



## THE RELATIONSHIP BETWEEN GADGET USAGE, COMMUNICATION SUPPORT, AND THE RISK OF SEXUALLY TRANSMITTED INFECTIONS AMONG ADOLESCENT GIRLS IN SMA PGRI 1 BEKASI CITY

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### ABSTRACT

Adolescence is a transitional period from childhood to adulthood in Indonesia, especially in West Java, which experiences an increasing number of HIV cases each year. Adolescents contribute to nearly 20% of the total cases, with Kota Bekasi having an adolescent population of 2.48%. The main contributing factors are related to gadget usage, communication, and support. This research aims to further examine the relationship between Gadget Use, Communication, Support, and the Risk of Sexually Transmitted Infections (STIs) among adolescents. The research employs a quantitative method with a Cross-Sectional design. The sample consists of 158 adolescents out of a total of 260. Data collection was conducted over 8 days, with the results indicating a significant relationship between Gadget Use and the Risk of Sexually Transmitted Infections (p-value: 0.005). Similarly, there is a significant relationship between Communication and the Risk of Sexually Transmitted Infections (p-value: 0.009). Support also correlates with the Risk of Sexually Transmitted Infections. Therefore, it is recommended that adolescents receive education regarding the proper use of gadgets, effective communication, and adequate support, with the involvement of parents or guardians.

**KEYWORDS:** Gadget ; Communication ; Assistance or Support ; Risk of Sexually Transmitted Infection

### INTRODUCTION

Adolescence is a transitional period from childhood to adulthood. Many young people experience a significant lack of knowledge regarding their own development, which can lead to various issues, particularly stemming from the lack of information, especially regarding reproductive health-related changes. Specifically, reproductive health is not taught in schools as part of the curriculum. Meanwhile, there is also a limited amount of open information about reproductive health issues at home and in the community (Dinkes Jabar, 2020).

Adolescent reproductive health refers to a state of holistic health, encompassing physical, mental, and social dimensions, free from diseases and disorders related to the reproductive system, its functions, and the reproductive process itself (Ardiansyah, 2022). Adolescent reproductive health



includes freedom from unwanted pregnancies, unsafe abortions, sexually transmitted infections (STIs), including HIV/AIDS, and all forms of sexual violence and coercion. It is defined as the state of sexual well-being. Based on the above definition, it can be concluded that adolescent reproductive health is a function of the healthcare system.

Adolescent sexual and reproductive health has become a global concern. According to WHO 2022, more than one million sexually transmitted infections are transmitted worldwide every day, with most cases being asymptomatic. Approximately 374 million new infections occur each year (WHO, 2022), and this continues to spread widely across countries, including Indonesia.

In Indonesia, specifically in West Java, according to the data quoted from the Provincial Health Office of West Java in 2020, there has been a tendency of increasing cases each year. In 2020, there was an increase of 4,758 incidents, while in 2018, there were 4,537 cases, with adolescents accounting for nearly 20% of the total HIV cases.

According to the Health Profile of West Java Province in 2020, several cities in West Java have experienced a significant increase in cases. Bekasi is one of them, ranking fifth after Bogor, Kota Bogor, Kota Cimahi, and Kota Cirebon, with adolescents accounting for 2.48% of the cases of sexually transmitted infections (STIs), particularly within the age range of 15- 19 years.

The increase in the percentage of sexual activity among adolescents can lead to a rise in unintended teenage pregnancies and abortions. Several studies have investigated the sexual and reproductive health among girls in Indonesia (Nurachmah et al., 2019).

The high transmission of STIs among adolescents is influenced by various factors, including interpersonal, social, and contextual factors. These factors affect the risk and capacity of adolescents to prevent STI exposure (such as the influence of parents, peers, and sexual networks; influence of sexual partners; community factors and other environmental factors; media; and access to and utilization of healthcare services) (Nurachmah et al., 2019). Some main factors commonly observed in society are the effects of gadgets, communication, and adolescent guidance.

Technology or gadgets have become an inseparable part of everyone's life, including adolescents (Layyinatus S, et al., 2019). A study by Layyinatus found that 26% of children fell into the high category of gadget usage, specifically for accessing YouTube, the internet, and games (Layyinatus in Meilanda, 2021). The accessibility of pornographic material among students has increased the frequency of risky sexual behavior. Parents, the government, and schools should pay attention to the freedom students have to access "anything" from their phones. Therefore, good communication between parents and children is also necessary

Communication about sexual issues between parents and adolescents can influence adolescent sexual behavior. One of the challenges is initiating communication about sexual relationships and sexually transmitted infections, including HIV/AIDS. Adolescents in high school require effective communication between parents and adolescents. The study conducted by Pepty et al. showed that the communication patterns between parents and adolescents regarding sex are still very low. In



addition to communication, guidance is also needed in the communication process, so it's not just about conveying information.

Therefore, the role of parents is crucial in monitoring and controlling their teenage children's activities, especially since parents are the main foundation for their children's growth. Moreover, many parents nowadays are accustomed to using gadgets and the internet, so they will not miss out on the latest information trending worldwide. However, the lack of widespread dissemination of information about sex education to the community is still a challenge, resulting in many people not understanding the importance of early sex education (Pratiwi & Winoto, 2020).

Guidance plays a significant role in this field. To prevent rampant risky sexual behavior among adolescents, school counselors or teachers need to take a systematic approach (Nurachmah et al., 2019). Effective communication with both schools and parents is necessary because every role contributes to the prevention of sexually transmitted infections.

The impact of an adolescent contracting a sexually transmitted infection cannot be considered as a light and simple consequence. While the physical impact is more apparent, the mental impact is also significant. Those affected mentally often experience excessive anxiety, persistent depression, and even drug dependence.

Based on preliminary studies, the researchers are interested in further examining the facts regarding the relationship between gadgets, communication, guidance, and the risk of sexually transmitted infections among female adolescents in SMA PGRI 1 Kota Bekasi. This is because many adolescents are unaware of the impact of gadget usage, communication, and guidance on the risk of sexually transmitted infections.

## **MATERIALS AND METHODS**

The method used by the researchers is quantitative. The research design employed in this study is a Cross-Sectional design. A Cross-Sectional study is a type of research that emphasizes measurement at a single point in time, observing the independent and dependent variables only once (Nursalam, 2016).

The research design aims to describe the relationship between the use of gadgets, communication, and adolescent support with the risk of sexually transmitted infections among female adolescents in SMA PGRI 1 Kota Bekasi in 2023



## RESULTS

The research results section is a critical part of a research report, encompassing tabulations or pictorial representations that stem from observations and report study findings based on the information collected through the applied methodology. This section presents findings without bias or interpretation and is organized logically.

This analysis is used to test the relationship between two variables, specifically the relationship between each independent variable and the dependent variable. According to Gunarto (2018), bivariate analysis techniques are used when two variables are analyzed (Hulu, 2019). In this study, the Chi-Square Test was used to examine the relationship between gadget use, communication, supervision, and the risk of sexually transmitted infections.

Tabel 1. The table above shows that gadget use is predominantly at risk, with 103 respondents (65.2%). Similarly, the risk of sexually transmitted infections is dominantly at risk, with 81 respondents (51.3%). The significance value (p-value) of  $0.005 < 0.05$  indicates that H1 is accepted and H0 is rejected, demonstrating a relationship between gadget use and the risk of sexually transmitted infections among female adolescents at SMA PGRI 1 Bekasi.

Relationship between Gadget Use and Risk of Sexually Transmitted Infections among Female Adolescents at SMA PGRI 1 Bekasi

Gadget Use	Risk of Sexually Transmitted Infections								P-Value 0,005
	Not at Risk		At Risk		Highly At Risk		Total		
	N	%	N	%	N	%	N	%	
Not at Risk	3	6,2	16	12,3	5	5,5	24	24,0	
At Risk	35	26,7	50	52,8	18	23,5	103	103,0	
Highly At Risk	3	8,0	15	15,9	13	7,1	31	31,0	
<b>Total</b>	41	41,0	81	81,0	36	36,0	158	158,0	



Table 2. The table shows that adolescent communication is predominantly at risk, with 106 respondents (67.1%). Similarly, the risk of sexually transmitted infections is dominantly at risk, with 81 respondents (51.3%). The significance value (p-value) of  $0.009 < 0.05$  indicates that H1 is accepted and H0 is rejected, demonstrating a relationship between adolescent communication and the risk of sexually transmitted infections among female adolescents at SMA PGRI 1 Bekasi.

Relationship between Adolescent Communication and Risk of Sexually Transmitted Infections among Female Adolescents at SMA PGRI Bekasi

Adolescent Communication	Risk of Sexually Transmitted Infections								P-Value <b>0,009</b>
	Not at Risk		At Risk		Highly At Risk		Total		
	N	%	N	%	N	%	N	%	
Not at Risk	3	6,2	15	12,3	6	5,5	24	24,0	
At Risk	32	27,5	45	54,3	29	24,2	06	106,0	
Highly At Risk	6	7,3	21	14,4	1	6,4	8	28,0	
<b>Total</b>	41	41,0	81	81,0	36	36,0	8	158,0	

Table 3. The table shows that adolescent supervision is predominantly at risk, with 105 respondents (66.5%). Similarly, the risk of sexually transmitted infections is dominantly at risk, with 81 respondents (51.3%). The significance value (p-value) of  $0.004 < 0.05$  indicates that H1 is accepted and H0 is rejected, demonstrating a relationship between adolescent supervision and the risk of sexually transmitted infections among female adolescents at SMA PGRI 1 Bekasi.

Relationship between Adolescent Supervision and Risk of Sexually Transmitted Infections among Female Adolescents at SMA PGRI Bekasi

Adolescent Supervision	Risk of Sexually Transmitted Infection								P-Value <b>0,004</b>
	Not at Risk		At Risk		Highly At Risk		Total		
	N	%	N	%	N	%	N	%	
Not at Risk	5	6,2	15	12,3	4	5,5	24	24,0	
At Risk	34	27,2	43	53,8	28	23,9	105	105,0	
Highly At Risk	2	7,5	23	14,9	4	6,6	29	29,0	
<b>Total</b>	41	41,0	81	81,0	36	36,0	158	158,0	



## DISCUSSION

The significance of this finding lies in affirming that factors such as gadget use, communication, and parental guidance have a significant correlation with the risk of sexually transmitted infections (STIs) among teenage girls in SMA PGRI 1 Kota Bekasi. This finding is consistent with previous research indicating that social and environmental factors play a crucial role in STI transmission among adolescents.

The use of gadgets, such as access to pornography content, can increase risky sexual behaviors. This underscores the need for a holistic approach to sex education involving both parents and schools. Effective communication between parents and teenagers has also been proven to be a critical factor in reducing STI risk. This finding reinforces the urgency of expanding sex education involving families and educational institutions as part of STI prevention strategies.

Furthermore, parental guidance also plays a vital role in guiding teenagers towards safe sexual behaviors. Thus, an approach involving parents, schools, and teenagers collectively can be an effective strategy in addressing STI issues among adolescents. It is recommended that sex education programs be enhanced and more deeply integrated into school curricula to increase awareness and understanding among teenagers about the risks of STIs and preventive measures.

## CONCLUSION

The findings of the research on the Use of Gadgets, Communication, and Support related to the Risk of Sexually Transmitted Infections among Female Adolescents in SMA PGRI 1 Kota Bekasi can be summarized as follows:

1. **Gadget Use:** Easy access to adult content on social media increases the risk of sexually transmitted infections among female adolescents.
2. **Communication:** Lack of proper communication with parents and peers increases the risk of unhealthy sexual behaviors among adolescents.
3. **Support/Mentoring:** Open communication between parents and adolescents regarding sexuality, as well as support in making responsible decisions, can reduce the risk of sexually transmitted infections.

Statistical analysis indicates a significant positive relationship between gadget use, communication, support, and the risk of sexually transmitted infections among female adolescents in SMA PGRI 1 Kota Bekasi.



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## Conflict Of Interest

In the context of publishing the research on the relationship between gadget usage, communication, and support with the risk of sexually transmitted infections (STIs) among female adolescents at SMA PGRI 1 Bekasi City in 2023, there are no conflicts of interest associated with the authors or affiliations with any commercial products. Additionally, there are no other associations, such as ownership of patent licensing arrangements, that could affect the integrity and validity of the research.

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