

# Developing Problem-Based Module to Train Life Skills

## In The Field Of Adolescent Reproduction Health

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**Abstract**—Nowadays, adolescents are facing issues of sexual and reproduction health which is known as *Three Basic Threat of Adolescent Reproduction Health*, and are called *Triad KRR*. In order to handle the risk, adolescents should acquire life skills in the field of reproduction health. The aim of this research were to produce problem-based module to teach life skill in field of adolescents' reproduction health and students' life skill after using the module. The study was a development research, conducted at Junior High School. The result showed that this module could be used to teach life skills in the field of adolescents' reproduction health. The students' learning mean score by using this module were: problem solving skill was 7.9; thinking skill was 7.8; and interpersonal communication skill was 7.9, which all of them were categorized as good.

**Keywords**—*problem based module, life skill, reproduction health*

### I. INTRODUCTION

One of public health issues that is potentially arising in Indonesia is reproduction health issue. Reproduction health is closely related to human life quality in the future. Reproduction health issue becomes more apprehensive because it happens to the adolescent. Reproduction health issue faced by the adolescent is the increasing of adolescent who are infected by HIV/AIDS and sexual disease, sexual issue such as undesired pregnancy, abuse of narcotics, alcohol, psychotropic, and addictive substances.

Every adolescent has potential risk to have reproduction issue, because it is related to the physical growth and development. In teenage ages, both boy and girl are felling sexual urges. This urge is rising when there is an external stimulus both psychologically or physically. Adolescents eager to know about sexuality and reproduction. Information about sexuality and reproduction are commonly gained from internet, friends, or incomplete information from the parents. Adolescents' knowledge about adolescent reproduction health is still low [1], [2]. Minimum information about adolescent reproduction health, friend social environment, and the society are the factors of the adolescent to get reproduction health issue. The arising of permissive situation of the society triggers the premarital sexual intercourse of the teenager

couples [1]. Lestary and Sugiharti stated that adolescent risky behavior is significantly related to the knowledge, attitude, access of the information media, and low quality level of communication with their parents [3]. Azinar also stated that premarital sexual behavior is significantly related to the adolescents' behavior, access and contact to pornography media, sexual attitude and behavior of their close friends [4].

To make the adolescents are able to face many challenges, including the risk of *Triad KRR*, so they need to be helped to get right information about adolescent reproduction health. As stated by [5], [6], and [7] that giving information of adolescent reproduction health should be conducted as soon as possible by school to improve students' understanding about adolescent reproduction health. [8], [9] described that one of students' information sources about adolescent reproduction health is teacher. As stated by Citrawathi, et al. that students want to have information about adolescent reproduction health given by teacher at school [2]. Besides improving students' understanding about adolescent reproduction health, the adolescents should be trained life skills in the field of adolescent reproduction health, including: (1) problem solving and decision making skills, (2) thinking skill, (3) interpersonal communication skill, (4) keeping physical health skill, (5) be firm skill, (6) trusting and self-respect skill, and (7) handling stress skill [10].

Problem solving and decision making skill, communication skill and thinking skill can be taught through problem based learning (Mayasari and Adawiyah, 2015<sup>[11]</sup>; Permana, et al, 2016<sup>[12]</sup>). To facilitate the problem based learning, a problem based adolescent reproduction health module should be developed. The research problem of this study was: 1) How is the eligibility of the modules developed to promote life skills in the field of adolescent reproductive health? 2). How the students' life skills in adolescent reproduction health after following learning process by using problem based adolescent reproduction health module.

### II. RESEARCH METHODS

This study was a development research that used development model of Dick and Carrey [13]. There were five

steps of development, namely: (1) subject setting, (2) need analysis, (3) developing module, (4) making module, (5) review and module try out. The developed problem based adolescent reproduction health module was assessed by subject expert and expert of learning technology and was tried out on teacher and students of Junior High School.

Subjects of this research were expert of anatomy study and human physiology, expert of learning technology, students of class IX Junior High School, and science teacher at class IX SMP Laboratorium, Ganesha University of Education.

The collected qualitative and quantitative data were analyzed descriptively by setting the data systematically, organizing data into category, conducting synthesis, arranging certain pattern, and drawing conclusion.

### III. RESEARCH FINDING AND DISCUSSION

From the result of syllabus analysis, in-depth interview, and questionnaires, so the developed problem based adolescent reproduction health module emphasized on main material of human reproduction system. Problem based adolescent reproduction health module was started with adolescent reproduction health problem taken from printed media, internet, result of observation around the students, problem experienced by the students, or result of simulation.

Structure of developed problem based adolescent reproduction health module consisted of some components such as cover, introduction, material (content), self-assessment, and references. Cover related to clarity, attractiveness, and conformity of cover with module material. Assessment at introduction, the evaluated components included: (a) attractiveness and conformity of problem with the discussed material, (b) clarity, operational, measurability, demand, and specification from the purpose. In material part, the evaluated components were: (a) conformity of content with problem and purpose, (b) organization and the depth/coverage of material, (c) the benefits for students, (d) the role in motivating students to learn, (e) attractiveness of content and language clarity, and (f) conformity, quality, attractiveness, and picture quality. In self-assessment, the evaluated components included; (a) conformity of self-assessment with the purpose, and (b) instruction of working. Meanwhile, components of references included writing consistency, upgrade, and layout. Result of the evaluation and try out is showed by Table 1. From the conducted evaluation, the developed problem based adolescent reproduction health module was declared feasible (mean score 3.87) as a learning source for Junior High School student about adolescent reproduction health. Result of the learning achievement in learning process by using problem based adolescent reproduction health module can be seen in Table 2.

TABLE 1. RECAPITULATION OF LEARNING ACHIEVEMENT OF PROBLEM BASED ADOLESCENT REPRODUCTION HEALTH MODULE

Module Component	Evaluation by:			
	Content Expert	Learning Technology Expert	Teacher	Student
Cover	4,00	4,00	3,90	3,45
Introduction	3,89	3,89	3,96	3,60
Material	3,92	3,75	3,94	3,87
Self-assessment	4,00	3,67	4,00	4,00
References	4,00	3,67	4,00	3,80
Mean	3,94	3,81	3,96	3,76
Score	3,87			

TABLE 2. LEARNING ACHIEVEMENT WITH PROBLEM BASED ADOLESCENT REPRODUCTION HEALTH MODULE

Learning Achievement	Mean	SD	Category
Thinking Skill	7,8	0,54	Good
Communication Skill	7,9	0,43	Good
Problem Solving Skill			
	7,9	0,61	Good

SD= Standard Deviation

The gained mean score as stated on Table 2 is for thinking skill was 7.8, communication skill was 7.9, and problem solving skill was 7.9. The three life skills in adolescent reproduction health were categorized as good.

Age of the student class IX Junior High School approximately between 14-15 years old. Based on Piaget' theory of cognitive development, Junior High School students have reached formal operational stage. It means that based on their cognitive development, Junior High School students can be taught by using problem solving teaching strategy. Santrock described that in formal operational stage, these students have ability to think logically about abstract concept, systematically and scientifically in solving a problem [14]. In this study, the

students were given problem related to adolescent reproduction health, and they were taught to solve the problem and found solution of the problem.

Problem based adolescent reproduction health module was designed based on need analysis so it was appropriate with Science Subject syllabus in Junior High School, teacher' needs, and student's needs, as well as it was deserved to be used as learning sources in teaching Adolescent Reproduction Health Education at Junior High School. By using problem based adolescent reproduction health module as learning source, the learning process became more innovative, contextual, interesting, and impressive for the students, so it motivated the students to learn.

As proposed by Prastowo, learning material that is designed based on students' needs, so the instructional would be more interesting, impressive, fun, so it would trigger effective learning process and improving learning output [15]. It is in line with the research finding of Adnyana and Citrawathi [16], Citrawathi, et al [17], [18], and Adnyana, et al [19], which found that a designed learning material based on the needs and taught by using

appropriate teaching strategy could improve process and students' learning achievement. Nuroso and Siswanto stated that the success of learning process is determined by the appropriateness of student's level thinking with the teaching material. Therefore, learning material development should be suited with student's cognitive development [20].

Based on some of the research, it can be concluded that adolescents have low understanding about adolescent reproduction health, and they need information of adolescent reproduction health [1], [2], [21], [22]. From previous research, it was found that adolescent reproduction health education could be integrated into Science Subject. Integration of adolescent reproduction health education with appropriate teaching strategy is the appropriate way to do in fulfilling one of the reproduction rights of Junior High School students as an adolescent that is information about adolescent reproduction health [2], [23], and [24]. As stated by [5] and [6], giving information about adolescent reproduction health should be done as soon as possible by school to improve students' understanding about adolescent reproduction health.

Sugiyanto and Suharyo described that one of information sources of students about adolescent reproduction health is teacher [8], [9]. The same opinion was proposed by [24] who stated that student wanted to have adolescent reproduction health from their teacher at school. Giving information about adolescent reproduction health through adolescent reproduction health education is conducted by using problem based teaching strategy to teach students about life skills related to adolescent reproduction health.

Based on the above explanation, problem based teaching strategy was appropriate with student's development and could accommodate learning needs of Junior High School students about adolescent reproduction health, so the process and students' learning achievement could be improved. Problem based adolescent reproduction health module was stated feasible to be used as learning source (score 3.87) to give adolescent reproduction health education at Junior High School. Integration of adolescent reproduction health education and Science Subject with problem based adolescent reproduction health module showed the thinking skill, interpersonal communication skill, and problem solving skill were categorized as good.

In adolescent reproduction health education with problem based teaching strategy, the students learnt in group with heterogeneous group member. Heterogeneous group was formed based on academic ability and gender. The students in group simultaneously learnt as active participant as well as observer. Students were given a chance to collaborate to discuss problem of adolescent reproduction health. Collaborative skill is one of important skills that should be acquired by adolescents in order to be able to cooperate and exist in global world [25]. When discussing, students were trained how to communicate well.

Problem based teaching strategy triggers the students to actively participate in solving problem of adolescent

reproduction health around their life. Besides that, problem based teaching strategy triggers conducive surrounding and harmonious relation among the students and student with teacher. Conducive and harmonious learning condition could develop respect, trust, and responsibility [26], [27].

In discussing given real problem, students are trained skills of problem solving, making decision, and giving solution from the reviewed problem. In order to make right decision, there should be thinking skill and interpersonal communication skill.

[28], [29] proposed that problem based learning uses problem as a focus to develop skills of problem solving, collaboration, communication, and learning material. Problem solving training improves internalization in students' learning process so there will be a meaning upon their object of learning. Problem based learning triggers the students to develop thinking and optimize thinking ability, so learning achievement could be improved. So, adolescent reproduction health education with problem based learning did not only improve students' knowledge about adolescent reproduction health, but also trained student's life skills in the field of adolescent reproduction health. The skills, that were trained through problem based learning, were problem solving and making decision skill, thinking skill, interpersonal communication skill. Knowledge and skills owned by the adolescents would decrease the risk of adolescent to have reproduction health issue, especially the *Triad KRR*.

#### IV. CONCLUSION

From this research, it can be concluded that: (1) problem based adolescent reproduction health module could be used to train and teach life skills in the field of adolescent reproduction health; (2) score of the life skills of the students were categorized as good, including thinking skill 7.8, communication skill 7.9, and problem solving skill 7.

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