



Needs Analysis of Digital-Based Promotional Media for Reproductive Health Puberty for Deaf Students

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Abstract. Reproductive health education for deaf adolescents in Indonesia still rarely gets the government's attention and educators in particular. Reproductive health education for deaf adolescents. This reproductive problem for the deaf is evident from the lack of comprehensive literature on the reproductive health of deaf adolescents. Information about reproductive health is necessary because deaf adolescents usually have the same development and sexual desires as normal adolescents. This research analyzes the need for digital reproductive health promotion media for deaf students. This research is explanatory research with a qualitative approach for the needs of digital-based promotional media for reproductive health during puberty. Data collection techniques using questionnaires and in-depth interview guides. Data analysis using content analysis (*content analysis*). All of the informants stated that they had never received reproductive health counselling. They were also never invited to discuss changes in puberty. The majority of students and parents stated that they needed reproductive health promotion media that were easily accessible and adapted to the limitations of deaf students. The media for promoting reproductive health during puberty that deaf students need focuses on text and images delivered digital-based so that they are easy to access.

Keywords: Needs · Media · promotion · Deafness · Reproductive health

1 Introduction

Children with special needs need unique forms of education services that suit their abilities or potential. Reproductive health is one of the essential things that children with special needs (ABK) who are studying at SLB/SMPLB/SMALB as prospective fathers/mothers must understand so that children with special needs (ABK) can understand their correct understanding of reproductive health. We must also introduce him correctly (Mince et al. 2015; SAPDA (Sentra Advokasi Perempuan, Difabel dan Anak), 2011; Tim Penyusun lembaga Sapda, 2016).

The Covid-19 pandemic has accelerated the adoption of technology by society. In order to avoid and reduce transmission, various physical activities are restricted and

replaced by activities in cyberspace, whether it is work, school, or socializing. Innovation in health services also needs to be done to provide better digital services to the community, including deaf students. In the health sector, freely circulated information often cannot be justified and becomes a hoax that misleads the public. Therefore, health workers must innovate in health promotion, digital health promotion to overcome these challenges. Digital health promotion is an opportunity to improve public health literacy, considering that most Indonesians use smartphones, can access the internet, and have social media.

Health promotion includes behavioural aspects, namely efforts to motivate, encourage and raise awareness of the potential of the community so that they can maintain and improve their health. The term and understanding of health promotion is a development of the terms that have been known so far, such as Health Education, Health Counseling, KIE (Communication, Information, and Education). Health education and health promotion have many influences from several disciplines. However, the primary influence on health education comes from the behavioural sciences, and health promotion is deeply embedded in the social sciences. It is from the behavioural and social sciences that health education and health promotion borrows its strategic planning method. Core concepts in the behavioural and social sciences are structured in theory. It can be concluded that the basic concept of education is a learning process, which means there is a process of growth, development, or change in education itself. An individual, group, or society who does not understand the value of health changes to understand the value of health and becomes more mature, better, and more mature. Adult in the sense of being able to overcome health problems (Gutmacher & Patricia J. Kelly, 2010; Nimkar, 2016).

Reproductive health education for deaf adolescents in Indonesia still rarely gets the government's attention and educators in particular. This can be seen from the lack of literature to discuss reproductive health problems of deaf adolescents comprehensively, in terms of information about reproductive health is very necessary because deaf adolescents also have sexual development and drive the same as normal adolescents in general (Ariantini et al., 2017; Aziz, 2014; Dara Ugi Aras et al., 2019).

2 Method

This study is the explanation (*Explanatory Research*), using a qualitative approach using design phenomenology. The research was conducted at SLB Prof. Dr Sri Soedewi Masjchun Sofwan, SH Jambi, while the speakers were 15 deaf students of SMALB class X to XII and five deaf students' parents the selection of *samples* using a *purposive sampling technique*. This study uses a questionnaire to analyze the needs of digital media for the promotion of reproductive health during puberty for deaf students as a research instrument, and in-depth interviews carry out data collection. The results were obtained in the analysis using a descriptive method of content (*content analysis*).

3 Results and Discussion

The student interviews were conducted directly accompanied by the deaf teacher. The questions include the experience of deaf students in accessing the internet and the experience of receiving reproductive health counselling. The results of the answers from respondents are analyzed and grouped.

Table 1. Frequency distribution of information regarding digital media access for deaf students

| No. | Statement | f | % |
|-----|--|----|-----|
| 1. | Learning Experience Using multimedia | | |
| | Yes | 15 | 100 |
| | Never | 0 | 0 |
| 2. | The experience of being asked/discussed changes in puberty by parents/teachers | | |
| | Yes | 0 | 0 |
| | Never | 15 | 100 |
| 3. | Experience accessing the internet to find health information | | |
| | Yes | 12 | 80 |
| | Never | 3 | 20 |
| 4. | Sources of information about changes in puberty (can choose more than one answer) | | |
| | Parent | 13 | 87 |
| | Teacher | 3 | 20 |
| | Friends | 15 | 100 |
| | Family | 11 | 73 |
| | Health Workers | 0 | 0 |
| | Electronic media | 15 | 100 |

The needs analysis results obtained from interviews with deaf students yielded the following results (Table 1 and 2).

Most of the students who were the resource persons stated that they had never been invited to discuss what changes would occur when they entered puberty. The female resource persons stated that they were only taught to use sanitary napkins and bathe after menstruation, especially those who were Muslim. Male resource persons who are Muslim are only taught how to “Full ablution” without ever being invited to discuss what they experience and feel in the changes of puberty.

Tidak pernah dikasih tahu kalau sudah besar akan menstruasi, waktu pertama keluar darah pas habis mandi, bingung takut, trus disuruh pake pembalut... iyo diajarin cara pakeknya, tapi idak ditanya soal lain nya (an.DO, 19 th)

Diajarin mandi wajib bae, idak di tanya yang lain...mmm cerito samo kawan-kawan aja yang sudah mimpi juga (an. KS, 20 th)

Adolescents need to receive education about reproductive health starting when they need to know and protect their reproductive organs. How to convey information about sexual changes during puberty must be done extra carefully and patiently. Use simple, clear, and easy to understand language. Adolescents in any condition have the right to

Table 2. Results of Analysis of Digital Media Needs for Promotion of Reproductive Health in Puberty for Deaf Students

| No. | Analysis Results | Student | | Parent | |
|-----|--|---------|-------|--------|-----|
| | | f | % | f | % |
| 1. | Mass Health Information Needs | | | | |
| | Need | 15 | 100 | 5 | 100 |
| | No need | 0 | 0 | 0 | 0 |
| 2. | Target Media promotion | | | | |
| | Only Students | 9 | 60 | 0 | 0 |
| | Only Parent/Companion | 1 | 6,66 | 0 | 0 |
| | For students and parents/guardians | 5 | 33,33 | 15 | 100 |
| 3. | Expected health promotion media | | | | |
| | Digital Pocket Book | 7 | 46,66 | 3 | 60 |
| | Flip Sheet | 0 | 0 | 0 | 0 |
| | Videos | 5 | 33,33 | 3 | 60 |
| | Interactive multimedia | 3 | 20 | 0 | 0 |
| 4. | Attractive Digital Promotion Media (<i>can choose more than one answer</i>) | | | | |
| | Clear Writing | 15 | 100 | 5 | 100 |
| | Interesting pictures | 15 | 100 | 5 | 100 |
| | Easy access | 7 | 46,66 | 5 | 100 |
| | Information conveyed | 15 | 100 | 5 | 100 |
| 5. | Information needed about puberty | | | | |
| | Changes at puberty | 9 | 60 | 4 | 80 |
| | How to keep the reproductive organs clean | 6 | 40 | 1 | 20 |

live, grow, develop and participate fairly by their dignity and worth. If this process is without guidance, adolescents will tend to have difficulty adapting to their environment. Many parents are reluctant to tell their child about puberty, which results in the child looking for information about puberty on their own through the internet and other media, which can have bad results.

Teaching or providing knowledge of reproductive health materials needs to be started through the family, which is the main role in educational guidance, but obstacles often occur in the teaching process because people still consider it taboo and shy to talk about sensitive things such as sex. Children with disabilities need to understand who they are, what to do if this happens, their names, and how they feel, especially children with special needs who also have to use special methods. This is followed by rapid technological developments, which will be a factor in teaching errors if the taboo culture is still deeply rooted in the family and even in a society that will cause children to seek

information out of their curiosity, let alone unclear. What sources do children read it is necessary to remove the taboo culture from our mindset if we want the reproductive health teaching process to run according to the current, as well as family concerns about free sex behaviour that children will carry out if they are taught about reproductive health, this assumption is certainly wrong, so it takes an open mind to accept all material most correct. The delay in knowledge about reproductive health will impact several aspects that will come later, especially because many people use it to commit indecent behaviour. So it takes an open mind to accept all the truest material. The delay in knowledge about reproductive health will impact several aspects that will come later, especially because many people use it to commit indecent behaviour. So it takes an open mind to accept all the truest material. The delay in knowledge about reproductive health will have an impact on several aspects that will come later, especially because many people use it to commit indecent behavior (Amirudin, 2016; *Pentingnya Mengajari Anak Berkebutuhan Khusus Tentang Kesehatan Reproduksi Sejak Dini* | Puspensos, n.d.; Prabowo, 2017).

Pernah dapat penyuluhan mengenai sikat gigi, kalo soal reproduksi belum pernahka kalo cari tahu lewat HP samo tanya sama kawan bae. (AA, 16 th)

The health promotions that deaf students have received are dental health, information regarding reproductive health students get through the internet, and discussions with friends.

Reproductive health material is taught early through the family, which is the primary role in educational orientation. Obstacles often occur in the teaching process because people still view it as taboo and embarrassing if they talk to sensitive areas such as sex. Many assume that children will understand who he is, what to do if this happens, what it is called, but that's not the problem for children in general. It will take a long time to be taught material about reproductive health, especially children with special needs who have to use special methods. The delay in the knowledge of reproductive health will impact several aspects that will come later, especially since many people take advantage of this to commit indecent behaviour (Aziz, 2014).

Health promotion media can overcome various barriers to understanding, facilitate the provision of health materials or information, and facilitate the acceptance of information by the target group/community, health education with individual methods oriented to each problem and reason. People are different. With individual methods, health workers can be better at conveying information according to the problems or needs of each person. This method is used to encourage someone to be interested in behaviour change or innovation (Notoatmodjo, 2012).

Promotional media specifically aimed at the deaf will be easier to accept due to the individual approach and adapted to their needs and limitations. The need for reproductive health education is realized by deaf students and parents, where they have difficulty with the existence of the limited communication that their children have and the limited knowledge of parents about reproductive health.

Lack of abstraction power is deaf and mute due to limited language skills, is not a state of mental retardation. If language skills are improved, abstraction skills will also increase. The learning concept of deaf students mostly comes from visuals (pictures/videos) or

can be seen in real terms. The existence of visual media, sign language, text, and role-playing for deaf and mute students will make it easier for deaf students to understand video methods and sign language lessons more effectively to increase the knowledge of deaf children about health. Interactive multimedia effectively provides reproductive health information and is worthy of being used as a learning medium. In addition to the media, reproductive health education for adolescents must be provided continuously and gradually (Fajrianto, 2012; Hakim, 2020).

Parents experience difficulties in preparing their children for puberty, communication difficulties and are still bound by a “taboo” culture in discussing reproductive health, and this is stated as follows:

Kami ini lah bingung dengan kekeurangan anak kami, tambah lagi dio dah makin besar, lah dewasa, nak ngomong soal itu tuh raso nyo tuh cek mano lah...mmm dak biaso ngomongin soal itu, malu, raso berat be nak ngomong (orangtua ITM)

These results are in line with the study results by Kurniati et al. (2018), which stated that information regarding reproductive organ health of SLB B students in Bali was obtained from parents and teachers. The obstacle faced by students when receiving lessons at school is the difficulty of understanding a concept being explained, let alone using many lips. They want an explanation through video or visual media and accompanied by an interpreter. From the teacher’s side, the obstacles they face are curriculum changes, time constraints, difficulty in applying the health care module, extended training, some teachers move, and the material provided is not aging appropriately. Meanwhile, their parents do not understand how to explain to their children.

The literature study conducted by the research has not found any media for promoting reproductive health for deaf adolescents issued by the Ministry of Health or government agencies. Promotional media currently need innovations for promoting reproductive health by considering more attractive media and information technology that will expand the scope of targets for health promotion.

WHO recommends increasing access to information and communication related to health promotion for persons with disabilities to include the following: sign language or text to improve access to health resources and public health information; Information is presented in a simple and easy-to-understand graphic format; Large print or braille material; information provided by radio, video, other than printed information; Demonstrate rather than simply describe activities such as condom use; Provide information more slowly and interrupt more frequently than usual to ensure everyone’s understanding. Advances in technology, including the availability of information on computers, have dramatically improved the quality of life of persons with disabilities in developed countries. New technologies must be accessible to all persons with disabilities (WHO & Unfpa, 2009).

Children with special needs have the same rights as other children. Parents, family, and companions (teachers or therapists) need skills in communication and good knowledge, especially related to reproductive health. Promotional media adapted to the condition of the deaf. Focusing on images, both in the form of interesting and clear text and images, maximizes the visual memory sensor so that this visual model can be integrated into long-term memory.

4 Conclusion

1. Digital promotion media for reproductive health during puberty for deaf students is limited, and there is no programmed reproductive health education in schools.
2. The target of health promotion media is not only needed by deaf students but also needed by parents and companions (families, teachers, and therapists)
3. Adolescent reproductive health materials are not only conveyed when students experience changes in adolescence but are also needed as a preparation for entering puberty.
4. Health promotion media that deaf students need are those that focus on exciting and easy-to-access text and images.

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