

Research Article

Development of Pop-up Book Illustrations as Educational Media for Child Reproductive Health

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Abstract.

The incidence of sexual crimes against children and the prevalence of health-risk behaviors resulting from a lack of reproductive health education media have been identified from an early age as problems that must be followed up immediately. Instilling conception from an early age in children regarding reproductive health education, which is still taboo in most Indonesian societies, is an indication of research achievements that are relevant to be applied in social sciences and humanity. This research aims to test the feasibility of the pop-up book with the title “Yours” (Reproductive Health Education Book) for the age group of children over 6 years. The research method applied in this study is the research and development (R&D) method with the 4D flow (define, design, development, and dissemination). The pop-up book product with the title Pop Up Yours is a product created by the author and has never been tested for feasibility before. The results showed that the Pop Up Book “Yours” can be a medium for reproductive health education in children with the results of testing on 30 children (n=30) aged 9 years, an increase in knowledge of 93.3% was observed. Based on the results of the feasibility test, it can be seen that the “Yours” Pop Up Book is suitable for use by groups of children over 6 years old with the important concern of using this pop-up book under parental guidance.

Keywords: pop-up book, child, reproductive health

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1. Introduction

Acts of sexual crimes directed at children in Indonesia have increased and need immediate handling. In 2020, it is known that there were 419 cases of sexual crimes against children [1]. From 2018 to 2020 cases experienced an increase of 258 victims [2]. In some cases, violence sexual contact occurs due to sexual approaches, whether touching, touching, or telling jokes of a sexual nature. In fact, it's been happening a lot lately cases of sexual violence that occur in electronic media, both on social media and online movie show [3] These cases can be prevented through reproductive health education from an early age [4]

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Information on sexual crime cases can be obtained from the number of cases handled by doctors in hospitals. There were 95 cases of sexual crimes from 2015 to 2016 which were reported in Doctor Kariadi Hospital and Doctor Adhyatma Hospital, MPH. 90% of total cases accept informed consent given by the doctor. In 57% of cases there was an anamnesis result at the time and date of incident, 41% of cases had general anamnesis results, 68% of cases had results anamnesis of the victim's sexual history and menstrual history. 13 cases contain questions what did the victim do after the incident, 98% of cases have a chronology of the incident, 94% cases contained the identity of the perpetrator, as many as 74 cases contained the location of the incident, 14% of cases. There is a history of the drugs consumed by the victim, and in 88% of cases there is a description type of sexual incident. As many as 97% of the total cases obtained had examination results physical and as many as 80% of the total cases have genital examination results. S [5] The rise of these cases occurs almost every year.

Knowledge about how to care for the cleanliness of the reproductive organs, pre-marital sexual behavior, and other reproductive problems in children is still lacking and taboo. Even though knowledge about this is very important because it is closely related to the process of growth and development to reach healthy adults and avoid other risky behaviors [6]. Choosing the right media can help informants' understanding, including targeting children. Children need an attractive display especially with sensitive content such as reproductive health which still needs adult assistance. This is important because reproductive health education varies between age groups [7] Pay attention to illustrations, colors, typography, and layouts that are suitable for children aged from 6 to 10 years. Typography that is legible and legible is suitable for children, while the layout must also meet the principle of unity.

The development of illustrated books as educational media is urgently needed, especially educational books on child reproductive health. Through these media children can recognize the body and prevent risk actions. This research is in line with Krenovasi's research which made a pop-up book as a medium for sexual education entitled "My Body Is Mine" [8]. However, in this research we will discuss further the results of the feasibility test of the media that has been developed.

Kholis's research using Systematic Literature Review (SLR) revealed that from the 9 studies presented it was found that the need for sexual education to be provided in special school institutions for early childhood [9]. Educational media for children's reproductive health needs to be presented in an interesting and interactive manner. One interesting and interactive media is a book presented in pop up form. Students can work on random pairs together. However, it is important to carry out feasibility tests

on reproductive health educational media that will be used en masse by children at school. Therefore, this research was conducted to test the feasibility of a pop up book with the title “Yours”.

2. Material and Methods

2.1. Material

Product development and feasibility testing were carried out on the following book entitled Yours:



Figure 1: (a) View Book Content (b) Cover View.

The pop-up book entitled “Yours” contains illustrations about introducing the private parts of women and men and how to maintain hygiene in the private parts. The color combination used is warm and attractive to children. Apart from that, choose typography that is appropriate and easy for children to read

2.2. Methods

The research approach used in this study is a research and development (R&D) approach with a 4D flow (define, design, development, and dissemination) which has the aim of producing a product and then testing the feasibility of the product. The research location was carried out at Inpres Laikang Elementary School with a sample of grade 3 students using the Purposive Sampling Technique and the student criteria were able to distinguish between gender and the opposite sex. The data collection methods that will support include observations are made by direct observation, library Studies, namely conducting literature searches related to research, and interview, namely obtaining information through question and answer.

Regarding the Research and Development (R&D) method that will be used, the research flow starts from:

1. Data collection through literature study and interviews with the Health Office which handles child health education and health promotion
2. Planning through making moodboards, segmentation, as well as mind mapping and brainstorming so as to produce work concepts that can be realized in the production department
3. Initial product development through manual sketching and digital illustrations. This work will later use Procreate and Adobe Illustrator software, followed by visualization of the pop up illustration book to become a prototype.
4. Pre-eliminary trials through media curators
5. Implementation of product revisions (main product) through printing and working on pop ups with the paper stacking Peepshow technique

The following is a detailed explanation of the stages of this research starting from define, design, development and dissemination:



Figure 2: Research Flow.

3. Result and Discussion

The results of feasibility/testing on 30 children aged 9 years showed an increase knowledge of the private part of 93.3% after being given exposure Reproductive health education using Yours pop up book. In addition, there are five indicators used:

3.1. Child indicators Know the Difference Between Boys and Girls

The results of this research were that there was an increase in knowledge of gender differences by 46.7% (n=30) after the post test via Pop Book Yours. Blaise (2009) explains how children construct gender and heterosexual discourse in the classroom shows that gender, sex and sexuality are proactive rather than reactive strategies towards children's identity construction and shows how two girls and one boy use their understanding of heterosexuality to actively defend and resist existing gender [9] Additionally, given that sex differences found in several studies were age dependent, examining a restricted age range rather than one spanning more than a decade would increase the likelihood of gaining insights into sex differences that occur at each developmental stage [10] This suggests that sex differences may be more prominent during certain developmental stages but are negligible in other stages, likely due to different rates of maturation between the sexes [11]. Thus, introducing knowledge about the differences between men and women is important.

3.2. Child Indicators Know about Puberty

The results of this study were that there was an increase in puberty knowledge by 66.7% (n=30) after the post test via Pop Book Yours. Children tend to openly talk about their private parts with those closest to them. Mutia's research results showed that as many as 62.8% of girls had asked their mothers about puberty or the body changes they were experiencing [11] The first person young women will look to to discuss reproductive health is the mother (78%) rather than older sisters, friends, parents' sisters, or teachers.[13] Responsive feedback is also needed from the immediate environment regarding this matter so that children still feel safe and confident before puberty

3.3. The Child's Indicator Knows the Private Part

The results of this research were that 11% (n=30) of child respondents answered that the eyes were a private part and answered that they did not know. The remaining 78 % (n=30) answered genital. Early childhood sexual education consists of knowing the names of body parts, understanding how to care for and maintain body parts and underware rules [14]

3.4. Indicators of Children Knowing How to Maintain Self-Hygiene

The results of this research were that 23% (n=30) of respondents answered that they often maintain personal hygiene and the remaining 77% (n=30) answered that they sometimes maintain personal hygiene. Personal hygiene habits are sometimes forgotten in providing private education to children, even though this is very important as a form or way of self-respect.

3.5. Indicators of Children Knowing Self-Protection

Respectively, the results of research on how respondents respond if someone else touches their private parts are that 55% (n=30) will run, 20% (n=30) will protect themselves, 8% (n=30) will threaten them, and the rest say no or don't. Early provision about sex as an alternative to reducing sexual crimes so that children are able to develop a healthy emotional attitude towards sexual problems [15]

4. Conclusion

Based on the findings of this research, it is known that there is a significant increase in knowledge using 5 indicators in the feasibility test for the Pop Up Book with the title Yours. This proves that the Pop Up Yours book can be an effective medium for reproductive health education for children over 6 years old with careful (essential) use. This pop up book is under parental guidance. Further research is needed so that this pop up yours book can be used by schools, in this case teachers.

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