WE MOTION (MOVE AND NUTRITION) : A CREATIVE NUTRITION EDUCATION TO IMPROVE THE PHYSICAL ACTIVITY AND APPLICATION OF BALANCED NUTRITION IN ADOLESCENTS DURING PANDEMIC

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ABSTRACT

Adolescence is a phase of significant growth. This phase is also a form of transition to adulthood so that it must be properly prepared for its nutrition and health for optimal growth. The forms of nutritional problems that occur in adolescents are stunting, malnutrition and overweight/obesity. One of the factors causing nutritional problems that occur in adolescents such as low knowledge about nutrition and physical activity. The purpose of the research is to increase the knowledge and awareness of adolescents about the importance of physical activity and the application of balanced nutrition. The research sample was 82 students of SMPIT Nurul Fajri in grades 7c and 7d. We motion contains interactive online educational activities, games, and the provision of interesting pocket books in the form of e-books that can be accessed at any time. The results showed that knowledge of physical activity in the good knowledge category continued to increase, namely at the pre-test 29%, mid-test 48% and post-test 78%. In the knowledge of balanced nutrition, it also continued to increase in the good knowledge category at 32% pre-test, 43% mid-test and 73% post-test. And in knowledge about obesity, it increased in both categories, namely 66% pre-test, 40% mid-test and 72% post-test. The conclusion is that the We motion (Move and Nutrition) program: Movement to Familiarize Sports and the Application of Balanced Nutrition During the Pandemic Covid-19 can increase the knowledge of SMPIT Nurul Fajri students about balanced nutrition and physical activity.

Keywords: balanced nutrition, education, knowledge, physical activity

1. BACKGROUND

Adolescence is a transitional period in the span of human life that connects childhood and adulthood (Santrock, 2003). According to the Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014, adolescents are residents with an age range of 10-18 years, this age group makes up about 20% of the total world population. The adolescent phase is a significant growth phase. In this period, physical growth occurs in adolescence which is earlier and faster than pre-adolescence (Teji et al, 2016). Adequate diet is very necessary in childhood and adolescence because it supports growth and development (Spear, 2002). The fulfillment of micronutrients, such as iron, calcium, zinc, and vitamin D is important to help growth. The nutritional and health status of girl adolescents is a reflection of the cumulative effect of physical growth, the onset of menarche and an increase in muscle mass, thus requiring adequate nutrition. The changes that occur during adolescence tend to cause various problems and changes in behavior in adolescent life and can lead to changes in healthy eating behavior or unhealthy eating behavior. The unhealty eating beaviour is hard to change (Siega-riz et al., 2010) it needs to understand the basic information about health especially nutrition to make appropriate decisions (Broucke, 2014) therefore, nutrition during adolescence contributes to maintaining health and optimal learing capacities (C-perez, 2003)

Indonesia is one of the countries affected by the outbreak Covid-19. During the pandemic Covid-19, many activities have become more limited. This can be one of the reasons it is difficult to find a motivation to do physical activity or sports during the pandemic Covid-19. Physical inactivity and sedentary lifestyle in adolescene are critical risk factor of chronic disease. To counteract any consequence of prolonged lockdown, the WHO encouraged all the people to be active and stay healthy at home (WHO, 2020). Sport is a physical activity that is planned, structured, repetitive, and has the aim of increasing or maintaining physical fitness (Garber et al, 2011). The regular physical activity at least 150 min/week can decrease risk factors for physical and mental disease (Pascoe, et al., 2020; Rhodes, et al., 2017; Warburton, et al., 2017).

Nutritional problems in Indonesia in adolescents, including stunting, obesity, and malnutrition. This needs to be a concern because malnutrition in adolescence can interfere with growth both physically and cognitively. The prevalence of central obesity at the age of 15 according to Riskesdas in 2018 was 31.0%, in addition there were 8.7% of adolescents aged 13-15 years and 8.1% of adolescents aged 16-18 years with thin and very thin conditions. These data represent the nutritional condition of adolescents in Indonesia that must be improved. School-based nutrition education should consider to improve nutritional status. Considering the nutrition education it is enough to feed information about food and nutrition to induce behavioural changes to healthy lifestyle (Scazzocchio et al., 2021) Therefore, the authors make a movement to get used to exercise and the application of balanced nutrition at home in adolescents.

1. METHOD

a. Preparation of the Program

Activities carried out for the preparation of the We motion program include discussion of ideas covering the concept of the program as well as discussing the target

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community, that is students of SMPIT Nurul Fajri. In addition, the creation of media that will be used during program implementation such as power points, e-books, daily journals and knowledge questionnaires regarding physical activity and balanced nutrition as well as questionnaires regarding preferences for theprogram We Motion.

b. Program Implementation

Implementation of the program consisted of 4 meetings held with the target community through online meeting Zoom, with details of the activities as follows:

1. First Meeting
   The first meeting was attended by students of SMPIT Nurul Fajri, teacher of the classes, all members of the PKM team and accompanying lecturers. This activity includes remarks by accompanying lecturers, initial data collection or pre-test by filling out knowledge questionnaires, followed by presentation of material on the role of Physical Activity during the Covid-19 pandemic by the team and an explanation of filling out the Daily Journal to monitor the physical activity or sports of each student.
2. Second Meeting
   PKM Program Implementation Activities at the second meeting included online education of Balanced Nutrition delivered by the team, second data collection mid-test by filling out knowledge questionnaires, and sports activities with students of SMPIT Nurul Fajri. The second meeting was attended by partners or SMPIT Nurul Fajri students and all team members.
3. Third Meeting
   The Program Implementation Activities at the third meeting included the presentation of material on the dangers of obesity delivered by the team and joint sports with students of SMPIT Nurul Fajri. The third meeting was attended by partners or SMPIT students Nurul Fajri and all team members.
4. Fourth Meeting
   PKM Program Implementation Activities at the fourth meeting include a review of material on balanced physical activity and nutrition delivered by the team, final data collection or post-test by filling out knowledge questionnaires, taking student satisfaction data with satisfaction questionnaires using google form, and closing activities by conveying impressions and messages from partner representatives and accompanying lecturers. The fourth meeting was attended by partners or SMPIT Nurul Fajri students, all team members, and accompanying lecturers.

c. Monitoring Evaluation

Monitoring is carried out to determine changes in knowledge about balanced nutrition and physical activity in students of SMPIT Nurul Fajri who are the program's target communities. By comparing the results of the percentage of correct answer data on the questionnaire from the initial data, mid-test, to the final test. Monitoring is carried out to review changes, evaluate overall data, and can conclude the results of this program.

d. Controling

This activity is carried out whether there are changes that occur regarding knowledge of balanced nutrition and physical activity which can be seen from the percentage of correct answers on the knowledge questionnaire. In addition, whether the students can apply it in everyday life.

e. Reporting

To obtain valid data from the information above, the team distributed questionnaires to students conducted before stage 1, at stage 2, and after stage 4. The questionnaire during these 3 stages aims to find out what changes have occurred to students regarding physical activity and balanced nutrition during the Covid-19 pandemic.

3. RESULTS AND DICUSSION

The benefits of the program for SMPIT Nurul Fajri are that it can help improve knowledge, attitudes, and nutritional practices, especially balanced nutrition, physical activity and exercise as well as obesity prevention so that it can help overcome nutritional problems, especially in adolescents.

1. Increased Knowledge

Education about balanced nutrition, physical activity and obesity can help improve knowledge, attitudes and practices of balanced nutrition and physical activity. In addition, education and physical activity practices together are expected to help improve the implementation of regular physical activity, especially for partners. Increased knowledge of SMPIT Nurul Fajri students are as follows:

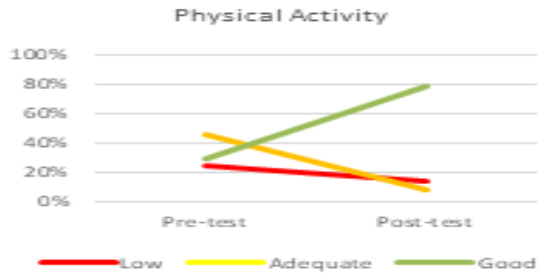

Figure 1. Results of Knowledge Questionnaire of Balanced Nutrition

Figure 2. Results of Knowledge Questionnaire of Physical Activity

Figure 3. Results of Questionnaire Knowledge of Obesity

Based on the results of the knowledge questionnaire, it can be concluded that there is an increase in knowledge about balanced nutrition, physical activity, and obesity. In knowledge of physical activity, the results of the good knowledge category data continued to increase, namely at the pre-test 29% and Post-test 78%. In the knowledge of balanced nutrition, it also continued to increase in the good category 32% at pre-test and 73% at post-test. And in knowledge about obesity, it increased in both categories such as 66% at pre-test and 72% at post-test. This increase in knowledge can be due to the compatibility of the pocket book and the material provided. The pocket book that is published is in the form of online, easy to access, contains simple topics, easy-to-understand, accompanied by pictures and is designed attractively for teenagers so that they are not easily bored when reading. In addition, the material is presented in simple language, easily understood by teenagers and does not contain too much words in the power point. Desy Eliana, et al, (2012) The senses used can determine how much information is absorbed, including if it involves the eyes, ears and is accompanied by discussions, exercises and the use of interesting materials, the information will be absorbed 90%.With this increase in knowledge, it is expected to improve attitudes and practices of balanced nutrition and regular physical activity among respondents, namely teenagers. According to Yuliati, et al, (2014) knowledge is one thing that is important to shape one's behavior. Because one can act according to knowledge which is beneficial to him. Practice or action is what someone will do in response to the stimulus from the knowledge gained.

2. Interest of the program

Based on the results of the program's favorite questionnaire, the data above can be seen that the interest of SMPIT Nurul Fajri students on the We motion program is 60% liked the program, 23.3% really liked the program, and 16.7% moderately liked the We Motion program.

Based on the results of the program's favorite questionnaire, it can be seen in the data above that SMPIT Nurul Fajri students agree that the program We motion can increase motivation for exercise and physical activity 53.3% agree, 40% strongly agree, and 6.7% moderately agree.

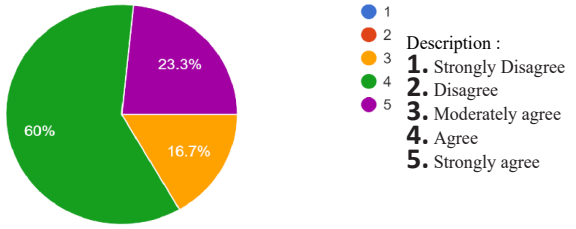

Figure 4. Interest of Respondents in the Program

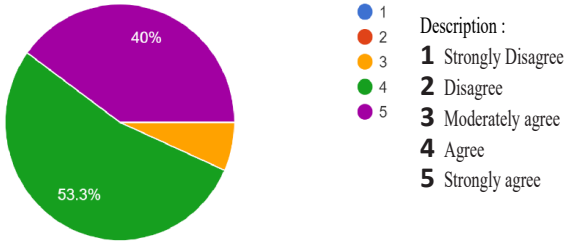

Figure 5. Respondents' Motivation to the Program

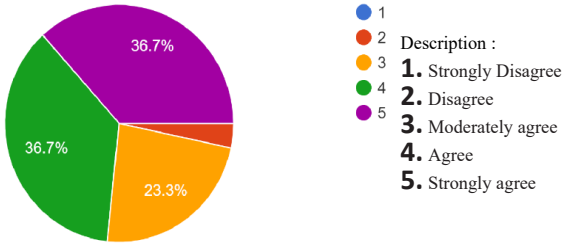

Figure 6. Program effectiveness

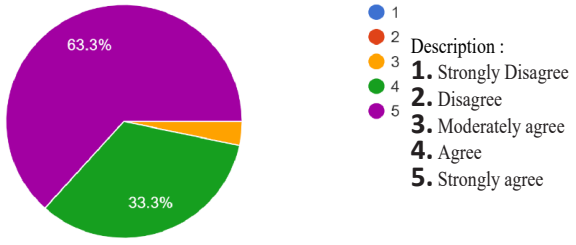

Figure 7. Program Benefit

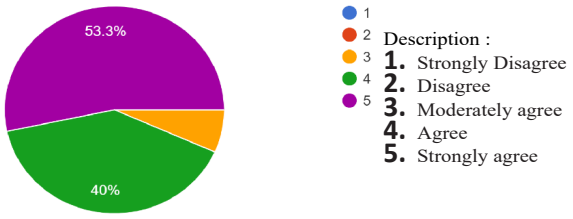

Figure 8. Increasing Knowledge

Based on the results of the program preference questionnaire, it can be seen that the data above shows that theprogram is We motion effective for increasing exercise and physical activity SMPIT Nurul Fajri students 36.7% of students strongly agree, 36.7% of students agree, 23.3% of students moderately agree, and 3.3% of students do not agree. Based on the results of the program preference questionnaire, it can be seen that the data above shows that the We motion program has increased knowledge about sports and activities physical examination of students of SMPIT Nurul Fajri 53.3% of students stated strongly

agree, 40% of students agreed, and 6.7% of students moderately agreed.Based on the results of the program preferences questionnaire, it can be seen in the data above that the We motion program is very useful for students of SMPIT Nurul Fajri so it has a percentage of 63.3% of students strongly agree, 33.3% of students agree, and 3.3% of students moderately agree.

CONCLUSION

After implementing the program in the target community, namely at SMPIT Nurul Fajri Jl. Telaga Asih Village No. 55B, Telaga Asih, West Cikarang District, Bekasi, West Java. Therefore, from this program the PKM team is expected to be able to help increase knowledge about physical activity, balanced nutrition, and the dangers of obesity, it can also help teenagers to be more active during the COVID-19 pandemic, after that the PKM team conducts introduction and training with a program entitled We motion (Move and Nutrition): Movement to get used to sports and the application of balanced nutrition during the Covid-19 for SMPIT Nurul Fajri students, the PKM team collected knowledge data for SMPIT Nurul Fajri students, namely initial data collection and general education and midline and midline data collection. filling out knowledge questionnaires and favorite questionnaires and making community service journals.

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