

Adolescent Health Education in Don Bosco Frater Junior High School Students Tomohon City

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Abstract

Adolescents frequently encounter several nutrition-related issues, such as anemia, obesity, and chronic energy deficiency, among others. During the developmental phase of adolescence, individuals need guidance as well as encouragement from adult figures. There is a need for guidance in order to enhance individuals' self-awareness and awareness towards regularly arising concerns. Health education is an effective approach for enhancing individuals' understanding and abilities to transform their health-related behaviors through the process of acquiring knowledge. The purpose of this activity is to increase awareness of adolescent health education in Frater Don Bosco Junior High School. The methods this activity conducts interactive seminars and to assess the students' comprehension, the team conducts pre and post-tests utilizing the Web Tool platform to develop interactive quizzes. The result findings this activity can involve participants actively and indicated a significant increase of 20.64% in participants' knowledge. The suggested recommendation for promoting enhanced understanding of adolescent health among students is to offer training programs to teachers and establish peer groups in schools.

Keywords: Health; education; students; anemia; school

INTRODUCTION

Adolescence is a phase of transition from childhood to adulthood that is defined by physical, psychological, and social changes. Physical changes include a fast increase in height, breast and Adam's apple development, voice alterations, and so forth. Adolescents' psychological changes cause them to feel inferior quickly, to prefer to be alone, to experience rapid emotional shifts, and to like issues. Meanwhile, social change is primarily focused on reactions to other individuals, such as adolescents desire to spend time with their peers (Gainau, 2015). Due to these changes in eating patterns, adolescents are more vulnerable to eating disorders. According to research, whereas adolescents perceive the significance of breakfast to be 89%, their breakfast habit is just 60%. This is due to haste, a lack of parental supervision, and a negative body image. Anemia, chronic fatigue, and psychological eating disorders (anorexia, bulimia) can result from adolescent girls' tendency to avoid breakfast and consume an unhealthy diet due to their fear of appearing overweight. Frequently, young women skip two meals and decide to snack. According to additional research, 17–69% of adolescents and adults do not consume breakfast (Niswah et al., 2014).

Adolescents frequently encounter several nutrition-related issues, such as anemia, obesity, and chronic energy deficiency among others. Adolescent girls are particularly susceptible to anemia due to their ongoing development and the onset of menstruation. The stage of adolescence offers a valuable chance to disrupt the cycle of intergenerational malnutrition (Gebreyesus et al., 2019). The condition of anemia has a significant impact on an individual's level of productivity. Iron insufficiency in adolescents is associated with symptoms such as apathy, susceptibility, and impaired concentration and learning abilities. Anemia is a nutritional issue that has a detrimental impact on an individual's cognitive abilities and impairs their job capacity (Almatsier, 2009). Anemia can lead to cognitive impairment, including decreased cognitive function and a lower ability to concentrate. This can result in diminished academic performance, particularly in school-age children who may experience challenges maintaining focus and learning well. Another adverse consequence is a compromised immune system, rendering the body more vulnerable to infections (Vera Dwi Apriani et al., 2022).

During the developmental phase of adolescence, individuals need guidance as well as encouragement from adult figures, particularly parents and teachers, as they navigate the path towards maturity and independence. There is a need for guidance in order to enhance individuals' self-awareness and awareness towards regularly arising concerns, such as adolescents health. Health education is an effective approach for enhancing individuals' understanding and abilities to transform their health-related behaviors through the process of acquiring knowledge. Interactive talks allow for conversations to go both ways. The efficacy of this communication depends on not only the content presented but also the rapport established between the participants and the participants (Gainau, 2015). Empirical evidence suggests that adolescents have a preference for educational experiences that are participatory and enjoyable, often requiring direct engagement with experts in the field (Lestari & Wulansari, 2018). Based on this background, a community service program was implemented at Frater Don Bosco Junior High School, focusing on increasing awareness of adolescent health education.

METHOD

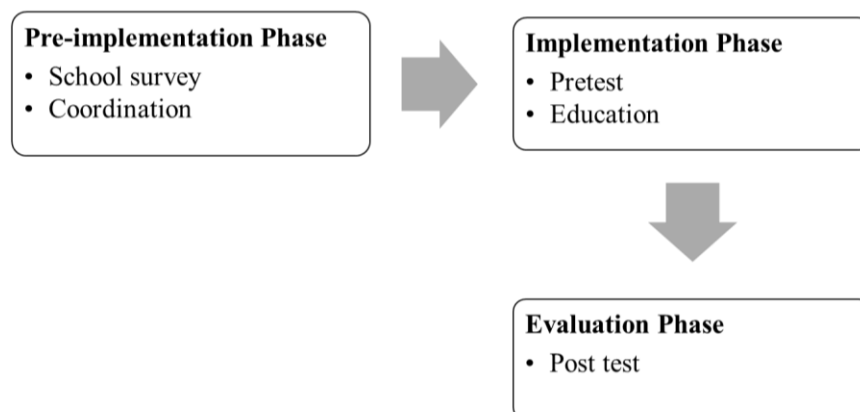


Figure 1. Method

Pre-implementation Phase

This was a preliminary survey in the selection of schools, following which authorisation was granted to the school, coordination with the team of instructors engaged in the activities, and topic identification.

Implementation Phase

- The team conducts interactive seminars on adolescent health education. On July 3, 2023, from 10:00 a.m. to 12:00 p.m. WITA, the event will take place at the Frater Don Bosco Junior School Hall
- The topics consist of adolescent health include: adolescent perception, adolescent development (physical, social, and psychological), adolescent health disorders, prevention of adolescents health disorders, and anthropometric measurement. Following the presentation of the topic, an participants discussion was held.

Table 1. Indicator of Implementation Program

Topic	Indicator
1. Definition of Adolescent	1. Participants
2. Adolescent development	comprehension changes
3. Adolescent health disorders	during pretests and posttests
4. Prevention of adolescent health disorders	2. Involvement rate of participants
5. Anthropometric measurement of the upper arm circumference (LiLA)	3. Practice upper-arm circumference measuring

Evaluation Phase

In order to assess the students' comprehension of the topic, the team conducts pre and post-tests utilizing the Web Tool platform to develop interactive quizzes.

RESULTS

Depending on the phases of community service completed by the team, the first step is to choose the school. Frater Don Bosco's junior high school in Tomohon City was selected because it had dormitories inhabited by both new and returning students from the city and surrounding areas. There were a total of 31 participants. The session started with ice-breaking activities and pretests aimed at assessing participants' first understanding of adolescent health.

Table 2. Characteristic of participants

Sex	Age (year)			Total
	11	12	13	
Boy	9	6	3	18
Girl	7	6	0	13
Total	16	12	3	31

The first topic is adolescents' physical, psychological, and social development. This topic is assigned because students who entering high school for the first time are undergoing the transition from childhood to early adolescence. During early adolescence, many changes can cause distress, including the development of breasts in adolescent girls and the development of facial hair in adolescent boys. Psychologically, a child who treads on an adolescent has a sense of humiliation, necessitating the provision of accurate information. Adolescents tend to associate socially with groups of peers who share a common objective.

The second topic is regarding adolescents health problems such as anemia, obesity, and chronic energy deficiency. Despite the fact that these issues are relatively common, it remain unfamiliar to adolescents. Following the topic discussion, the speaker demonstrates how to measure the upper arm circle to detect any signs of chronic energy deficiency in adolescents. In adolescents, the usual circumference of the upper arm is 23.5 cm. If measures fall below the normal range, adolescents should be provided further instruction in controlling their eating habits.

During the topic submission process, the relative priority of participants was observed through the questioning patterns exhibited by both girls and boys. Following the delivery of the two topics, the team proceeded to conduct an assessment in order to evaluate the level to that their knowledge had been enhanced by the utilization of a web-based tool. The Quizzi online tool is utilized because of its perceived simplicity and aesthetic appeal, particularly among adolescent users. The evaluation findings indicated a significant increase of 20.64% in participants' knowledge.

Table 3. Participant Evaluation Results

Participants	Pretest	Posttest
JSG	80	90
HTC	80	80
CP	60	80
QS	70	80
GM	60	90
AR	60	100
DK	60	90
IR	80	100
AO	90	90
RR	60	100
FS	60	80
TT	90	90
GT	90	100

Participants	Pretest	Posttest
GC	60	90
FB	60	80
FS	80	90
BP	90	90
CP	80	100
TM	60	80
CR	80	90
AH	60	90
OT	80	40
WM	70	80
GR	60	90
PL	60	70
JA	50	60
JP	30	100
FO	60	100
RR	40	90
LA	60	100
BV	50	100

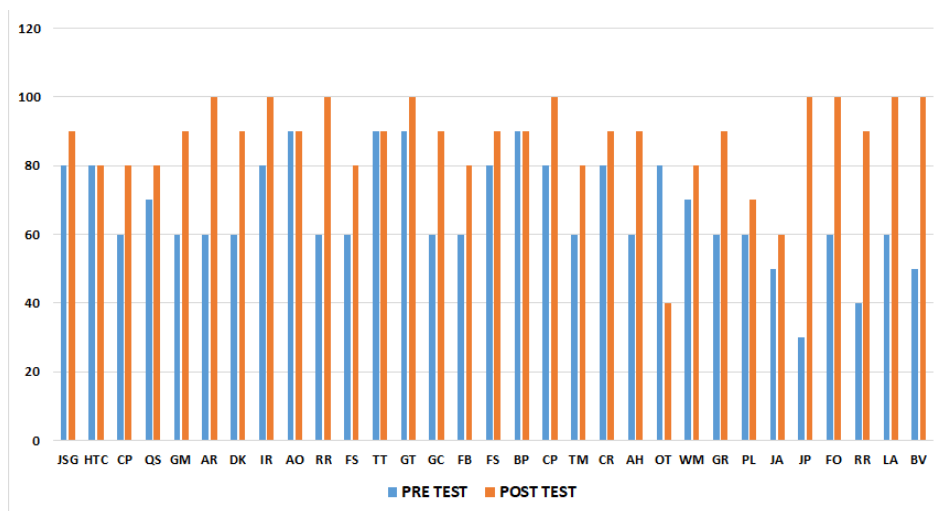


Figure 2. Graphic knowledge of participants before and after receiving education

DISCUSSION

Adolescents have different kinds of health challenges. The transition from childhood to adulthood involves physical development, hormonal changes, and psychological instability. These changes can make them vulnerable to challenging behaviors, such as unhealthy diet and reproductive issues. Health education provides a platform for addressing these obstacles and educating adolescents with the knowledge and skills required to make informed decisions.

Our findings indicate that school-based health education activities positively affect adolescents' health knowledge. Based on Figure 1, it can be observed that there is an increase in participants' knowledge before and after receiving education of approximately 20,64%. Several community engagement activities employing school-based health education strategies have produced comparable results. Participation in the educational program increased adolescents' knowledge of anemia by 40% (Komara Sari et al., 2020). Nutrition education program increased the average knowledge of high school pupils from 5.061.83 prior to the intervention to 8.221.2 after the intervention (Irawan et al., 2020). The combined teaching techniques with audiovisual aides and obtained positive results, with respondents' average knowledge increasing by 15.8 points for the lecture method and 22.3 points for the audiovisual method (Widodo et al., 2023). According the results of education programs, after obtaining education, participants' knowledge increased from 40%- 65%. When health education programs employ digital interventions, particularly web-based services, platforms accompanied by text messages, and activities, significant behavioral changes in the target population can be attained (Siti Mutia Ulfa & Rinna Azrida, 2018).

Health education is a primary and effective method of promoting behavioral changes and healthful practices. Through a variety of activities, it aims to increase public health awareness and provide techniques for enhancing health (World Health Organization, 2019). Health education in schools involves communication activities that incorporate the teaching and learning of knowledge, beliefs, attitudes, values, competencies, and skills. It frequently concentrates on specific health topics or may involve a more global examination of our health. WHO defines educational activities as successful if they result in positive changes in participants' knowledge, attitudes, and behaviors. School-based health education helps adolescents acquire functional health knowledge and reinforces the attitudes, beliefs, and practical skills required to adopt and maintain healthy behaviors throughout their lives. In addition, a systematic review has demonstrated the positive outcomes associated with student participation in school health education. . (Griebler et al., 2017). These outcomes include elevated levels of contentment and motivation, cultivation of positive attitudes, personal growth, development of competencies and knowledge, health-related benefits, and enhanced interpersonal interactions and social relationships. The other community services showed there is an increase in the knowledge of parents and teachers before being given education and after being given education which can be seen from the pre and post test score (Shinta Pondagitan & Agustina, 2022). This information is consistent with the results of our program, indicating that adolescents who participated in school health education activities demonstrated an increase in knowledge, particularly in the areas of adolescent health and nutrition.

CONCLUSIONS AND RECOMMENDATIONS

The awareness of health issues resulting from malnutrition among newly enrolled students remains inadequate. Consequently, interactive seminars have emerged as a useful method of disseminating health-related information and enhancing participants' understanding. Furthermore, the habit of measuring the upper arm circumference also contributes to an enhanced understanding of the methodology employed in assessing nutritional status.

The suggested recommendation for promoting enhanced understanding of adolescent health among students is to offer training programs to teachers and establish peer groups in schools that serve as centers of information related to adolescence.

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APPENDIX



Figure 3. Icebreak



Figure 4. The speaker delivered the first topic



Figure 5. The speaker delivered the second topic



Figure 6. Demonstrates how to measure the upper arm circle to detect any signs of chronic energy deficiency in adolescents

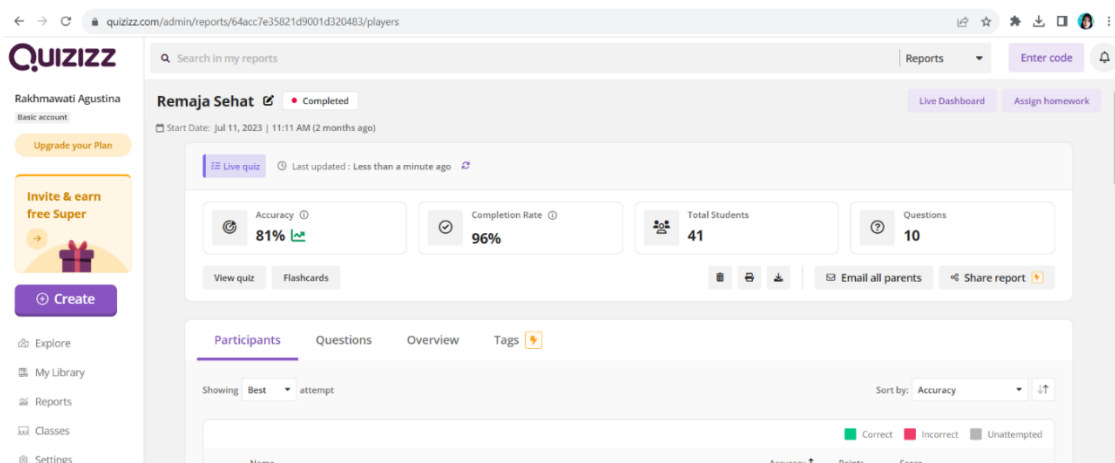


Figure 7. Post test using web tool