The Impact of Teaching Aids in Learning of Women's Reproductive Organs For Blind Teenage Students At SLBN A Kota Bandung

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A B S T R A C T
This research explores the impact of puppet media as teaching aids in teaching the anatomy of female reproductive organs to blind children in class 9 at SMPLB N Pajajaran, Bandung. In the context of sexual education for children with special needs, understanding reproductive anatomy is crucial for self-protection against sexual abuse and sexually transmitted diseases. Using a qualitative approach, this study examines strategies, techniques, and methods in inclusive education to help blind children understand female reproductive anatomy. It considers their developmental needs and abilities in selecting suitable learning media. The research aims to benefit students, teachers, and schools by enhancing knowledge and skills related to reproductive health and offering new methods for teaching sexual education. Theoretically, it seeks to advance the development of effective learning tools for blind children. This research is urgent because it promotes awareness and protection of reproductive health among blind students, ensuring inclusive and equitable sexual education. It supports national education goals by addressing the special needs of each child, contributing to a smarter and more inclusive society.

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1. INTRODUCTION

Education is a necessity and an important aspect in children's development, including children with special needs. Every child has the right to get a decent education. This is in accordance with article 3 of Law no. 20 of 2003 concerning the National Education System states that one of the functions of national education is to develop abilities and shape the nation's character and civilization which is useful to make the nation's life more intelligent. As a form of implementation of this law, it is appropriate that the learning provided is focused on student development, one of which is related to sexual education for children.

Sexual education is an important component of education that aims to provide the knowledge, skills and information that every child needs to understand and manage aspects of their sexuality. This covers topics such as anatomy, reproduction, relationships, reproductive health, protection against sexually transmitted diseases (STDs) and gender identity. Sexual education in Indonesia is still relatively low, so it is a problem that needs special attention. Sexuality is often considered a taboo topic in Indonesian society, discussions about sexuality are often avoided because they are considered to violate social norms and stigma. In addition, some individuals and community groups believe that sexual education is contrary to religious values.

Sexual education needs to be provided not only in public schools, but also in special schools. This sexual education is given to students who have entered adolescence, including teenagers with special needs. This is because children with special needs experience the same physical and emotional development as other children. Appropriate sexual education can empower children with special needs to make wise decisions about their bodies, relationships and reproductive health. Sexual education can help children with special needs understand and protect themselves from the risk of sexual abuse and sexually transmitted diseases.

Considering the widespread cases of sexual abuse that occur in children with special needs in Indonesia, such as the case quoted from detik news on September 14 2023, “A child with special needs with the initials SA (17) experienced sexual abuse by a papeda seller in Kampung Pulo, Rangkapan Jaya, Pancoran Mas, Depok.” Sexual education for children with special needs can be given, including to blind children.

Sexual education for blind children has special characteristics that need to be considered, such as the strategies, techniques and learning methods that will be provided as well as the need to adapt and provide appropriate learning media to be used. Teachers should provide concrete learning media. This learning media can be in the form of miniatures, statues, dolls or objects that are as similar as possible to the real object. This is because blind children have limited visual senses so the learning provided must utilize the senses that are still functioning. Therefore, further efforts are needed to develop sexual education for blind children, one of which is by developing effective learning media that is adapted to the child's level of development, needs and abilities.

Through this research, it is hoped that educators will know effective sexual learning media for blind children. Apart from that, it is hoped that blind children can know the parts of the reproductive organs and their functions so that they have the knowledge and skills to protect themselves.
2. METHODS

The research design uses an experimental research approach with Pretest-Post-test Design. This research will examine the subject's condition before and after treatment in terms of knowledge about the anatomy of the reproductive organs.

Data collection was carried out using performance tests in the form of pretests and post-tests on the questions in the research instrument. **Figure 1.** The pre-test is an initial test before an experiment is carried out and is the first step in knowing the initial condition of the subject. Meanwhile, the post-test is used for the final test after being given intervention in learning to determine the condition of the subject's abilities after being given the intervention.

![Research Flow](image)

**Figure 1.** Research Flow

Pretest and post-test data will be analysed to determine whether there are significant differences in student (subject) understanding before and after the learning intervention.

3. RESULTS AND DISCUSSION

3.1. Results

The students who were the subjects of this research already had knowledge about the anatomical aspects of female reproductive organs, namely the vagina, uterus and fallopian tubes, but they did not yet know and understand the internal female reproductive organs such as the ovaries, cervix, endometrium. Apart from that, we are also unable to explain the functions of the reproductive organs in women. So, a learning program was designed using puppet props to give children a concrete understanding of what the internal reproductive organs in women look like.

After implementing the learning in 2 meetings with the subjects, the results were that they were able to understand the internal female reproductive anatomy, already knew the parts and functions of the internal female reproductive organs such as the vagina, cervix, uterus, ovaries and fallopian tubes. The implementation process which was carried out twice has seen a change in understanding compared to the initial assessment process which was not able to explain and mention the parts and functions of the internal female reproductive organs. This can be seen from the results of the evaluation given to the six subjects, they were able to answer/do almost all the questions given. So, this implementation process shows that students have a significant change in understanding when the learning process is carried out using learning media in the form of puppet teaching aids.
The results of children's ability acquisition can be seen from the pre-test and post-test that have been provided, this is intended so that researchers are able to know and see differences in children's abilities before and after the child undergoes the learning process. The following are the pretest and post-test scores obtained by all subjects.

### Table 1. Pretest and Post-test Results

<table>
<thead>
<tr>
<th>No</th>
<th>Initial Name</th>
<th>Skor Pre-Test</th>
<th>Skor Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NA</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>HS</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>PA</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>MM</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>TF</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>DS</td>
<td>3</td>
<td>14</td>
</tr>
</tbody>
</table>

### 3.2. Discussion

Visual impairment is a condition where a child has obstacles in his vision so he needs assistive devices in his learning. According to Pertuni in Kurniawan (2017) blind people are those who have no vision at all (totally blind) to those who still have residual vision, but are unable to use their vision to read ordinary 12 point writing in normal light conditions even though they are aided by glasses (insufficient watch out). Blind children can be classified based on the degree of impairment in their sense of sight from mild to severe. According to Heri Purwanto (in Purna, 2020) classifies the blind based on the level of visual acuity, namely totally blind or no longer able to see rays or light even though they have used a correction device, and low vision who have residual vision but are no longer able to use it to read sighted writing. standard without tools.

The understanding of blind children from an educational aspect was also put forward by Hardman (in Atmaja, 2015) who stated that blind children cannot use their sight so that in the learning process they will depend on their sense of hearing (auditive), sense of touch (tactual), and other senses that still works". To maximize tactile abilities in learning for blind children in the anatomy of female reproductive organs, an approach is needed that utilizes the tactile abilities of blind children's hands. One approach that can be used is learning the anatomy of the internal female reproductive organs using teaching aids to maximize sensory sensitivity through hand touch.
According to Heri Rahyubi (in Sepdwiko) explains that a learning method is "a model and method that can be used to hold teaching and learning activities so that they run well". The learning media in this research in the form of teaching aids can really help blind children with low vision in understanding the anatomy of the reproductive organs and maximizing their ability to touch. The learning media that the group uses can stimulate thoughts, feelings, attention and abilities or learning skills so that it can encourage the learning process and children understand more about the anatomy of the internal female reproductive organs. According to the BKKBN (in Sekarayu, 2021) reproductive health is complete physical, mental and social well-being in all matters relating to reproductive systems and functions and processes and not just conditions that are free from disease and disability. Meanwhile, according to ICPD (in Alkornia, 2018) explains that reproductive health is the end result of a state of physical, mental and social health which is not only free from disease or disability in all matters related to the reproductive system, function and process.

The effect was seen after further research was carried out that teaching aids can improve children's ability to understand the anatomy of the internal female reproductive organs. This is in accordance with the theory of Piaget, Burner and Dienes (Ruseffendi, 1992) that the benefits of real teaching aids are that they can increase students' interest in learning, can see the relationship between the knowledge being studied and the surrounding natural environment, invite discussion, think, participate actively, solve problems and so on and more students can maximize their sensory organs. Teaching aids that are effective in increasing understanding and interest in learning are real teaching aids, supported by Russffendi's opinion that learning using real teaching aids can increase interest in learning. The result was that children's understanding increased after being given a program regarding internal female anatomy using teaching aids. According to Sudjana's (2011) theory, teaching aids are more effective in student learning to increase students' interest in learning. This teaching aid can also be called learning media. Pe media is a tool used to support the implementation of the learning and teaching process to make it more effective and efficient so that students are able to absorb the material well (Yudhi, in Priana 2021). In the learning process in this research, there was a significant increase in students' understanding regarding the internal female reproductive anatomy, students were able to name, show and even explain the parts and functions of the reproductive organs using the teaching aids provided, this was proven by the results of the posttest students, students are able to answer all questions/questions from the assessor.

The learning method using teaching aids can make students more enthusiastic and active and have a better understanding of learning the anatomy of the internal reproductive organs in women. The active role of students can be seen from the contribution of their opinions and their seriousness in working together during discussions in carrying out assignments given by the group. Students' understanding increased after the learning program was given. In other words, the use of teaching aids for learning encouraged students to be more active and understand the learning process of the internal female reproductive organs. As stated by Sudjana, teaching aids are tools that can be absorbed by the eyes and ears with the aim of helping teachers to make the teaching and learning process more effective and efficient.
This can be seen in subjects who had a significant increase at the second meeting in their understanding of the anatomy of the internal female reproductive organs compared to the first meeting. Based on this, learning using teaching aids can increase children's understanding of the anatomy of the internal female reproductive organs for class students with low vision impairments at SLBN A Pajajaran Bandung.

4. CONCLUSION

Based on the results of research and data analysis, in general it can be concluded that the use of teaching aids has a positive effect in improving the ability to learn the anatomy of the internal female reproductive organs in students with visual impairments in grades 8 and 9 at SLB Negeri A Pajajaran Bandung. This positive influence can be seen from the increase in children's understanding from initial conditions to becoming more knowledgeable and understanding after being given a learning program using puppet props in understanding the anatomy of the internal female reproductive organs. Based on the results of research and data analysis, in particular it can be concluded as follows: There is an influence of increasing children's understanding of the anatomy of the internal female reproductive organs given learning using puppet props at SLBN A Pajajaran, There are differences in children's ability to understand the anatomy of the female reproductive organs before and after being given a learning program using puppets, Puppet teaching aids are effective in increasing children's understanding of the anatomy of the internal reproductive organs in women at SLBN A Pajajaran

5. ACKNOWLEDGMENT

Thank you to all parties who have been involved in the research The Impact of Teaching Aids in Learning of Women's Reproductive Organs For Blind Teenage Students At SLBN A Bandung City

6. AUTHORS’ NOTE

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7. REFERENCES


