follows: “I do not want to date first ... afraid of making trouble ... can disturb my study ...” (P1). “... since there are more sexual crimes amongst adolescents nowadays so as teenagers, we must be vigilant in maintaining our reproductive health, and we need our parent’s supervision” (P6). Those statements are inline with the mothers’ perception who believes her daughter harus bisa menjaga dirinya sendiri, namun tetap dibutuhkan under the parent’s supervision to keep them safe:

*“We want our daughters to have abstinence, no freesex so they stay aware ...no unwanted pregnancy. Therefore even though they have to proteck themself but they should be under parent’s supervision” (M 3).*

**Theme Three: Maintaining RH by Personal Hygiene, Nutrition and Exercise**

All participants said that maintaining personal hygiene during menstruation was believed to be one of the efforts to stay healthy. By frequently changing the sanitary napkin, cleaning the genital area and bathing. According to the participants’ understanding, consuming adequate nutrition and having healthy diet were able to keep the body healthy. Doing sports activities was also considered as another way to maintain their HR. Below are the participant’s statement:

“... It is important to keep the genital area clean to prevent from having unpleasant smell and diseases such as cyst ...” (P8). “... eating healthy diet to protect the body from diseases ...” (P9). “The sport is very important ... for me, on Sunday morning, I run around the complex with my friends... I like to see the food stalls ... he he he” (P2)

**Theme four: Parents, Teachers and Health Providers as Information Sources**

Eight out of 12 participants mentioned that they gain information about RH from school lessons taught by their teacher counselor and biology teacher; four of them mentioned health workers; and all of them mentioned to have received RH information from electronic and print media. The participant’s statements was disclosed as follows:

“... sometimes the health center officers come to school to provide counseling ... hmmm ... about reproduction ... hmmm ... maintain hygiene during menstruation ..., take blood- boosting tablets ...” (P5)

“Mom likes to pay attention ... so she can teach me. Monthly menstruation ... How many times to change, clean shower ... it’s already quite a lot on the internet right ... about reproductive health ... because right now everything is on the internet so it’s easy to get information ...” (P3)

The teacher stated that health workers came to school at the beginning of the learning year to provide education and physical examinations to class representatives. The following statement is related: “... health workers come at the beginning of the year to give physical examinations on some children ... and provide health education ..giving tablets... besides that, our sudents received RH information from me as a teacher counselor and from Biology teacher...” (T.3)

Sejalan dengan pernyataan teacher, Perawat mengatakan bahwa program kesehatan dilakukan minimal pada awal pembelajaran meliputi screening kesehatan, kesehatan reproduksi, dan juga melatih siswa menangani masalah kesehatan yang sering terjadi di sekolah sebagai petugas kesehatan sekolah. Juga program pemberian Fe sebulan sekali.

“The youth health program at the puskesmas, we will visit schools at the beginning of the semester to conduct health screening and counseling, give vitamin Fe once a week and train students in certain periods to become health cadres...” (N2)

**Theme five: Ashame and Tiredness are the Most Problems**

Seven out of 12 participants said that they felt tired and ashamed to utilize primary health services. Tired due to school activities that had just finished after 15:00, and felt discomfort when being in the health center filled with visitors. The participant expressions are as follows: “The teacher said that at the health center there is a special service for teenagers ... only we have never been there ... because the time is already late after school and we’re so tired” (P9).

“It is embarrassing to go there (primary health car services) especially when so many people are watching ...” (P5)

Those statements are inline with the ners’ explanation that remaja jarang datang ke puskesmas untuk konsultasi kesehatan reproduksinya, kebanyakan mereka datang jika terdapat keluhan sakit, seperti demam lebih dari 3 hari, flue berat. Berikut pernyataan yang dikemukakan oleh perawat:

“...most of the teenagers who come to the puskesmas because of illness, such as fever for days, severe flu...their nets come about their reproductive health” (N1)

### **Theme Six: Friends are their Confidence Partner for Discussion**

Six out of 12 participants considered sharing RH information with fellow friends were more enjoyable, through discussions and attending counseling together. The participant's statement was disclosed as follows:

"eee ... the thing is, it is more comfortable sharing stories with our friends because we have done a lot of things together. Besides sharing stories, we also give advice and provide solutions to each other" (P9)

### **Theme Seven: The Need of Nurses Who can Provide RH Education Properly**

Four out of 12 participants stated that they expected to be given health education by friendly health workers such as friendly nurses who smiles a lot. The participant's statement was disclosed as follows:

"... usually when I'm sick ... my mom takes me to the Community Health Center ... It's not that bad but we have to queued for a long time ... not to mention the nurses there are not

friendly ... it makes me feel reluctant to face them ... It would be better if the nurses smile a lot ... "(P.9)

"... Maybe if the nurses are friendly ... we can ask so many questions ... if we learn more from experienced people then how so ... "(P2) Perawat menyatakan bahwa hambatan petugas kesehatan yang ada di puskesmas belum semuanya mendapatkan pelatihan tentang kesehatan reproduksi. Hanya perawat yang memegang program kesehatan reproduksi yang mendapatkan pelatihan tentang remaja. Pernyataan perawat sebagai berikut:

"We health workers have not trained on adolescent reproductive health, for now only health workers who hold adolescent reproductive health programs are participating..." (N3)

### **Theme Eight: Expectation of Accessible Mobile Health in RH**

All participants hoped for an accessible application to gain information about RH. The reason for this expectation was that although the internet could easily be accessed, there were still not enough applications about RH education. The participant's statements were expressed as follows: ' ... applications that are accessible can enrich our knowledge about RH ... Internet provides RH information but also vulgarity ...' (P1.) '...if we receive adequate information, for sure we can take better care of our RH ... Hopefully there is an accessible application especially designed for us to help us broaden our knowledge about RH' (P12).

### **Discussion**

This study showed that the understanding of RH among girls are good enough, but most of the girls' knowledge of RH is still relatively focused on physical changes, this result in line with another study conducted by, they identified that the information needed by the adolescent girls about sexuality and RH includes the physiology of reproductive organs, puberty, menstruation, HIV/AIDS, early pregnancy, early marriage, family planning, sexual violence. A correct understanding of RH will help adolescent girls in rural areas treat reproductive health properly, so that the behaviors employed will improve health and avoid health problems [5].

Participants argue that RH needs to be maintained by providing hygiene during menstruation, consuming healthy nutrition and exercising. This finding is consistent with another researchs, which found that the perception of adolescent girls to maintain their health is by consuming good nutrition, having adequate exercise and maintaining cleanliness [6-8].

The study showed that adolescent girls in rural areas need people around them to help them maintain their reproductive health such as parents, siblings, health workers, teachers, and even friends. They are a support system for young women in maintaining good reproductive health information about reproductive health, as well as a place to consult. In line with study of that respondents consulted about RH to friends, family, health workers, religious leaders and teachers. Adolescent girls expect to receive health services as well as health education from friendly health workers [9].

All participants explained that they gained their knowledge from their families, especially from their mothers. Participants revealed that their mother provided knowledge about personal hygiene during menstruation. Besides to their mother, they also felt comfort by talking with their sisters. The results of this study are in line with most studies which state that families, especially mothers, are the main sources of information for adolescent girls [10,11,8].

Electronic and print media were also identified by all participants as sources of RH knowledge. All participants mentioned that the electronic media being the most popular one such as websites, online social media like Instagram and YouTube and online chat forum. Only three participants added that printed books as their source of knowledge are also interesting sources. This finding in line with the results of research by, the use of mobile phone text messages is a fun way for teens to get information of RH [12].

Tired and ashamed are feelings expressed by participants to utilize public health centre services. Feeling tired due to school activities that run from morning to afternoon and discomfort when visiting the health center, especially during rush hour. Similar finding was found by Sihotang's research (2018) in his study, he found that there were inhibiting factors in carrying out adolescent reproductive health programs was the negative perceptions such as feeling ashamed, doubtful of their secrecy. The research above shows that Adolescent Health Care Services (AHCS) has not been used by adolescents. because of negative perception. However stated that AHCS helps adolescents to meet their health needs in effective and efficient ways [13].

Adolescent girls find convenience with their friends, their fellow adolescent girls, to talk about puberty condition and problems. This finding is similar with the result of previous studies that found adolescents feel better when they learn from their friends [14]. In other words friends become an important role to help support adolescent girls in maintaining their RH Participants expected if there is an internet media which is accessible, understandable, provides comprehensive information about RH, and has interesting features in a form of applications [7]. They recommended applications as valuable resources for comprehensive sexual health. This is in accordance to several studies that showed adolescent girls consider promoting sexual health via apps [15-17]. Health education through smartphones can provide accurate, comprehensive, and up-to-date sexual and health reproduction information which might improve their reproduction health outcomes. Smartphone apps have been shown to be highly effective in providing health information to teenagers [18,19].

### **Conclusion**

The result of this study found that adolescent girls in rural area need comprehensive knowledge of RH, and also need a convenient and accessible information about RH. The health services that are expected by adolescent girls are accessible and unconstrained by distance and time issues. This study recommends that a model for communicating information regarding reproductive health should be developed to facilitate interaction between adolescent

girls and health workers, information sharing among peers, and self-monitoring of RH. Future nursing research should also focus on electronic health technologies, such as mobile health that more attractive for adolescent girls in rural area [20-22].

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