

Practice and hygiene of adolescent reproduction health in agricultural area: a qualitative study[†]



Original article

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Abstract: **Objective:** Adolescent reproduction health (ARH) differs greatly based on religions, religious norms, culture, and ethnicities in the Indonesian context. The value of local wisdom was considered too binding, traditional, and outdated, particularly on ARH in agricultural areas. The purpose of the study was to identify the problems, challenges, and needs, specifically for ARH, in the agricultural area of Indonesia.

Methods: A qualitative study was performed among 41 communities, including 28 village officials (VOs), 9 community health volunteers (CHVs), and 9 adolescents. The data were collected through in-depth interviews and FGD. An thematic analysis was used to describe the phenomena.

Results: This research obtained results regarding ARH in terms of communication patterns, daily behavior, reproductive practices, and hygiene of adolescent reproductive organs, especially in agricultural areas.

Conclusions: The differences in the perspective of ARH are influenced by environment, parental roles, religion, ethnicity, and knowledge.

Keywords: adolescent • local wisdom • reproductive health • practice hygiene • agricultural

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1. Introduction

Adolescence is a transitional phase with many changes that occur so quickly and are not significant between physical changes and mental changes. In this phase, one of the main problems faced by adolescents is sexual behavior that occurs before marriage. This usually

occurs because of inner urges and desires. The differences in parental monitoring, knowledge, religious norms, culture, ethnicities, and religions in Indonesia influence adolescent reproductive health (ARH).¹ Apart from these factors, westernization is one of the

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supporters of ARH. Westernization cannot be denied even though Indonesia is a country with unique cultural conditions and a fairly high Islamic tradition environment.² Adolescents prefer to develop new grades that provide freedom and satisfaction because the values of local wisdom were considered too binding, traditional, and outdated, particularly on ARH. Evidence based in Indonesia showed that 50.6% of adolescents have active ARH-related factors, including negative attitudes toward ARH. Meanwhile, adolescents identified 20.3% of immaturity in puberty and 39% of negative attitudes toward ARH that are related to age, areas, ARH communication with parents, and pubertal development.³ Approximately 44.8% of Indonesian parents still feel taboo, uncomfortable, or afraid when they discuss sexual education with their adolescents because some of them believe that this discussion represents permission or encourages sexual activity in their children.⁴

Management as a form of solution to problems in ARH has been carried out in many countries. One among them is the use of community and youth-friendly health service training through the school curriculum conducted in Ghana to increase knowledge of adolescent reproductive health.⁵ There is also the use of health education programs through the theory of planned behavior (TPB) approach in changing the behavior of children and parents toward understanding the importance of adolescent reproductive health in Iran.⁶ The implication for solving all ARH problems was done through the culturally appropriate healthcare centers by increasing the role of public health nurses (PHNs) in a comprehensive program, improving intergenerational equity, and preventing intergenerational conflict, as well as engaging the adolescents in the promotion of ARH based on locally wisdom resources in the community. Furthermore, the PHN services with the comprehensive health promotion program of ARH should be designed based on the characteristics of these adolescents to improve their life skills during puberty in Indonesia, particularly in the context of local wisdom based on prevalent social, cultural, and religious values to prevent intergenerational conflict with an integrated system of healthcare: adolescent health, family health, school health, and community health.

Adolescents face barriers to acquiring adolescent reproductive health (ARH) information and care. Even though they understand their condition, they may be unable to access the health facility.⁷ Families play an essential role in facilitating and supporting ARH needs.⁸ However, discussing ARH and educating adolescents within the family were taboo based on the Indonesian social and cultural context.⁹ In family healthcare services, family as systems could be assessed through the Friedman Family Assessment Model (FFAM)¹⁰ to

measure family structure and function (FSF) during the family life cycle with adolescent children. Therefore, it is essential to use the FFAM to measure the FSF of parents when providing ARH in an Indonesian context. Family action to provide ARH will become a critical caregiver issue during the family life cycle. This situation requires a scale of family ARH function to assess the relationship between parents and their children within the context of a system. The purposes of this research were to (1) identify the problems, challenges, and needs, specifically to life skills on ARH based on family as system and community as partners, (2) explore the experienced PHNs to promote life skills of ARH with culturally appropriate based on local wisdom values at family and community, and (3) evaluate an intergenerational local wisdom for life skills of adolescent reproductive health as an alternative of culturally appropriate to comprehensive health promotion program in community by PHNs.

2. Material and methods

2.1. Design

A qualitative research study design was used in this study. An ethnography approach identified the problems, challenges, and needs, specifically for ARH in the agricultural area of Indonesia.

2.2. Settings and participants

A qualitative study of focus group interviews was performed among 41 community leaders, including 28 village officials (VOs), 9 community health volunteers (CHVs), and 9 adolescents. The exclusion criteria in this study were respondents who were unwilling to be interviewed due to illness or refused to be respondents.

2.3. Data collection

Recruited community leaders will be interviewed in focus groups consisting of either VOs or community health, bearing in mind the potential disadvantages of convenience sampling compared to probability sampling in terms of possibly limited variability. The principle of "first come, first served" was applied due to pragmatics, resulting in the inclusion of the first 8 groups recruited.

All focus groups were conducted by the first author. Discussions were initiated with an information session. Then, written consent and completed Participant Information Sheet were obtained. Participants were reassured that confidentiality would be maintained throughout the entire study process. They were encouraged to share thoughts, opinions, and experiences. Moreover, mutual consideration and respect of all participants were emphasized during and after the group discussion interviews.

Focus group interviews were semi-structured to ensure inclusion of the main issues in relation to the study purposes. Group interviews started with a general question for open discussion: “How are communication patterns, daily behavior, reproductive practices, and hygiene of reproductive organs?” Discussions were audiotaped and transcribed verbatim. Participants received gift vouchers as appreciation for their participation. All data were stored securely at our University and were accessible only by the first author.

2.4. Data analysis

Data were analyzed using a thematic analysis approach.¹¹ Transcriptions and analysis were performed by the first author. After transcription, reading and re-reading of the transcriptions were done to familiarize with the content. Notes were taken simultaneously to create initial ideas from the transcriptions, generating a starting point for the emerging codes. In compliance with the inductive approach, the ambition was to allow the findings to depend on the transcriptions exclusively, avoiding coding around pre-existing theories or hypotheses.

The coding procedure entailed identifying data segments relevant to the research questions, coding them according to content and meaning, and collating extracts relevant to each code. During the next phase of analysis, the codes were grouped based on similarity in content and meaning, thus forming potential themes. Gradually, the main themes and subthemes were identified. Finally, themes were reviewed on two levels: from top to bottom, ensuring that themes and subthemes correspond to encompassed extracts and codes, and from bottom to top, ensuring that extracts are illustrative of the formulated themes. The emerging analysis, codes, and themes were validated in consultation with the Heads of the PHCs and co-authors. Then, the codes and themes were translated into English by the authors.

2.5. Ethical considerations

Ethical clearance was obtained from the Research Ethics Committee at the University in Indonesia, as well as from the PHCs. Data collection via interviews entailed unique possibilities for an in-depth understanding of the topics at hand, which is fundamental in qualitative research. Since personal narratives carry the risk of awakening affections and memories of both positive and painful nature – as focus groups are also exposed to other participants – extra care was taken to ensure a comfortable and encouraging environment for conversation. Participants were assured that confidentiality was respected, and their identity would not be revealed in the research report. In the ethical balance, however, it is also important to consider the advantages of participation in

potentially sensitive research and the disadvantages of withholding such research. As for the former, being able to share opinions and contribute to development and progress may be regarded as strengthening and positive for the participant. Concerning the latter, avoiding particular research due to a (perceived) sensitivity of topics would rather be unethical since it could potentially withhold indispensable information, enabling further understanding, development, and possibilities for improvement (Creswell, 2012).

3. Results

3.1. Participant characteristics

A total of 37 community leaders, including 28 VOs, 9 CHVs, and 9 adolescents were recruited (Table 1).

Variable and category	N	%
<i>Type of community leader</i>		
Village officer	28	68.2
CHV	9	9.4
Adolescent	4	4.4
<i>Gender</i>		
Male	17	41.4
Female	24	58.6
<i>Age (years)</i>		
<30	9	21.9
30–40	13	31.7
41–50	13	31.7
>50	6	14.7
<i>Religions</i>		
Moslems	41	100
Madura	28	64.3
Jawa	13	35.7
<i>Educational background</i>		
Elementary	4	9.7
Junior high school	3	7.3
Senior high school	17	27.5
Undergraduate	17	27.5
<i>Occupation</i>		
Community workers	9	21.9
Community leaders	28	68.2
Student	4	9.9
<i>Length of stay in the areas (years)</i>		
<1	1	2.4
1–5	5	12.1
6–10	4	9.7
11–15	6	14.6
16–20	4	9.7
>20	21	51.5

Note: CHV, community health volunteer.

Table 1. Characteristics of participants (N = 37)

The results, presented in Table 2, are related to 4 findings: communication patterns, daily behavior, reproductive practices, and hygiene of adolescent reproductive organs. Each theme is accompanied by a category to describe the findings about how the culture of care regarding religiosity and local wisdom can foster adolescent health in the Pandalungan ethnic of Indonesia. The sources of quotes from religious leaders are denoted as RL, village officials as VO, and community health volunteers as CHV.

3.2. Patterns of parent–adolescent communication about reproduction

This section presents perceptions of parental communication with their adolescent children about the importance of adolescent reproductive health. This perception is derived based on the level of assertive and non-assertive communication.

3.2.1. Assertive communication

Participants who are teenagers think that communication with their parents is quite good, open, and easy to listen. This encourages adolescents not to be ashamed to tell their parents about reproductive health.

From family, I always provide support and advice to get along properly, I also sometimes often tell people I know about daily activities. (Adolescent)

I often open up to my mother and father, and lately I often tell stories so I can solve problems like this all the time. I told my friends and now it's a pandemic, so the story is

the same as my mother and father, yes, in the end, my mother and father can provide a solution, my mother and father also communicate. well, listen, so feel more open to parents. (Adolescent)

This opinion is also justified by parents who may be good advisors for their children. Thus, the parents can supervise their teenagers.

My children and I always communicate from school to me after studying, where are their friends, so he tells his friends that he is the same as this one, so it's like a friend to me. So, when I come home from school, I don't stay quiet like that. The problem is that when his father comes home from work, he tells him that his work is similar to his father's, so his father comes home, what his office tells him. So maybe those are things that should be said. My two children are open like that. (Parent)

My child is menstruating, he told me and was shocked, I was advised that this is normal for teenagers. I'm trying to be open, meaning not to be too restrained, really restrained, but while not monitoring it like that, while being put in, here's the normal procedure like this. Women have to be like that. If there's anything, keep talking about it. (Parent)

From these data, it is clear that assertive communication between parents and adolescents can be used as material for evaluating parents to supervise their children. Children can also be more open for good advice for their reproductive health.

Theme and category	Keyword
<i>Communication patterns</i>	
Assertive communication	Adolescents feel that communication with their parents is quite good.
Non-assertive communication	Parents perceive that good communication is sometimes difficult for their teenage boys. Parents who rarely communicate with their children can have a negative impact.
<i>Daily behavior</i>	
Risky behavior	There is a technological sophistication that could give adolescents access to see pornography on social media.
Negative behavior	Adolescent delinquency or existing negative behavior usually occurs because there is insufficient parental monitoring.
<i>Reproductive practices</i>	
Healthy	Parents teach their children to be clean, including taking a bath, washing their face, and washing and disposing of the sanitary pads during menstruation.
Unhealthy	Adolescents take medicines like Feminax during menstrual periods.
<i>Hygiene of adolescent reproductive organs</i>	
Hygiene	Parents teach their children to maintain personal hygiene, especially the cleanliness of their reproductive organs.
Unhygienic	Parents find that their teenagers are sometimes negligent in carrying out personal hygiene, for example, negligence in disposing of the sanitary pads directly.

Table 2. Theme of the findings.

3.2.2. Non-assertive communication

Parents perceive that good communication is sometimes difficult for their teenage boys. They are not open and do not convey what their activities are.

My son is quite introverted, especially my son, he just comes to me asking for a cell phone and clothes. Even though I'm always there at home, maybe because I feel big, I'm closer to my father. (Parent)

Other things such as lack of supervision and too much freedom for children can also have an impact on juvenile delinquency. Community leaders and RL also conveyed that parents who rarely communicate with their children can have a negative impact.

Communication and monitoring by parents is not strong, most of them always say yes to the wishes of children, so that community leaders who are here are well-established and teach children appropriate things, God willing, I'm sure parents will be more careful if there are directions from figures Public. Why, I see in the book, we want to find a teacher for the child, a teacher for the child, so don't let the parents be at fault, because it will be returned to the parents later. So far what I have seen is like that, sometimes their children go there and they are let go, they are also allowed to go there, so they join in. (Community figure)

From the perception above, the lack of assertive communication with children can have an impact on the reproductive health of the children themselves, especially teenagers who always want to try new things.

3.3. Adolescent daily behavior

This section presents perceptions about the daily behavior of adolescents. This perception is derived based on the level of behavior.

3.3.1. Risky behavior

Risky behavior arises due to invitations from friends, which is perceived by adolescents. At school, there are many invitations from friends which are actually wrong.

In my environment there are friends who join in, so join in the naughty, their parents may also not monitor, so they think that when they are teenagers they are allowed to be free. (Adolescent)

There is also technological sophistication that can give youth access to open things that are not appropriate to see, such as pornography, through advertisements on social media.

Usually there are ads that are pornographic on cell phones, but I also know the limit that it's wrong, there are lots of ads like that now on the internet. (Adolescent)

Adolescent risky behavior can come from anywhere. Research results show that the environment greatly impacts the emergence of deviant behavior in adolescents.

3.3.2. Negative behavior

The opinion below states that juvenile delinquency or negative behavior usually arises because of insufficient parental monitoring.

Because I am a teacher, I used to have students who were pregnant, used drugs, and so on. With that in mind, there are preventative rules for teenagers at school. But actually this does not escape the care of parents. (Teacher).

Like the use of those illegal drug pills. There were also those who used it like that in the past, was it because their father also used it before, now that it's good, the school is good. In the past, however, there was a child here but moved now because it was formed from his home environment. (Parent)

The results above also emphasize the importance of rules in schools and regions to regulate inappropriate adolescent behavior.

3.4. Adolescent reproductive practices

This section presents perceptions about adolescents' actions in their reproductive health. This perception is derived based on the level of action classified as healthy or unhealthy.

3.4.1. Healthy

Reproductive health practices in adolescents are mostly carried out on girls for personal hygiene.

In the past, when I first got my period, I was confused, I immediately called my mom because I was shocked. From then on, I was told how to wash pads and how to dispose of them properly. (Adolescent)

Mothers often teach girls that they have to be clean, take a bath twice a day, wash their face, and during menstruation, sanitary pads must also be washed and immediately disposed of in its place. Initially lazy, but eventually got used to it. (Adolescent)

Likewise at school, good health practices are carried out as screening material for adolescent reproductive health.

I am in charge of the youth posyandu program, so my activities are educating youth regarding reproductive health, we also carry out screening to find out if there are reproductive health problems such as anemia. (Nurse)

The data above show that adolescents can perform personal hygiene as a form of reproductive health practice.

3.4.2. Unhealthy

Adolescents have not been able to carry out reproductive health practices because of their condition.

At first I was given herbal medicine by my mother, because it was bitter so I didn't want it anymore. Then I tried taking the Feminax medicine and it continued to feel dizzy, so I stopped because I don't know what being healthy is like when menstrual pain comes. (Adolescent)

3.5. Hygiene of the reproductive organs

This section presents perceptions about the cleanliness of the adolescent reproductive organs. This perception is derived based on the level of cleanliness.

3.5.1. Hygiene

Many parents teach good things as a form of attention in carrying out personal hygiene, especially in the cleanliness of their reproductive organs.

Usually I teach not to forget to pray first to clean the genital area, so we can avoid things or creatures that are not visible to see our bodies. (Parent)

In the past, I made betel nut for my child when he had vaginal discharge, now there is instant betel nut, so it's better to tell the child. (Parent)

This is also based on the youth that cleanliness of the reproductive organs is important, not to mention personal hygiene.

If I'm menstruating, sometimes I take a shower and use deodorant so you don't smell, My mother also said to keep it clean and not to be lazy. (Adolescent)

The data above show that personal hygiene and reproductive organs are understood by parents and adolescents.

3.5.2. Unhygienic

Some parents find that their teenagers are sometimes negligent in carrying out personal hygiene.

The children's room is above, so I monitor it occasionally, sometimes I still don't throw away the rest of the pads directly, I get angry right away. (Parent)

4. Discussion

Parents are in control in providing an overview for adolescents on their reproductive health. The relationship between parents and their adolescent children becomes an appraisal system in assessing the function of the family in supporting adolescent development.¹¹ One among them is through good communication about ARH. Good communication is assertive communication.¹² Assertive communication will provide firmness to adolescents so that they can protect themselves from peers who damage their health, increase self-confidence, and reduce adolescent anxiety.¹³ In addition, family communication has an important role in the development of adolescent personality characteristics and behavior.¹⁴ Conversational orientation means that family members have constant interaction and self-motivation with one another, whereas conformity orientation refers to the homogeneity of attitudes, values, and beliefs of family members as well as children's obedience to parents and older family members.¹⁵

Assertive communication to adolescents can be done to find out the reproductive health of children.¹² The results of the study found that parents were able to communicate assertively with adolescents, causing children to be more open to their parents, so that parents can also find out about their children's reproductive health. People who know will provide advice and solutions related to their health problems. In line with this research, Larsson et al.¹⁶ stated that communication with parents can help adolescents make choices and decisions.

Conversely, the results of the study also found that non-certificate communication has a negative impact on adolescent reproductive health. The perception of the response states that the low monitoring and communication of parents toward children have an impact on the behavior of children who join in on things that are not appropriate and lead to juvenile delinquency. In accordance with this, Harris-McKoy and Cui¹⁷ stated that the lack of control from parents and the lack of good communication with children can have an impact on juvenile delinquency and inappropriate behavior. Non-assertive communication causes children to fail in achieving positive self-identity as adolescents, resulting in a loss of self-control over the negative impacts of their environment.¹⁸

The next aspect is the daily behavior of adolescents. The results of the study found that many adolescents fill their daily lives with going to school, reciting the Holy of Al Qur'an, and participating in additional activities in their environment. Apart from this, there are several adolescents' daily lives that are at risk and have negative values, including the spectacle seen through the use of mobile phone technology that contains pornography. This is a risky habit if it is seen every day. Wijayanti et al.¹⁹ stated that the lack of parental roles and too frequent exposure to pornography²⁰ have an impact on inappropriate premarital sexual behavior in adolescents. Therefore, their reproductive health will also be disrupted.

Furthermore, there are daily activities that have a negative value, for example, getting pregnant out of wedlock and using drugs. Respondents who have the same thought say that these daily activities are the result of a lack of parental monitoring. This situations become a trend of following along among teenagers. Many teenagers follow their peers without knowing the dangers they will face. A study conducted by Esan and Bayajidda²¹ found that the lack of parental guidance played a high role in driving the number of cases of pregnancy out of wedlock among adolescents. In line with this, Nathan et al.²² argued that adolescents have unstable emotional control, want to try other things that they have not tried, and follow their peers with trust. They did not use protection in dealing with the opposite sex because they wanted to try new thing.

The next aspect concerns the practice of reproductive health behavior in adolescents. Adolescence is the stage after entering puberty. Many changes occur physically and mentally in adolescents after entering puberty such as menstruation and enlarged breasts in female adolescents²³ and also the occurrence of wet dreams in male adolescents.²⁴ With these changes, parental guidance is needed to be able to maintain the reproductive health conditions of adolescents. The results of the study found that most of the respondents were Muslims who had the belief to wash sanitary napkins. Parents as respondents also said that they taught their teenage girls to wash sanitary napkins, bathe twice a day, and use deodorants. This is in line with research by Pandit et al.,²⁵ which was carried out on Rohingya adolescent girls, and the results showed that it was important to change sanitary napkins every time and wash them after use.

On the contrary, the next aspect of the study was regarding the practice of unhealthy behavior related to reproductive health in adolescents, for example, the use of herbal medicine and drugs that were not appropriate, resulting in excessive side effects of menstruation. This is in accordance with research by Wong et al.,²⁶ which states that during menstruation it

is not recommended to avoid cold drinks and herbal teas such as jamu. Pain reduction during menstruation can be done by using aromatherapy, such as lavender aromatherapy.²⁷

The next aspect is regarding the cleanliness of the reproductive organs in adolescents. The results of the study found that there were still young women who did not throw away the remaining pads in the appropriate place. Some parents taught their teenage daughters to use betel nuts when there was a vaginal discharge. The information is in line with research conducted by Tisnawati and Yanti,²⁸ which states the existence of a significant effect on vaginal discharge before and after the administration of betel leaf extract. Betel leaf is a non-pharmacological therapy in reducing symptoms of vaginal discharge and treating fluor albus in female adolescents.²⁹ Other hygiene based on research results includes the teaching of parents to maintain body hygiene for teenage girls because parents judge that in their environment girls are the ones who maintain family dignity. The main thing about cleanliness is body cleanliness. Chatterjee³⁰ explained that young girls face big challenges to their bodies after puberty because besides experiencing menstruation, they will also experience psychosocial changes from the surrounding environment.

5. Conclusions

Adolescent reproductive health (ARH) is an important topic of discussion considering that adolescence is an active period of physical and psychological changes. The factors that occur are of course inseparable from parental monitoring, knowledge, and religious norms; the culture, ethnicities, and religions of Indonesia differ greatly; and such differences influence ARH. This study obtained results regarding ARH in terms of communication patterns, daily behavior, reproductive practices, and hygiene of adolescent reproductive organs. The results of interviews with adolescents, parents, community leaders, and health workers are related to differences in each aspect of adolescent reproductive health, which are influenced by environment, parental roles, religion, ethnicity, and knowledge.

Authors contribution

All authors have agreed and approved the final editing of the manuscript to submit to FON. They have contributed to this manuscript and have credited a statement as below:

- (1) Study conception and design: IR and TS
- (2) Data collection: TS and RJ

- (3) Data analysis and interpretation: IR and PPA
- (4) Drafting of the article: NDM and AYL
- (5) Critical revision of the article: TS and WF

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Ethical approval

This study was approved by the ethics committee of Faculty of Dentistry, Universitas Jember with IRB No. 1254/UN25.8/KEPK/DL/2021.

Conflicts of interest

All contributing authors declare no conflicts of interest.

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