



Reproductive Health Services for Adolescents With Hearing Impairment in Indonesia: Expectations and Reality

Ni Luh Putu Suariyani^{1,2}, Desak Putu Yuli Kurniati^{1,2}, Desak Nyoman Widyantini^{1,2}, Luh Putu Wulandari Artha¹

¹School of Public Health, Faculty of Medicine, Udayana University, Denpasar, Indonesia; ²Department of Public Health and Preventive Medicine, Faculty of Medicine, Udayana University, Denpasar, Indonesia

Objectives: Reproductive health education is essential for adolescents with hearing impairment. Since they communicate using specialized language (i.e., sign language), specialized reproductive health services in sign language is a necessity. This study aimed to describe the needs, availability, and expectations of reproductive health services among adolescents with hearing impairment.

Methods: This study used a qualitative approach. It was carried out at a school for children with special needs in the city of Denpasar, Bali, Indonesia. Data were collected by in-depth interviews. The informants were 6 adolescents with hearing impairment aged 16-17 years and 4 other key informants, including school staff and health officers. The data were then analyzed using the thematic method.

Results: We found that the informants had insufficient knowledge regarding reproductive health. There was no specific subject in the curriculum regarding this issue. Teachers did not specifically provide reproductive health information. The health service unit in the school had not been utilized well for this purpose. Furthermore, no reproductive health services were provided due to the limited number of healthcare workers who could use sign language.

Conclusions: The awareness and intentions of adolescents with hearing impairment regarding access to reproductive health services remain low. Health service units at schools should be optimized to enable schools to provide reproductive health information and services for these adolescents.

Key words: Hearing loss, Reproductive health, Reality, Expectation

INTRODUCTION

Reproductive health is a broad topic encompassing everything related to reproductive and sexual health. Reproductive

Received: February 6, 2020 Accepted: October 6, 2020

Corresponding author: Ni Luh Putu Suariyani, MHID
Department of Public Health and Preventive Medicine, Faculty of Medicine,
Udayana University, Jl. PB Sudirman, Denpasar 80232, Indonesia

E-mail: putu_suariyani@unud.ac.id

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

health education aims to prevent diseases and to maintain and restore the function of reproductive and sexual organs. By providing good reproductive health information and optimal reproductive health services to adolescents, it is expected that they will be able to behave healthily and be responsible for their own reproductive health [1]. Adolescents with disabilities have limited access to health-related information, including even basic information on their own physical growth and changes [2,3]. This condition is exacerbated by the traditional perception within society that people with disabilities should be silent and obedient, even regarding their sexuality.

Several studies have reported that people with hearing im-

pairment faced several challenges in accessing reproductive health services due to difficulties in communication [4-7], ignorance of the fact that they are hearing-impaired [4], unfriendly behavior towards them [7], lack of knowledge among health-care workers, and speech difficulties [4-6]. Another study found that people with hearing impairment are more likely to be involved in high-risk sexual behaviors, with implications regarding HIV/AIDS risk [8], high-risk sexual activities [9], family planning, and maternal health [3].

In Indonesia, the National Population and Family Planning Board (NPFL) and Ministry of Health (MOH) have introduced separate reproductive health programs for adolescents. The programs have been implemented in schools, health facilities, and the community with different names: the youth counseling and information center under the NPFL, and adolescent care health services under the MOH. However, these programs have not reached adolescents with disabilities, especially those with hearing impairment. Hence, it is necessary to assess the needs, availability, and expectations of reproductive health services among adolescents with hearing impairment.

METHODS

This study used a qualitative approach involving framework analysis. This study was conducted in a school for children with special needs in Denpasar, Bali, Indonesia. The inclusion criteria applied in this study were students who were able to communicate well using Indonesia sign language (Bahasa Isyarat Indonesia (BISINDO)). The informants were 3 girls and 3 boys, 2 school staff, and 2 health officers. Data were collected in January 2018 through in-depth interviews assisted by a sign language interpreter and recorded using a digital recorder. The semi-structured interview guide was developed based on the social model of disability (SMD) framework, which addresses people with disabilities and challenges they face, as well as their relationships with the environment (e.g., gender), which have a major influence on all aspects of their lives [10,11].

Ethics Statement

This study was approved by the Ethics Committee of the Faculty of Medicine of Sanglah General Hospital (No. 2466/UN.14.2/KEP/2017). Prior to carrying out the interview, written consent to participate in the study was obtained from all participants.

RESULTS

Reproductive Health Knowledge

We found that the informants had insufficient knowledge on reproductive health. They recognized the external reproductive organs in the local language, but only knew the names of the organs, not their functions, as reflected by the following statements:

"Not yet, what is reproductive health?" (Informant 1, student, boy)

"Yes I know, 'pepek' [local name for vagina] ... its function is for menstruation, stomach ache." (Informant 6, student, girl)

"HIV? Don't know." (Informant 4, student, girl)

"Boys don't have breasts, girls have breasts, boys have a 'lolok' [local name for penis], girls have a 'pepek' ... It is so strange that fluid comes out of it, why? And then [you have to] immediately wash the sheets and one's pants [in regard to nocturnal emissions]." (Informant 5, student, boy)

Reproductive Health Information at School

Unfortunately, the school had to follow the required curriculum, which did not specifically include content regarding reproductive health. In practice, this topic was integrated into the subject of science, which was covered to a very limited extent. Therefore, the school authorities entrusted reproductive health education to parents. However, the youth felt embarrassed to talk about these issues with their parents, so they turned to other resources.

All informants stated that they had accessed reproductive health information through internet sources, such as YouTube and Google, because doing so was easier and quicker.

"Easy to understand, seeing a lot of pictures from Google. Don't understand videos... because videos are too fast. If I read a text [and] I don't understand, [I] then search for the picture using Google." (Informant 4, student, girl)

Every school has school health services Usaha Kesehatan Sekolah (UKS) through coordination with the public health center of the sub-district; nevertheless, we found no UKS or extracurricular activities related to reproductive health at this school.

Reproductive Health Services

An interview with a city health officer and public health center officer showed that there was no specific reproductive health program for youth with disabilities.

"There is no program yet [for those] with special needs, only for adolescents in general." (Informant 10, health officer, female)

Different ways of communicating indeed became a significant obstacle hindering the implementation of programs for adolescents with hearing impairment. The fact that learning sign language requires time, perseverance, and continuous training makes health officers reluctant to learn it.

Expectations of All Participants

Informants strongly hoped that reproductive health information would meet their needs.

"... [I] don't understand when it is a video, [when I see] a picture on Google, [I] understand ... if it is in Indonesian [I] want [them] to add the sign language ... it's hard to understand. no interpreter and no sign language ... if they have them, [I] want it." (Informant 6, student, girl)

Based on these in-depth interviews, all of the students were embarrassed to ask their parents about reproductive health.

"Embarrassed, father, mother, never talk [about it] ... not yet, parents are busy ... never talk [about it] with siblings ... [I] am embarrassed [if I have to ask] my mother, then I look for [the information] on Google." (Informant 4, student, girl)

Another expectation stated by the key informants (teacher and health officer) was the need for additional lessons or extracurricular content on reproductive health in schools. The UKS and extracurricular activities can become a starting point for reproductive health services for adolescents with hearing impairment at school.

DISCUSSION

In the SMD framework, 4 factors affect whether adolescents' for information on reproductive health are met; namely, factors related to the individual, school environment, government in general, and availability of reproductive health services.

The individual factors include needs for reproductive health knowledge and information that are accessible in the school environment. In several studies, a comprehensive knowledge of reproductive organs and their functions was found to play a vital role in maintaining a healthy and high-quality reproductive life [9,12]. Due to minimal access to health information, and because the currently available reproductive health information is not written in the Braille letter format, does not use simple language, and is not conveyed in sign language [3,12], the reproductive health knowledge of adolescents with hear-

ing impairment remains very superficial. Similar findings were reported in a study carried out in Ethiopia where almost half of the respondents did not receive sufficient high-quality information about reproductive health [13].

A literature review conducted by Gavin et al. [14] showed that the incorporation of reproductive health into school curricula will increase knowledge about reproductive health and help prevent high-risk sexual behavior. Despite the importance of integrating reproductive health information into the school curriculum, the fact that reproductive health information is taught as part of the subject of science in the schools, it results in the delivery of limited and insufficient information. Nonetheless, the MoH together with the Ministry of Education and Culture and the Ministry of Religion, with support from the United Nations Population Fund, compiled a module on adolescent reproductive health education from 2013 to 2017 [15]. In 2018, the MOH and the Ministry of Education and Culture trained teachers as facilitators of reproductive health education for adolescents. However, the module has not been adapted for adolescents with hearing impairment.

A study in Ghana found that people with hearing impairment tried to find information from various media [7]. This finding is highly similar to that of this study. There was a tendency for participants to consult various media sources, especially in the form of pictures or videos, to obtain a more in-depth understanding about this topic. However, the information available on the Internet may not always be reliable and credible, and there is also a possibility that the adolescents will end up accessing pornographic content.

This study also found that receiving information through pictures or videos using sign language and text would help adolescents with hearing impairment to better understand the information [6,16]. However, some of them found it difficult to grasp the information properly, due to the speed of videos or the language used was not Bahasa Indonesia. Likewise, due to their low level of education, they also had difficulties reading and understanding texts [4].

In addition, parents at home also play a major role in conveying information on reproductive health to adolescents. However, talking about reproductive health in the family is still considered taboo and tends to be avoided [13]. This study found that parents tended to explain reproductive health information to their children using terms in the local language, which had limitations regarding the depth of the explanations about reproductive health.

This study found almost identical levels of knowledge of reproductive health among boys and girls. However, some studies have shown that girls had less knowledge than boys regarding sexuality [4,13,17], because girls receive less support and have less access to information.

The study found that knowledge on reproductive health is very important for adolescents who are just entering puberty to become healthy and responsible adolescents. Schools in Indonesia have UKS programs through coordination with primary health centers, but in practice, the UKS has not been used for this purpose by schools. The UKS can be improved through the provision of reproductive health information.

It is deeply unfortunate that most healthcare workers cannot communicate using sign language. Some studies have also highlighted that the absence of interpreters at healthcare facilities and low levels of access to health services created problems in understanding health information [4,18,19]. Therefore, to increase access to reproductive health information and services for adolescents with hearing impairment, the availability of interpreters is essential. A study in the United States found that miscommunication due to linguistic differences often occurs among patients and healthcare providers, resulting in misunderstandings in diagnosis and therapy [19]. Several other studies have also documented communication barriers when accessing health services [6,18]. Therefore, the willingness of health officers to learn and understand sign language is very much needed.

The reproductive health services needed by adolescents with hearing impairment are essentially the same as those required by adolescents in general [8,9,20]. The availability of health services that are friendly to adolescents with hearing impairment is therefore urgently expected.

At present, adolescents with hearing impairment in Indonesia have insufficient knowledge of reproductive health and less access to reproductive health services. Health facilities in school (UKS) are still markedly lacking. Meanwhile, facilities for reproductive health services for adolescents with hearing impairment can be provided in schools through the UKS program and activities. This solution is also expected to enable the UKS to serve as the starting point for adolescents with hearing impairment to access reproductive health services. Moreover, the government should take steps to increase access to information and health services on reproductive health.

The limitations of this study include difficulties that respondents faced in interpreting abstract words, as well as biases re-

sulting from their cultural background, in which it is taboo to talk about sexual matters. However, the face-to-face interviews conducted in this study served to increase concord between the interviewers and the participants.

CONFLICT OF INTEREST

The authors have no conflicts of interest associated with the material presented in this paper.

FUNDING

This research received funding from Udayana University, Bali, Indonesia.

ACKNOWLEDGEMENTS

We would like to thank the participants and the translator for their contribution to this research.

AUTHOR CONTRIBUTIONS

Conceptualization: NLPS, DPYK, DNW, LPWA. Data curation: NLPS, DPYK. Formal analysis: NLPS, DPYK, DNW. Funding acquisition: DPYK, DNW. Methodology: NLPS, DPYK, DNW. Project administration: LPWA. Visualization: NLPS, LPWA. Writing – original draft: NLPS, DPYK, DNW. Writing – review & editing: NLPS, LPWA.

ORCID

Ni Luh Putu Suariyani <https://orcid.org/0000-0003-3848-1009>

Desak Putu Yuli Kurniati <https://orcid.org/0000-0001-9678-8135>

Desak Nyoman Widyanthini <https://orcid.org/0000-0002-7972-556X>

Luh Putu Wulandari Artha <https://orcid.org/0000-0001-7857-7131>

REFERENCES

1. Global-Regulation Inc. Government regulation number 61 2014 [cited 2020 Oct 22]. Available from: <https://www.global-regulation.com/translation/indonesia/8422597/government->

- regulation-number-61-2014.html.
2. UNICEF. The state of the world's children 2013: children with disabilities; 2013 [cited 2020 Nov 19]. Available from: https://www.unicef.org/publications/index_69379.html.
 3. World Health Organization. Promoting sexual and reproductive health for persons with disabilities: WHO/UNFPA guidance note; 2009 [cited 2020 Feb 1]. Available from: <https://www.who.int/reproductivehealth/publications/general/9789241598682/en/>.
 4. Mprah WK. Perceptions about barriers to sexual and reproductive health information and services among deaf people in Ghana. *Disabil CBR Incl Dev* 2013;24(3):21-36.
 5. Hoang L, LaHousse SF, Nakaji MC, Sadler GR. Assessing deaf cultural competency of physicians and medical students. *J Cancer Educ* 2011;26(1):175-182.
 6. Baart J, Taaka F. Barriers to healthcare services for people with disabilities in developing countries: a literature review. *Disabil CBR Incl Dev* 2017;28(4):26-40.
 7. Mprah WK. Sources and use of sexual and reproductive health information among deaf people in Ghana. *Indones J Disabil Stud* 2014;1(1):1-11.
 8. Touko A, Mboua CP, Tohmuntain PM, Perrot AB. Sexual vulnerability and HIV seroprevalence among the deaf and hearing impaired in Cameroon. *J Int AIDS Soc* 2010;13:5.
 9. Sangowawa AO, Owoaje ET, Faseru B, Ebong IP, Adekunle BJ. Sexual practices of deaf and hearing secondary school students in Ibadan, Nigeria. *Ann Ib Postgrad Med* 2009;7(1):26-30.
 10. Samaha AM. What good is the social model of disability? *Univ Chic Law Rev* 2007;74(4):1251-1308.
 11. Reindal SM. A social relational model of disability: a theoretical framework for special needs education? *Eur J Spec Needs Educ* 2008;23(2):135-146.
 12. James G. Education and sexuality: towards addressing adolescents' reproductive health needs in Nigeria. *Curr Res J Soc Sci* 2012;4(4):285-293.
 13. Kassa TA, Luck T, Bekele A, Riedel-Heller SG. Sexual and reproductive health of young people with disability in Ethiopia: a study on knowledge, attitude and practice: a cross-sectional study. *Global Health* 2016;12:5.
 14. Gavin LE, Catalano RF, David-Ferdon C, Gloppen KM, Markham CM. A review of positive youth development programs that promote adolescent sexual and reproductive health. *J Adolesc Health* 2010;46(3 Suppl):S75-S91.
 15. Juliana B, Tumilisar H, Fitri S, Wirasti RA. Development of sexual education programs in utilizing social media. *Indones Couns J* 2019;4(2):43-48 (Indonesian).
 16. Bampi LN, Guilhem D, Alves ED. Social model: a new approach of the disability theme. *Rev Lat Am Enfermagem* 2010;18(4):816-823.
 17. Arulogun OS, Titiloye MA, Afolabi NB, Oyewole OE, Nwaorgu OG. Experiences of girls with hearing impairment in accessing reproductive health care services in Ibadan, Nigeria. *Afr J Reprod Health* 2013;17(1):85-93.
 18. Kuenburg A, Fellingner P, Fellingner J. Health care access among deaf people. *J Deaf Stud Deaf Educ* 2016;21(1):1-10.
 19. Scheier DB. Barriers to health care for people with hearing loss: a review of the literature. *J N Y State Nurses Assoc* 2009;40(1):4-10.
 20. Aziz S. Sex education for special needs children. *J Kependidikan* 2014;2(2):182-204 (Indonesian).