THE RELATIONSHIP OF KNOWLEDGE, AGE, GENDER AND MENTAL HEALTH WITH BEHAVIOR AT RISK FOR SEXUALLY TRANSMITTED INFECTIONS IN ADOLESCENTS IN THE WORK AREA OF MENTENG PALANGKA RAYA PUBLIC HEALTH CENTER

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Abstract— In adolescence, many changes of biological, psychological, and social, with the persistence of incident cases of sexually transmitted infections become evidence that teenagers are prone to risky behavior sexually transmitted infections. This study aims to determine the level of knowledge, age, gender, and mental health with behavior at risk of sexually transmitted infections in adolescents in the work area of Menteng Palangka Raya Public Health Center. This was an observational analytic study with a cross-sectional design. The sample size in this research is 74 teenagers in the work area of Menteng Palangka Raya Public Health Center with the method of sampling with simple random sampling. The result of bivariate analysis of this study showed that the level of knowledge with risky behavior was affected by STI (p = 0.000), age (p = 0.000), gender (p = 0.607), and mental health (p = 0.013). There is a relationship of knowledge, age, and mental health with behaviors at risk of sexually transmitted infections. The result of the multivariate analysis showed the most dominant age with the result of Odd Ratio (OR) or Exp (B) = 8.911. For that purpose, the program organizes, evaluates or re-activates the Counseling Guidance, Health Care for Youth Care (HCYC), targeting teenagers and their parents, and establishing special NGOs or counselors that concentrate on adolescents.

Keywords— Adolescents, risk behavior, sexually transmitted infections

I. INTRODUCTION

Sexual transmitted infections (STIs) are infections caused by bacteria, viruses, parasites, and fungi that infect humans through intermediaries hole intercourse sexual intercourse, oral, or rectal (anal), where there are more than 30 types of microbes that can transmit through sexual intercourse [1], so sexual transmitted infection is among the most widespread infectious diseases and dangerous [2]. World Health Organizations (WHO) in 2017 every day, more than one million people are affected by STIs. Data from Integrated Biological and Behavioral Surveillance (IBBS), which is part of the surveillance activities of HIV/AIDS and sexual transmitted infection do Survey on 23 districts/municipalities in 11 provinces in Indonesia in 2011 indicated 7.022 adolescents were taken as risky behavior data, and 7% of adolescent populations confessed to having sex, and 4% had tried to use drugs.

Sexually transmitted infections are one of the top ten causes of diseases that interfere with young adult males and the second largest cause of young adult women in developing countries. The 15-24 year age category accounts for 25% of all newly acquired STI cases. Detected STI cases account for only 50% -80% of all STI cases in the United States, reflecting limited early detection and low STI recording and awareness, in the United States, the number of women suffering from chlamydia infection 3 times more higher than in men, the result of all women suffering from chlamydial infection, the age group that contributes greatly is the age category 15-24 known [4]. Adolescence is a critical period in a person's developmental cycle, during which time there are many

changes, both biological, psychological, and social changes. This phase of change often leads to conflict between adolescents and themselves and conflicts with the environment. If the conflicts can not be resolved properly then in its development can bring negative impact, especially on the maturation of adolescent character and not infrequently will trigger the occurrence of mental health problems [5].

II. METHOD

The research location was conducted in the working area of Menteng Palangka Raya Public Health Center, with research time from February to April 2018. This research is a type of Quantitative research using an analytic observational design using Cross-sectional approach. The research population in adolescents in the work area of Menteng Palangka Raya Public Health Center is 74 people. Sample selection by Random Sampling method. The process of collecting data was done by giving questionnaires to the research subjects in the working area of Menteng Palangka Raya Public Health Center. The data analysis technique used multiple logistic regression analysis.

III. RESULT AND DISCUSSION

Table 1. Relationship of The Knowledge, Age, Sex, and Mental Health with Risky Behavior Affected by STI in Adolescent in Work Area of Menteng Palangka Raya Public Health Center

Variables	Frequency	Percentage
Knowledge		
Bad	18	24.5%
Good	56	75.5%
Age		
At risk (15-18 years old)	44	59.5%
Not at Risk (≤14 years, and ≥ 19 years)	30	75.5%
Gender		
Male	51	68.9%
Female	23	31.1%
Risk Behavior		
At risk	24	32.4%
Not at risk	50	67.6%
Mental health		
Less	45	60.8%
Good	29	39.2%

Table 2. Bivariate Analysis Relationship of The Knowledge, Age, Sex, and Mental Health with Risky Behavior Affected by STI in Adolescent in Work Area of Menteng Palangka Raya Public Health Center

Variables	Behavior at risk of STIs				Total		*P-value*	OR
	At risk		Not at risk					
	n	%	n	%	n	%		
Knowledge								
Bad	13	72.2	5	27.8	18	100	0.000	3.78
Good	11	19.6	45	80.4	56	100		
Age							0.000	8.33

At risk	22	50.5	22	50.5	44	100		
Not at Risk	2	6.7	28	93.3	30	100		
Gender								
Male	18	35.5	33	64.7	51	100	0.607	1.34
Female	6	26.1	17	73.9	23	100		
Mental health								
Less	20	44.4	25	55.6	45	100	0.013	3.38
Good	4	13.8	25	86.2	23	100		

Bivariate analysis in table 2 shows that the level of knowledge obtained P-value = 0.000 so it can be concluded that there is a significant relationship between the level of knowledge of risk behaviors affected by the STI, and supported by the value of advanced analysis of PR known that the level of bad knowledge increase the risk of behavior Infectious infections sex 3.78 times greater than at the level of good knowledge. Age variable got value P = 0.000 so it can be concluded that there is a significant correlation between age to behavior at risk of IMS, and supported by further analysis P R indicate that age at risk increase risky behavior Infectious infections 8.33 times greater than age is not at risk. Then the mental health variables obtained values P = 0.013 so it can be concluded that there is a significant relationship between mental health against STI risk behaviors, supported by further analysis of PR shows that mental health is lacking improve risky behavior Infected sexually transmitted infections at risk 3.38 times greater than good mental health, from all independent variables, obtained one variable that is not significant correlated with risky behavior of STI, that is on gender variable where got value P = 0607 (<0.05) which mean ho accepted, and result in PR indicates that there is a tendency of male sex to increase risky behavior affected Sexually transmitted infection 1.34 times larger than female gender

Table 3. Multivariate Analysis Relationship of The Knowledge, Age, and Mental Health with Risky Behavior Affected by STI in Adolescent in Work Area of Menteng Palangka Raya Public Health Center

Variables	***B***	***Sig.***	***Exp (B)***	**95% CI For EXP (B)**	
				Lower	*Upper*
Knowledge	2.085	.006	8.047	1.810	35.779
Age	2.187	.012	8.911	1.632	48.662
Mental health	2.051	.010	7.779	7.779	37.179

Multivariate analysis showed that there were three variables included in the multivariate test phase ie knowledge, age, and mental health, further analysis result obtained the most dominant actors related to risky behavior Infection of sexually transmitted infection in multivariate test of this research is age with value processing *B* = 2.187 and Exp (B) = 8.911 which means that the age of 15-18 years has a tendency of 8.911 times greater for risk behavior compared to age ≤ 14 years or ≥ 19 years.

In this study, knowledge level variables are related to risky behavior where knowledge is the result of recalling events that have been experienced both intentionally and unintentionally and this occurs after a person is in contact or make observations of a particular object [6]. Knowledge is influenced from one's experience, most of which is obtained from sensing the sense of sight and the sense of hearing, which is then expressed, and cause motivation, and there are other factors that can also affect knowledge, as for other factors namely its environment, both physical and environmental non physical and socio-cultural [7]. As well as knowledge about diseases Sexual transmitted infections play a role in predicting risky behavior.

Age is a vulnerable life as measured by the year since the individual was born, the age associated with the biological changes of adolescents. The reproductive maturity level is usually 12

years of age in female adolescents and 14 years of age in adolescent boys [8]. Age may have an effect on adolescent risk behavior [9]. The results of this study are also in line with the research conducted by Mustofa, which gains the age of a teenager then it will extend the vulnerable period that increases the chances to behave at risk, this is certainly not apart from the role of biological systems, in the body encourage the active performance of sexual hormones with age in adolescence, these hormones would provide sex drive in adolescent self that seeks to realize a boost in the form of risky sexual behaviors, adolescents aged 14 to 18 years showed that the prevalence of high tow[10], the Department of The Health of the Republic of Indonesia defines risky adolescents as adolescents who have conducted risky behaviors on health, and based on the results of research conducted Reqyrizendri 2015, as many as 55.2% of adolescents with age (14-18 years) never do risky behavior.

Gender is one of the factors associated with risk behavior in adolescents, the results in this study indicate that there is no significant relationship between sexes on risky behavior of STIs, this is in line with the same study [11] showed that gender unrelated or insignificant to risky behavior where, statistical test results obtained $P = 0.323 < \alpha$ (0.05) which means Ho accepted, a teenage boy or girl with more or less the same growth will have almost the same developmental side of physical change, experienced by adolescent boys and girls. The physical changes experienced by boys and girls will create equal opportunities for risky behavior. Although sex statistically there is no significant or significant relationship to risky behavior of sexually transmitted infections, there is a greater tendency for adolescent boys to engage in risky behavior in girls [12].

Mental health has a major influence on one's daily life in terms of controlling behavior, feelings, emotions, good problem-solving strategies, and feeling happiness in life [13]. Self-control in one's mental health is the individual's ability to control the emotions or impulses originating within him so that if the adolescent is incapable of controlling his or her mental health, the individual will develop a deviant behavioral form. Self-control in mental health is in the learning process. The learning process that is the center of a person to control themselves, to be able to relate to others to achieve personal goals, because the development of self-control of mental health of a person lasts from childhood until lifetime. There is a strong influence between mental health and the prevention of risky behavior, with $P = 0.021$.

Multivariate analysis showed age is a dominant factor in the level of knowledge among variables, and mental health. age is a crucial factor in the development of risky behavior, the age of an individual impact on the different types of risk behaviors, [14] adolescents belonging to an intensity involving increased susceptibility to disease or injury that may have dangerous consequences. Based on the results of the Indonesian Demographic and Health Survey study in 2012 also shows, the number of adolescents who have had pre-marital sex at age 15-19 years as much as 0.7% women, and 4.5% of men mostly located living in urban areas, according to a survey of some respondents with age 15-19 years of opinion that premarital sexual intercourse is more permissible and agree to the incidence of such behavior 16.9% for women, and 12.4% for men [15]. These are risky behaviors that pave the way for transmission of STDs and HIV/AIDS, both frightening diseases that are likely to occur in adolescents, who commit coitus before marriage, as couples tend to change, due to unexplored dating status. in addition to the fact that in adolescence must not be separated from the role of biological systems in the body, which encourages the active performance of sexual hormones with age in adolescents, the hormone will provide a sexual drive in adolescents so as to attempt to realize these impulses in the form of sexual risk behavior, Other factors that influence such as level of knowledge, gender, and mental health.

IV. CONCLUSION

There was a significant correlation between knowledge, age, and sex with the risky behavior of STIs in adolescents in the work area of Menteng Palangka Raya Public Health Center, and based on multivariate analysis, the dominant age variables had an effect on the risky behavior of STI. Therefore, it is necessary to organize the program, to evaluate or re-activate the Counseling

Guidance, Health Care for Youth Care, to target teenagers and their parents, and to form a special NGO or counselor that concentrates on handling mental health problems for adolescents. Health workers can also make visits to schools, schools or public or private universities to provide basic information on reproductive health and sexuality that is proportional to the understanding and level of adolescent education and does not consider the taboo to discuss issues of reproductive health and sexuality.

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