

Partner Discussion and Adolescent Smoking Behaviors in Indonesia: IDHS 2012

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Abstract- The adolescent knowledge and perception on such risk behaviors might be shape by whom the health related information has been discussed. Smoking has negative impact for the future adolescent life. This research aims to assess to what extent discussion partner influence on adolescent smoking behavior. Data used in this research is Indonesia Demographic and Health Survey 2012, Adolescent Reproductive Health component. The population of the research is unmarried young men and women aged between 15-24 years old. The result shows that a discussion partner is proven to have association with smoking behavior. Adolescent who discuss with friends will increase smoking behavior. Adolescent who discuss with fathers have potentially higher risk to smoking than the other one. The quality of discussion partner and information values need to become consideration to help protect adolescent from negative behaviors. This research shows that mothers need to involved in the effort to overcome risky behaviors.

Index Terms- adolescent, discussion partner, smoking.

I. INTRODUCTION

Adolescents are a phase where individuals continue to grow into maturity and have full of curiosity to try new things that tend to lead to risky behavior. The results of the 2010 Population Census show that Indonesia's population is 237.6 million and 26.67% of them are adolescents, which of can affect social, economic, and national development aspects¹. Seeing the large number of adolescents, it needs to get serious attention because they are vulnerable to expose behavior that impacts on their health.

Health problems that occur in adolescents are associated with risky behavior such as smoking, drinking alcohol, drug abuse, and having premarital sex. Smoking has negative impact for the future adolescent life. According to the Basic Health Research data², the number of Indonesians who smoked in 2007 was 34.2%, in 2010 it was 34.7% and continued to increase until 2013 to 36.3%. The Global Youth Tobacco Survey (GYTS) states the number of Indonesian adolescent smokers in 2009 was 20.3%³. The younger a adolescent smokes, the more likely to become a heavy smoker in his adult life and of course the impact of smoking will be even greater.

Risk behavior is influenced by several factors. Various studies have suggested factors that influence risk behavior in adolescents. Green and Kreuter's theory⁴ stated that behavior is influenced by predisposing factors, enabling factors, and reinforcing factors. One of the reinforcing factors that has a strong relationship with risky behavior is their communication with whom they discuss. Sources of information that are easily accessible to adolescents are chosen to satisfy their curiosity about reproductive issues.

Based on IDHS data 2012⁵, there are various partner discussion that are preferred by adolescents including mothers, fathers, friends, teachers, siblings, health officer, and religious leaders. The information delivered by partner discussion certainly affects the attitude in the adolescent's behavior. This research aims to assess to what extent discussion partner influence on adolescent smoking behavior.

II. RESEARCH METHODOLOGY

The sampling method used in the 2012 IDHS is a three-stage sampling method. The first stage is carried out by selecting the Primary Sampling Unit (PSU) from the PSU sample framework established for the purposes of various surveys with a household approach in a probability proportional to size (PPS) method. PSU is a group of adjacent census blocks that become the coordinator's task area in the 2010 Population Census team. The second step is to choose a PPS census block at each PSU selected in the first stage. The third step is to choose 25 ordinary households in each census block systematically.

The data used in this study were all adolescents aged 15-24 years unmarried at 19,882 respondents. A total of 8,902 female respondents and 10,980 male respondents were successfully interviewed with response rates of 94 percent and 89 percent, respectively.

Partner discussion is chosen as independent variables based on a spontaneous question with multiple response types. Respondents make it possible to choose more than one answer choice. Measurement of the dependent variable was obtained from all adolescents who answered ever had smoked. There are no variables that describe how often and in depth the patterns of discussion of adolescents with the partner discussion, how is the knowledge, how to deliver information and what type of

information delivered. Logistic regression is used to measure the association of partner discussion and smoking behavior.

III. RESULTS AND DISCUSSION

Smoking is a risk behavior that is most often found among adolescents. The incidence of smoking in male adolescents are very high. At the level of education, adolescents with higher education are more likely not to smoke. male adolescents tend to live freely and find it easier to leave the house for fun compared to women, whereas women are usually more likely to be watched by parents or older siblings⁶. In general, the higher the economic status, the lower the proportion of smoking behavior. Santrock in Barus (2013) explained that juvenile delinquency is more common in lower socioeconomic groups. The hard demands of life make adolescents aggressive.

Table 1. Socio-demographic characteristics of adolescents smoking behavior in Indonesia, 2012

| Socio-demographic | Smoking | |
|--------------------------------|---------|------|
| | N | (%) |
| Sex | | |
| - Female | 8,902 | 10.5 |
| - Male | 10,980 | 70.9 |
| Education | | |
| - Completed junior high school | 6,704 | 54.8 |
| - Senior high school | 13,032 | 47.1 |
| Residential | | |
| - Urban | 11,241 | 48.8 |
| - Rural | 8,641 | 51.6 |
| Socio-economy | | |
| - Poorest | 3,970 | 53.5 |
| - Poor | 4,024 | 53.6 |
| - Middle | 4,049 | 51.3 |
| - Rich | 3,731 | 49.7 |
| - Richest | 4,108 | 43.9 |
| Media exposure | | |
| - Good | 6,754 | 50.0 |
| - Lack | 12,680 | 49.3 |

There are various sources of adolescent information relating to the role of the family (mother, father, sibling), the role of the school namely the teacher and the role of the community (peers, health workers and religious leaders). Partner discussion has an important role as a source of reproductive health information and matters relating to adolescent behavior⁷.

Adolescent female discuss more with mothers than male. Naturally there is a close relationship that occurs between mother and daughter, while boys lack emotional ties with their mothers⁸. Father became a figure who is very rarely invited to discuss both for male and female. Busyness and the role of the father as head of the family and family income seekers make the presence of the father figure rarely seen in the midst of the family.

From various choices of partner discussion, it is seen that more than half of adolescents choose friends. Peers are explained as a group that is closely related to the exchange of information

and ideas in groups⁹. Friendship between peers can have good or bad effects depending on the quality of the group. Nearly half the adolescents make the teacher as the opponent of the discussion. The teacher is interpreted as second parents because students have a lot of time interacting with the teacher¹⁰. Teachers play an important role as health promoters in schools. The teacher's attitude has a positive or negative influence on his students depending on what they convey. No wonder, indeed, most adolescents prefer to look for partner discussions from their peers and teachers at school. The role of siblings did not show such a large number. The same thing can also be seen in the minimal role of health workers and religious leaders.

Table 2. Partner discussion of adolescents in Indonesia, 2012

| Partner discussion | Female | Male | Total |
|--------------------|--------|------|-------|
| Mother | 44.0 | 9.9 | 24.9 |
| Father | 4.6 | 8.2 | 6.7 |
| Friends | 60.2 | 58.6 | 59.4 |
| Relative | 26.1 | 11.7 | 18.1 |
| Teachers | 43.2 | 38.7 | 40.9 |
| Health workers | 16.0 | 17.0 | 16.8 |
| Religious leaders | 5.1 | 11.1 | 8.6 |

Several studies have proven there is a link between one risky behavior to another risky behavior. Adolescents who have committed one of the risky behaviors will have the opportunity to try a variety of other behaviors. Adolescent smokers have a 5.4 times greater risk for consuming alcohol compared to adolescents who did not smoke. Adolescents with experience using cigarettes tend to try other risk behaviors including alcohol consumption.¹¹ The Global Youth Tobacco Survey examined adolescents aged 13-15 years and found that teenage smokers were twice as likely to consume alcohol.

Table 3. Smoking and other risky behavior in Indonesia, 2012

| Smoking and other risky behavior | 95% CI | | |
|----------------------------------|--------|--------|-----|
| | OR | 95% CI | |
| Sexual intercourse | 2.1 | 1.4 | 3.2 |
| Drug use | 1.2 | 0.9 | 1.6 |
| Alcohol drinking | 5.4 | 4.4 | 6.5 |

Partner discussion have an influence on the incidence of risk behavior. Overall, adolescents who discuss with friends have a greater risk for risky behavior than adolescents who do not discuss with friends. Peers is one of the external factors that can influence adolescent health behavior¹². Being accepted by a peer group becomes more important than being accepted by someone else.

Conversely, adolescents who discuss with mothers have self-protection against risky behavior. This study is in line with the study of Lestary¹³ which states that adolescents who did not communicate well with their parents have a 3.6 times greater chance to behave riskfully than adolescents who communicate well. Specifically, adolescents who have good communication

with their mothers are reported to have good health quality, have a less desire to smoke, a low frequency of drinking alcohol, and a low desire to have sex before marriage¹⁴.

Adolescents who discuss with friends have a greater risk for smoking. That peer groups are associated with adolescents' decisions to smoke¹⁵. In addition, the effect was also seen in adolescents discussing with fathers. Adolescents who discuss with fathers have a 1.2 times greater risk for smoking. The family in this case the father used as role models as preparation for the process of maturity. Fathers who have the habit of smoking can be used as examples of their children to do the same behavior. Conversely, the figure of mother, siblings, family and teacher becomes a protection against smoking behavior.

Table 4. Risk of Smoking Based on Partner Discussion

| Partner discussion | Smoking | | |
|-------------------------|---------|--------|-----|
| | OR | 95% CI | |
| Friends | 1.4 | 1.2 | 1.6 |
| Mother | 0.1 | 0.1 | 0.2 |
| Father | 1.2 | 1.1 | 1.5 |
| Relative | 0.7 | 0.6 | 0.8 |
| Teacher | 0.7 | 0.6 | 0.8 |
| Health provider | 0.9 | 0.7 | 1.1 |
| Religious leader | 1.1 | 0.8 | 1.5 |

*controlled by socio-demographic factor

IV. CONCLUSION

Peers play an important role in the influence of adolescent behavior. The social system that is formed creates pressure that regulates all styles, attitudes, behaviors in the group. The negative group will control adolescents towards the negative effect. On the other hand, peer groups are specially controlled and formed which contain a leader as a promoter towards positive behavior that will help lead adolescents to positive behavior. Adolescents need to be equipped with life skills so that they can increase their confidence to reject negative invitations from their friends and be able to choose positive activities to avoid associations that bring closer behavior. Bronfenbrenner's theory (1979) concludes that a person's behavior depends on the environment closest to the individual. Messages delivered to individuals can be received or not accepted depending on the environment that is most influential.

The results of this study can provide information and knowledge about the role of opponents in discussions with the incidence of risk behavior in adolescents. The quality of the opponents of the discussion needs to be taken into consideration because it really determines the information given to adolescents. The findings show there is a relationship between friends as partner discussions on the occurrence of risky behavior. While mothers have a positive role to protect adolescents from negative behavior. The values of discussion are important to be considered to improve the quality of information between adolescents and their parents. This research is expected to be the basis of further

research by adding other variables. This will enrich the results of research and deepen knowledge about adolescent risk behaviors.

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