

# The Effect of Leaflet on Reproductive Health Media Accessing Behavior among Students in Medan North Sumatera

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#### ABSTRACT

Background: Psychological changes in adolescents can be influenced due to hormonal changes in the body and the desire to express sexual appetite so that it can result in increased sexual problems such as increased premarital sexual behavior or free sex. Therefore, it is necessary to do an intervention step to be able to increase information and knowledge for adolescents about reproductive health. This study aimed to determine the effect of information through leaflets on the habit of accessing media related to reproductive health and premarital sexual attitudes on students at Vocational School (VS) Parulian I Medan.

**Subjects and Method:** This was quasi experimental with One Group Pretest-Posttest Design without a control group. The study was conducted from May to July 2019. A total of 133 students of class X and XI of Medan Parulian I Vocational School was selected for this study. The data were collected using a questionnaire. The data was analyzed by Wilcoxon.

**Results:** The habit of accessing media after being given information through leaflets (Mean=

1.59; SD= 0.49) was higher compared to before getting information through leaflets (Mean= 1.26; SD= 0.44), and statistically significant (p<0.001). Pre-sexual behavior marriage after got the information through leaflets (Mean= 42.38; SD= 11.11) was higher than before got the information through leaflets (Mean= 38.92; SD= 11.97), and statistically significant (p< 0.001).

**Conclusion:** Information in the leaflet improved the habit of accessing media related to reproductive health and positive premarital sexual attitudes.

**Keywords:** leaflets, media access, premarital sexual attitude

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#### Cite this as:

Damanik VA, Lasmawanti S, Anggraini N, Hardika BD (2020). The Effect of Leaflet on Reproductive Health Media Accessing Behavior among Students in Medan North Sumatera. J Health Promote Behav. 5(1): 18-25. https://doi.org/10.26911/thejhpb.2020. 05.01.03



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### BACKGROUND

According to WHO, adolescents were residents in the age range of 10-19 years old. According to the Indonesian Minister of Health Regulation, adolescents were residents in the age range of 10 to 18 years old and according

to the National Population and Family Planning Agency (BKKBN) the age range of adolescents is 10-24 years and not married yet. The total age group of 10-19 years old in Indonesia according to the 2010 Population Census is 43.5 million or 18% of the population. In the

world estimated at 1.2 billion or 18% of the total world population (WHO). Adolescence is a transition from adulthood, where at this time there is a point of sexual maturity called puberty. Puberty is the early stages of adolescence when there are physical, psychological changes and sexual maturation (Pieter, 2018).

Adolescent life is a decisive phase for the next life. Many differences and changes that occur in this phase, both physical, biological, psychological and social changes in adolescents themselves. Psychological changes in adolescents can be influenced because there are hormonal changes in the body. The desire to channel sexual appetite has surged, it is undeniable and is a human nature (Herni, 2017).

Study conducted by Adhikari (2009), among Kathmandu Nepal students showed that from 573 male students studying at 12 colleges affiliated with Tribhuvan University (TU), there were about two-fifths of survey respondents (39%) who reported that they had premarital sex relationship. The study also showed that a substantial proportion of students indulge in sexual activities as well as risky sexual behavior. Sex with commercial sex workers, multiple sex partners, and the use of condoms that are not consistent with non-permanent partners is common among students. Less than two out of five male students (57%) have used condoms for the first sexual activity (Adhikari and Tamang, 2009).

The problems of adolescents in Indonesia are Drugs and Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV / AIDS), and the main problems of adolescents today are free sex or premarital sex (BKKBN, 2017). Premarital sexual behavior is sexual relations carried out by people who are not married or without ties. According to Humasugm and Soetjiningsih, adolescents had their first sexual activities while in high school at the age of 15-18 years old. Basically, sexual behavior can be grouped into

four categories, namely kissing, hugging, making out (petting), and having intercourse. Most of the sexual behavior is carried out at home, boarding houses, school and campus environments, and lodging places/hotels (Pinem, 2009).

Data obtained from the BKKBN in 2010 revealed that out of 100 respondents in Jabotabek, 51% of adolescents had premarital sex, in Surabaya was 54%, Medan was 52%, Bandung was 47%, and Yogyakarta was 37% (Suryanto, 2010). Based on the results of the 2012 SDR survey the KRR stated that around 9.3% or around 3.7 million adolescents stated that they had had premarital sexual relations (Central Bureau of Statistics, 2012). Changes in adolescent sexual attitudes can result in increased sexual problems such as increased promiscuity, venereal disease, risk of cervical cancer (4-5 times if it was done before the age of 17), maternal and infant mortality rates, abortion, young marriage, and problems pregnancy was undesirable (Kumalasari and Andhyantoro, 2012)

Health promotion is a combination of various supports regarding education, organization, policies, and legislation for environmental changes and behaviors that benefit health. Meanwhile, according to WHO, health promotion is a process to improve the community's ability to maintain and improve their health. To achieve perfect health, whether physically, mentally, and socially, the community must be able to recognize and realize their aspirations, needs, and be able to change or overcome their environment (Nugraheni, et al., 2018).

Adolescents do not get enough information and knowledge about reproductive health they need from family or school so adolescents tend to look for it outside formal education which often cannot be accounted for. Therefore, it is necessary to do an intervention step with health promotion to be able to increase information and knowledge for adolescents

about reproductive health to anticipate or prevent the occurrence of premarital sexual behavior or free sex.

Information is data that is processed into a form that has meaning for the recipient and has real and perceived value for current or future decisions, information that comes from the sender of the message addressed to the recipient of the message. In addition, information can be obtained from print media, electronic media, non-media such as family, friends, and health personnel. Information sources relate to knowledge, both from people and the media (Destariyani and Dewi, 2015).

Based on study conducted by Mosavi (2014), it was known that the lack of access to sources of information about sexual reproductive health was one of the six main reasons for the need to provide sexual reproductive health services for young women (Mosavi et al., 2014).

One of the health promotion efforts carried out is to provide counseling with lecture methods and the provision of leaflet media. The lecture method can be used on targets with low or high education levels, when counseling is conducted, the target can actively participate and provide feedback on the counseling material provided. Leaflets were chosen as media because they are easy to store, economical and can function as remainder for the target. Hasan (2011) states that health promotion with leaflet media is effective in increaseing knowledge of work fatigue in folded workers at PT. Toha Putra Semarang.

Based on a preliminary survey conducted by authors on students at SMK Parulian 1 Medan, it was obtained that 8 out of 10 students interviewed said that they had already engaged in premarital sexual behavior at least holding hands and kissing during dating. In addition, the teacher said that he had seen students of the opposite sex holding hands and hugs in the school area.

Based on the background above, this study aims to determine the effect of information through leaflets on media access habits and premarital sexual attitudes on students at VS Parulian I Medan.

#### SUBJECTS AND METHOD

## 1. Study Design

This was quasy experimental with One Group Pretest-Posttest Design without a control group, which was done first assessment/measurement (pre-test) before being given information through leaflets, then re-evaluating (post-test) after being given information through leaflets. The study was conducted in May to July 2019.

## 2. Population dan Sample

The population in this study were all students of class X and XI of Medan Parulian I Vocational School by 133 people. Sampling used the entire population of 133 people.

## 3. Study Variables

The independent variable was the use of leaflets. The dependent variable in this study was the habit of accessing premarital media and cissexuals.

### 4. Operational Definition of Variables

The habit of accessing media is the intensity of respondents in accessing information related to adolescent reproductive health. Question for this variable was 1 item, measurement using the Guttman scale which consisted of two answer choices, namely yes and no.

Attitude was the attitude owned by respondents regarding adolescent premarital sex. Questions for attitude variables were 12 items, measured using a Likert scale consisting of four answer choices, namely strongly agree (SA), agree (A), disagree (D), and strongly disagree (SD).

## 5. Study Instruments

The instrument in this study was using a questionnaire containing questions related to media access habits and premarital sexual

attitudes conducted by students at Parulian I vocational school in Medan. The first questionnaire was given to students in Parulian I Medan before giving information through leaflets about adolescent reproductive health (pretest) and the second questionnaire was given to respondents after the intervention (posttest).

## 6. Data Analysis

The data was analyzed by Wilcoxon with a statistical significance test p < 0.05.

#### 7. Research Ethics

Ethics in this study are permits from the leadership of the institution to carry out the study.

#### **RESULTS**

## 1. Characteristics of Study Subject

The characteristics of the study respondents described in Table 1.

**Table 1. Characteristics of Study Subjects** 

Characteristics	Category	n	%
Age	Early Adolescents (12-16 years old)	100	75.2%
_	Late Adolescents (17-19 years old)	33	24.8%
Gender	Female	75	56.4%
	Male	58	43.6%
Religion	Confucianism	0	0%
	Buddha	0	ο%
	Christian Protestant	131	98.5%
	Hindu	2	1.5%
	Catholic	0	0%
	Moslem/Islam	0	0%
Department	OA (Office Administration)	38	28.5%
	AC (Accounting)	35	26.3%
	SS (Software Series)	30	22.6%
	CNE (Computer Network Engineering)	30	22.6%
Parents Education	Elementary school	9	6.8%
	Junior high school	16	12.0%
	Senior high school/vocational school	94	70.7%
	Diploma/Bachelor Degree	14	10.5%
Residence	Not With Parents	58	43.6%
	With Parents	75	56.4%
Parents Relationship	Not Good	36	27.1%
	Good	97	72.9%
Boyfriend/Girlfriend	Yes	92	69.2%
	No	41	30.8%

## 2. The result of bivariate analysis

Table 2 showed that the habit of accessing media after being given information through leaflets (Mean= 1.59; SD= 0.49) was higher compared to before being given information through leaflets (Mean= 1.26; SD= 0.44), and statistically significant (p < 0.001).

Table 3 showed that premarital sexual attitudes after being given information through leaflets (Mean= 42.38; SD= 11.11) were higher than before being given information through leaflets (Mean= 38.92; SD= 11.98), and statistically significant (p < 0.001).

Table 2. The influence of information through leaflets on the habit of accessing media on students of Parulian I Vocational School Medan

Intervention	Mean	SD	p
Pre-intervention	1.26	0.44	<0.001
Post-intervention	1.59	0.50	

Table 3. Influence of information through leaflets on premarital sexual attitudes on students of Parulian I Vocational School Medan

Intervention	Mean	SD	p
Pre-intervention	38.92	11.98	0.001
Post-intervention	42.38	11.11	

#### DISCUSSION

## 1. The effect of information through leaflets on habits of accessing media related to reproductive health

The habit of accessing media after getting the information through leaflets higher compared to before getting the information through leaflets and statistically significant.

Lack of knowledge about reproductive health makes information needs important, especially in reproductive planning, HIV/-AIDS prevention and drug dependence. Knowledge of good sexuality information provides opportunities for longer abstinence to have premarital sexual relations with adolescents. However, if the hidden message of media exposure contained pornographic content, it would stimulate the interest of adolescents to have sex (Pinandari et al., 2015).

Exposure to sexuality information through both explicit and implicit media raised vulnerability for adolescents to engage in premarital sexual behavior. Media exposure in several countries rarely presents the promotion of reproductive health that is responsible for adolescents. Other studies stated that adolescents were more likely to be exposed to sexual content in the media (Puspasari et al., 2017). Study conducted by Kumalaningrum (2018) also stated that positive attitudes, positive subjective norms, perceived strong behavioral control, the same gender relations,

and media exposure about safe sexual behavior, predicts positively the possibility of safe sexual behavior in young women (Kumalaningrum et al., 2018).

The results of this study were in line with study conducted by Darmasih (2009) on "Factors Affecting Premarital Sex Behavior in High School Adolescents in Surakarta", which was known that there was an influence of knowledge, understanding of religious levels, sources of information, and the role of families on premarital sexual behavior among adolescents in High school in Surakarta (Darmasih, 2009).

This was in line with a study done by Destariyani (2015) concerning "Factors Associated with Premarital Sexual Behavior in Adolescents of SMP Negeri 1 Talang Empat, Central Bengkulu Regency", the results stated that there was a relationship of knowledge, family environment, peer influence, and exposure to information media with premarital sexual behavior. Multivariate analysis found that the information media exposure variable was the most dominant factor influencing adolescent premarital sexual behavior (Destariyani and Dewi, 2015).

According to the authors assumptions, adolescents who often and were accustomed to accessing information through the media would influence knowledge. If the information received contained positive elements, it would

form good behavior. Vice versa, if the information received contained negative elements, it would form bad behavior. Information received by accessing media can also be influenced by other factors such as the role of parents and peers.

## 2. The effect of information through leaflets on premarital sexual attitudes on students

Premarital sexual attitudes after getting the information through leaflets higher than before getting the information through leaflets and statistically significant.

Attitude is defined as a reaction or response that arises from an individual to an object which then raises individual behavior towards the object in certain ways (Azwar, 2013). Changes in attitude are also influenced by the length of time someone remembers a message. In accordance with Brigham's opinion, with the concept of sleeper effect which stated that people may still remember the contents of the message delivered within 10-14 days after the message was delivered but forget who the source of the message was, which in the end the attitude changes that occur would not be as much as while still remember who was the source of the message or the communicator (Azwar, 2012).

Currently, there was information exploitation due to the presence of the internet, various media, easy access, and the large amount of pornographic material available. The Asian education system focused on core subjects and excludes sex education. Because of the lack of support from the education system and family, adolescents who were naturally curious about sex would access the internet and other media to satisfy their curiosity about sex (Chang, Hayter and Lin, 2014).

Study conducted by Tarmidi (2018) also stated that healthy premarital sexual behavior directly increased with perceived intention and control of behavior. Healthy premarital sexual behavior was indirectly influenced by subjective norms, attitudes, maternal education, subjective norms, peer norms, and health information centers (Tarmidi et al., 2018).

The results of this study were in line with Pradhasari (2017) who conducted the study on "The Effects of Counseling on Reproductive Health on Premarital Sexual Attitudes of Adolescents in Karangtaruna, Plamar Hamlet, Jatiyoso District, Karanganyar" stated that there was a significant influence of attitude between before counseling and after counseling (Pradhasari and Betty, 2017).

But it was not in line with a study of Handayani (2009) on "The Effectiveness of Group Discussion Methods with and without Facilitators on Increasing Adolescent Knowledge, Attitudes and Motivation about Premarital Sex Behavior" showed that there were significant differences between group and facilitator discussions and group discussions without facilitators in increasing adolescent knowledge. While for the improvement of attitudes and motivation of adolescents, there was a significant increase between group discussions with the facilitator and group discussions without the facilitator with the attitude and motivation values (Handayani et al., 2009).

According to the authors assumptions, this could be influential because one of the factors influencing attitude formation is the information received. If the information received lead to negative, it would form a negative attitude and if the information received can motivate, it will cause changes so as to form a positive attitude. Attitudes can also beformed due to personal experiences with certain things or objects. Attitudes toward sexuality are the dominant factors that influence adolescent premarital sexual behavior so that it was necessary for awareness to various parties that reproductive health education should be given not only limited to knowledge,

but also included the values and attitudes that every adolescent must have to act.

#### **AUTHOR CONTRIBUTION**

Veronica Anggreni Damanik has roles in collecting data and processing data analysis. Sri Lasmawanti has roles in adding the conceptual framework and study methodology. Novita Anggraini has a role in helping in the production of leaflets and study instruments. Bangun Dwi Hardikaberperan has a role in reviewing study texts.

#### **CONFLICT OF INTEREST**

The author declares that no conflict of interest in this study manuscript.

### FUNDING AND SPONSORSHIP

This study was funded by the Directorate of Research and Community Service-Directorate General of Research and Development Strengthening based on Decree Number 7/E/KPT-/2019 and Agreement/Contract Number T/-138/L1.3.1/PT.01.03/2019.

#### ACKNOWLEDGEMENT

Researchers would like to thank the Parulian I Vocational School Medan for helping and students who were willing to become respondents.

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