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The Effect of Facilitator Gender on the Effectiveness of Adolescent Reproductive Health Education: A Literature Review

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Abstract

Introduction: Sex education is a prevention measure to decrease juvenile delinquency. However, the implementation of sex education runs insufficiently and it is influenced by various factors. Of those, gender is one of the factors. This study shows the results of literature reviews regarding the relationship between facilitators and the effectiveness of sex education in adolescents aged 13-19 years.

Methods : This research method used a literature review, by screening literature from 4 databases; Google Scholar, Pubmed, Science Direct, and Scopus. The PRISMA flow chart was used to show each step eligibility criteria of article selection.

Results: This study found 6 journals that match the inclusion criteria. There were 5 articles that show a relationship between the gender of e-facilitators and the effectiveness of sex education in adolescents aged 13-19 years, while 1 article did not show a relationship because of an imbalance in the sample between male facilitators (24.5%) and women facilitators (75.5%).

Conclusion: This review highlighted that implementing class separation based on sex (single-sex education) is one of best strategies to increase the effectiveness of reproductive health education for adolescents aged 13- 19 years. Thus, it is also suggested for Health Office or NGO to adopt a separate class system based on gender.

Keywords: adolescents, facilitator gender, sex education

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Introduction

Adolescence is the process of growth from childhood to adulthood, and the

reproductive organs undergo a process of maturity or puberty.¹ In addition, adolescence is a person's process of self-discovery. As a result, adolescents are vulnerable to 103 temptation, one of which is risky sexual behavior.² A preventive measure to reduce adolescent risk of bad sexual behavior is through education on reproductive health. Junior High School and Senior High School are education setting for adolescents in the age of 13-19 years to receive reproductive health education through official institutions. However, the implementation of reproductive health education is still not carried out effectively.³ Facilitators are one of the factors that influence the effectiveness of reproductive health education. There are abilities that reflect effective teachers. including abilities related to classroom climate, management strategies, providing feedback and reinforcement, and selfimprovement.⁴

These skills and abilities are based on several factors. According to the theory of "Effectiveness in Teaching", personalitybased disposition is an innate factor that affects effectiveness in teaching.⁵ Personalitybased disposition consists of gender, age, and good interpersonal relationships. The gender of the facilitator is one of the influencing factors because there are differences in natural characteristics between women and men.⁶ Previous research has cited the advantages of separating students and facilitators based on gender in discussing reproductive health issues due to the possibility of gender bias caused by feeling shame to talk and discomfort.⁷ So far, studies aimed at measuring the effectiveness of reproductive health education in adolescents have only measured the increase in knowledge, attitudes and practices after being given education, but no one has analyzed the influence of facilitator gender on the effectiveness of adolescent reproductive health education. Therefore, this article aims to analyze the effect of facilitator gender with

the effectiveness of reproductive health education in adolescents aged 13-19 years.

Methods

This study used the literature review method using the PRISMA flow diagram to examine the effect between gender facilitators on the effectiveness of reproductive health education in adolescents. Article searches were conducted from 4 databases, Google Scholar, Pubmed, Science Direct, and Scopus. The keywords used were: teacher's gender, effectiveness of sex education, adolescents 13-19 aged. Total 2,059 articles were found. After duplication removed and article screening was carried out based on title, abstract, and full text status, total 101 articles were obtained.

The next stage is quality appraisal, using the PEO approach (population, exposure. outcome) follows: as a.) Population: Reproductive Health Facilitators and/or adolescents aged 13-19 years, b.) Exposure: factors related to keywords, theory of effectiveness in teaching, c.) Outcome: Effectiveness of reproductive health education in adolescents. Based on the PEO, 73 out of 101 journals were not eligible in accordance with the PEO of the study.

The inclusion criteria are; English Indonesian-language literature published in 2011 – 2021, has the aim of investigating the influence of facilitator sex with the effectiveness of reproductive health education in adolescents aged 13-19 years, using quasiexperimental methods or intervention studies. The final screening found 5 articles that meet relevance and predefined criterias. Figure 1 showed the PRISMA flow chart.



Figure 1. PRISMA flowchart of defining eligibled-articles

Results

The final screening process resulted 6 eligibled-articles. The first article titled "Evidence for a Comprehensive Sexuality Intervention that Enhances Education Chinese Adolescents' Sexual Knowledge and Gender Awareness and Empowers Young Women".⁷ This article is Comprehensive Sexuality Education (CSE) intervention by implementing 45 minutes of 12 sessions on brainstorming, role-playing, group discussion, and case study activities. This intervention aimed to improve adolescent reproductive health knowledge, attitudes towards gender, and sexual self-efficacy. The second article titled "HIV prevention through extended education encompassing students, parents, and teachers in Japan".8 This article provide **HIV/AIDS** prevention interventions by providing counseling to students, parents, and facilitators. Intervention to facilitators by giving knowledge about changes and risk prevention during puberty, understanding educational methods, and teaching to the students so that they are able to avoid risky sexual activity. The third article titled "Helping Teachers

Conduct Sex Education in Secondary Schools in Thailand: Overcoming Culturally Sensitive Education".9 **Barriers** to Sex The Comprehensive Sex Education (CSE) intervention in this article was carried out once a week for 6 weeks with the aim of increasing the confidence of facilitators in building communication about reproductive health. The fourth article titled "Evaluation of schoolbased comprehensive sexuality education program among very young adolescents in Uganda".¹⁰ rural Comprehensive Sex Education (CSE) intervention in this article used the form of classroom activities in the form of role-playing, group discussions, case studies, and essays. The material presented in the intervention was puberty, adolescent relationships and emotions, decision making, self-esteem skills, sexual violence, sexually transmitted infections, HIV/AIDS and stigma, pregnancy prevention, quality and gender, media influence. The fifth article titled "Effectiveness of a Youth-led Educational Program on Sexual and Reproductive Health for Thai Early Adolescents".¹¹ During the Youth-led Educational Program intervention process, students are segregated by gender. The activities carried out were discussions about reproductive health, games, and skill training. After the intervention, there was a positive influence from the experimental group. Compared to the control group, students from the experimental group had increased knowledge about reproductive health, positive attitudes about reproductive health and condom use.

Author, year	Country	Sample	Subject	Method	Result
Zhihong Sa 2021	China	548	Students at Senior High School Class 10	Quasy Experimental	There was an increase in reproductive knowledge and understanding of gender roles after Comprehensive Sexuality Education (CSE) (p < 0.001)
Miyuki Nagamatsu, Takeshi Sato, et al 2011	Japan	490	Students at Junior High School	Quasy Experimental	There was an increase in the frequency of communication about AIDS with educators (p value 0.027), knowledge of HIV/AIDS in female students (p value 0.023), and rejection of risky sexual behavior in male students (p 0.045)
Pimrat Thammaraksa, et al 2014	Thailand	90	Educators in grade 7 and/or 8 of Junior High School	Quasy Experimental	The female and male gender variables of EG and CG had no influence (p 0.624)
Elizabeth Kemigisha, et al 2019	Uganda	1096	Students at Junior High School	Mixed Methods	There is an increase in knowledge in adolescents about puberty after the implementation of Comprehensive Sexuality Education (CSE)
Warunee Fongkaew, et al 2011	Thailand	169	Students at Junior High School	Quasy Experimental	There is an increase in students' knowledge about reproductive sexual health after implementing the Youth-Led Educational Program (p 0.001)

Table 1. The eligibled-articles (n=6) result summary

Discussion

Facilitator Gender Characteristics

Facilitators have a role in establishing learning communication with students as facilitators, motivators, and communicators who disseminate information.¹² This shows that facilitators have a role in increasing learning effectiveness.¹³ In accordance with the "Theory of Effectiveness in Teaching" from the model "Critical Factors in Good Teaching" adapted from Bustos-Orosa (2008), there are 4 main factors that affect effectiveness. One of them is personality-based disposition or innate characteristics, including gender, age, self-relationships. and interpersonal relationships.5

Gender is a concept to see the differences between men and women in biological and non-biological terms, such as cultural, social, and psychic. The results of biological research show that the body between men and women has consistent sexual asymmetry. These biological underpinnings will determine the effects on male and female communication patterns.¹⁴

The style of communication between men and women has its own characteristics. Women tend to choose words and gestures that involve emotion, empathy, and tone of voice. In addition, women speak to build a rapport-talk relationship. While men have more difficulty understanding emotions that they do not want to express it. The way men speak is to give reports (report-talk) and express knowledge and expertise. Differences in male and female communication styles will affect the way facilitators teach. Male facilitators will teach based on their experience and deliver the material more straightforwardly. Meanwhile, female facilitators use a teaching system that accordance with the applicable is in educational curriculum. Female facilitators are more sensitive to the feelings and conditions of a student than male facilitators.¹⁵

Based on research from the 5 articles above, it was found that the gender of the facilitator has an influence on the effectiveness of reproductive health education in adolescents aged 13-19 years. There are 2 factors that influence these which are sociocultural and sex characteristics.

The topic of sex and reproductive health is seen as a taboo in society. There is still controversv stiama and about reproductive health education that can stimulate adolescents to engage in risky sexual behaviors.¹⁶ Indonesia is part of Asian countries that prioritize eastern traditions in various aspects, one of which is sexual issues that are taboo to discuss by adults with teenagers.² This stigma is also attached in India, where reproductive health education is considered incompatible with the culture and ethos that exist in society. As a result, there is a sense of shame and hesitancy to discuss topics regarding reproductive health bv facilitators and adolescents.¹⁷

According to Miyuki Nagamatsu's 2011 study, in Japan, adolescents still feel uncomfortable discussing with facilitators risky sexual behavior.⁸ Based on observations from research conducted by Auli Arvola in 2012, during classroom learning, adolescent interest in the topic of sexuality causes the facilitator discomfort to explain it.¹⁸ According to the results of research conducted by Ziyin Xiong in 2019, facilitators have difficulty in establishing effective communication with students of different genders on the topic of reproductive health.¹⁹

The characteristics of female and male facilitators influence the way adolescents teach, interact, and respond to adolescent problems.²⁰ Female facilitators tend to respond according to the feelings and emotions of adolescents. This is due to the innate character of women who tend to involve emotions and empathy in expressing something. Meanwhile, male facilitators are seen as having more knowledge than female facilitators.²¹

The results of research on HIV/AIDS education and prevention conducted by Miyuki Nagamatsu in 2012, showed that there increase in interaction was an and communication about AIDS between facilitators and adolescent girls in the intervention group. These significant changes increase knowledge of **HIV/AIDS** in adolescent girls.⁸ According to research from Ziyin Xiong in 2019, when compared to female health facilitators, male facilitators showed that they had difficulty in establishing communication with students regarding reproductive health education.¹⁹

Role models have behaviors that can be followed by others. Another definition of role model, is to inspire others in developing the best potential in themselves.²² Anyone can become a role model, one of those is a facilitator. The facilitator becomes a positive representative of the role-model.²³

Role models have an influence in improving the quality of adolescents to be responsible for making decisions about their sexual activities. In the study, the lack of male reproductive health facilitators caused an imbalance that potentially increased stereotypes in one gender. Imbalances in role models can lead to limited understanding of gender roles.²⁴

Based on research by Pimrat Thammaraksa in 2014, the results were obtained: "there is no influence between the sex of the facilitator and the effectiveness of reproductive health education". The majority of facilitators from intervention groups and control groups are female (75.5%). This shows that the proportion of male and female facilitators is unbalanced, thus triggering biased results.⁹

Mixed-Gender Class

Mixed-gender class is a learning system where male and female students are combined in one class. Reproductive health education in various countries still applies the method with mixed-gender classes. There are advantages and disadvantages to the implementation of mixed-gender classes for reproductive health education. The advantage of implementing mixed-gender classes is that adolescents get learning experiences from different genders. As for the shortcomings of implementing mixed-gender classes is that there is still a sense of awkwardness and discomfort in discussing topics around reproductive health. As а result. misinformation and knowledge appear that are not conveyed optimally.¹⁸

Single-Gender Class

Single-gender class or also called "gender segregation" is the separation of male and female students in the learning process in the classroom. The separation of education for men and women is based on the concept of biological innate differences, so special treatment is needed that is not the same as the opposite sex. The provision of special treatment is carried out proportionally, so that the potential and ability of students can be explored to the maximum.²⁵

Reproductive health education for adolescents aged 13-19 years is appropriate educational material if applying the single-sex education method. Segregation of classes by gender will create a learning climate that focuses on specific topics. Special interests regarding reproductive health between male and female students can be explored more deeply through discussion rooms between peers and gender-appropriate facilitators. Each learner's experience will be more comfortable conveying, knowing their peers are experiencing similar things.

This study is limited in obtaining articles that meet the criteria, especially regarding research that examines the effectiveness of sex segregation in adolescent reproductive health education interventions. Researchers actually want to focus on sex segregation in Indonesia only because of the taboo culture. However, because it was not found at all, the researcher expanded the scope of his territory to the world. Of the 5 articles obtained, 4 of them are from Asian countries whose cultures still have similarities with each other. This means that this study will be very appropriate used as a reference in conducting if adolescent reproductive health interventions in Indonesia and other Asian countries.

Conclusion

Facilitator gender is one of the factors that determine teaching effectiveness (personality-based disposition). Based on the results of systematic review research using PRISMA flow diagrams, 6 articles were answered obtained that the research objectives. There were 5 articles that show the influence of facilitator sex with the effectiveness of reproductive health education in adolescents aged 13-19 years. There was

1 article that showed no effect, due to an imbalance in the sample of facilitators male (24.5%) and female (75.5%). Some of the factors behind the influence of facilitator sex with the effectiveness of reproductive health education socio-cultural, gender are characteristics, and role as role models. The implementation of reproductive health education for adolescents aged 13-19 years, requires a separate class system based on gender or single-sex education. Class separation aims to minimize discomfort in the reproductive health learning process.

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Conflicts of Interest

The authors declare that there is no conflict of interest.

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