

Health quality improvement of Banglas Village through community service program

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ABSTRACT

As one of the strategies to improve the health of the community in Banglas Village, the students of 2023 Riau University community service activities in Banglas Village. The implementation method used early detection, counseling, training, and mentoring. The team participated in the monthly Posyandu program. This involved measuring height and weight and exploring children's developmental levels. The results of the counseling activities, the impact, causes, and prevention of stunting, as well as the importance of nutrition for mothers and children, have aroused the enthusiasm and curiosity of the mothers and the program "GeLAS Stunting: Gerakan Banglas Cegah Stunting" program was also welcomed by Posyandu officers and the community in Banglas village. Through the implementation of joint gymnastics, efforts to control hypertension were also made. PHBS also showed great enthusiasm, especially in implementing the 6-step handwashing practice. This is designed to ensure students understand and practice what it means to live a clean and healthy life. digital education that has been conducted at SMP IT PERMATA also provides knowledge about the negative impact of digital technology on physical and mental health, how to prevent negative impacts, and how to use technology properly.

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1. INTRODUCTION

Health is a condition of well-being of the body, soul, and social which enables everyone to be economically productive (Pasal 1 (1) UU No. 23 Tahun 1992 about Health). The importance of health for each individual is an investment that needs to be pursued, fought for, and improved in order to enjoy a healthy life and ultimately realize an optimal degree of public health. Currently, a major challenge in Indonesia is the decline in the quality of public health found in primary health care, namely hypertension. Based on the National Basic Health Research Survey (Riskesdas) in 2013 hypertension had a high prevalence, which amounted to 25.8% [1, 2].

Hypertension or high blood pressure is an increase in systolic blood pressure of more than 140 mmHg and diastolic blood pressure of more than 90 mmHg on two measurements with an interval of five minutes in a state of rest/calm. The impact of hypertension can lead to disturbances in the function of other organs until death. Another problem is stunting, which is at a high prevalence level. When

compared to the standards given by the World Health Organization (WHO), Indonesia still needs to reduce the prevalence of stunting. Stunting is a condition where toddlers experience a slowdown in their growth [3-5].

According to the Indonesian Toddler Nutrition Status Survey (SSGBI) last year, the prevalence of stunting in Indonesia still touched 24.4% of the WHO standard of under 20%. If equalized with the number of babies under five years (toddlers) is 5.33 million toddlers [6, 7]. This is caused by the lack of nutrition or food intake obtained by pregnant women, then there are also various problems related to the health of pregnant women, prospective pregnant women who are malnourished and anemic, and poor parenting patterns. Stunting can hinder children's physical and psychological development. Toddlers who experience stunting will experience an increased risk of degenerative diseases, including diabetes and hypertension in the future. Stunting also has an impact on reducing intellectual capacity and productivity rates [8-10].

Banglas Village is one of the villages in the Meranti Islands Regency. Banglas Village is one of the villages with a fairly high stunting rate. According to the Village Head, Mr. Abdul Zaid, this year there are 42 children affected by stunting in Banglas Village. This stunting rate needs to be emphasized with a village work program that leads to stunting eradication activities in posyandu and public health programs [11, 12].

The reduction and prevention of hypertension also needs to be done in Banglas Village. Efforts to control diseases including non-communicable diseases (NCDs) are through the involvement of all elements of society through community-based health efforts (UKBM) [13]. Control of hypertension is carried out based on the commitment of all elements of society by forming an Integrated Assistance Post (Posbindu) PTM. Posbindu PTM is a community empowerment effort that involves community participation in carrying out early detection activities and monitoring of major PTM risk factors which are carried out in an integrated, routine, and periodic manner [13].

Along with this, the 2023 Riau University Integrated KKN students carried out activities that synergized with the village program. The service team collaborated to help organize posyandu activities for the elderly, adolescents, and posbindu and provide free blood pressure tests and blood sugar checks for the Banglas village community. The 2023 Riau University Integrated KKN students realize their role as future drivers who must be present in the community regarding stunting prevention by presenting innovations related to stunting prevention so that Indonesia's goal of a Stunting-Free Golden Generation 2045 can be achieved [14, 15].

Community service activities are also carried out in order to increase community literacy about the impact and prevention of hypertension in Banglas Village. In line with the socialization of stunting and hypertension to the community, insights and awareness for clean and healthy living are also needed. Stunting prevention is not only about improving nutrition but also about the environment and developing a healthy lifestyle from an early age. A fundamentally unhealthy environment, unclean water, unhealthy lifestyles, and others can also interfere with child nutrition and health [16-18].

The implementation of Clean and Healthy Living Behavior (PHBS) is an important program to be promoted so that awareness arises in families, groups, or communities to help themselves independently and play an active role in realizing public health [19]. As stated in the PHBS indicators, washing hands using running water and soap, using clean water facilities, not smoking in the school environment, exercising regularly, eradicating larvae to minimize mosquitoes, measuring body weight and height, disposing of garbage in its place, and consuming healthy food, are preventive programs [20]. Based on this, the service team held a PHBS socialization at SDN 14 Banglas Village to provide a transfer of habits that will become an instillation in themselves that clean and healthy living behavior needs to be done.

In order to improve the overall health quality of the Banglas village community, gymnastics was carried out with students of SDN 14 Banglas Village, PKK mothers, and ODGJ. The mechanism of increasing or decreasing immunity during physical exercise can provide positive benefits for health in the long term, this is related to the body's defense against disease infection [21]. With gymnastics, it is hoped that the residents' immunity will increase, besides exercising general gymnastics, the service team provides education related to how to exercise properly and actually according to frequency.

Counseling on digital education was also conducted for students of SMP IT PERMATA to prevent negative impacts on children's mental and physical health. The purpose of this service activity is to optimize education so that it is expected to increase community knowledge about the factors that

cause stunting and its prevention, the dangers of hypertension, educate students about the impact of digital on health, habituation of PHBS and by doing gymnastic activities can provide good benefits for the human body and is one way we maintain immune power to stay strong and avoid various diseases. Therefore, the 2023 Riau University Integrated KKN Students compiled this journal as education and more knowledge related to stunting and innovation in its prevention to emphasize the reduction in stunting and hypertension rates and other service activities to improve public health in Banglas Village. Through this activity, it is hoped that there will be an increase in the insight and knowledge of readers and the community, especially Banglas Village.

2. IMPLEMENTATION METHOD

The program to improve the quality of health for the community in Banglas Village carried out by Integrated KKN Students of Riau University 2023 uses early detection, counseling, training, and mentoring methods. To find out the condition of children in Banglas Village, KKN students participate in the posyandu program held every month, which measures height, and weight, and explores the level of child development. Furthermore, students of the Integrated KKN Riau University 2023 conducted counseling related to stunting aimed at parents of early childhood at the Banglas Village Toddler Posyandu and the Bestari Posyandu in Dusun IV. This counseling was followed by the declaration and distribution of a movement poster with the theme "GeLas Stunting: Banglas Movement to Prevent Stunting". The hope is to increase understanding of the impact, causes, and prevention of stunting, as well as the importance of nutrition.

Another health improvement program is to participate in the Posbindu program. In addition to measuring height and weight, waist circumference, blood pressure, and blood sugar were also measured. In this activity, the 2023 Riau University Integrated KKN students also inserted a little health education so that the community could improve or be consistent with a healthy lifestyle.

Based on data from blood pressure measurements that have been taken, the hypertension rate in Banglas Village is quite high. To address this, Dr. Suyanto, MPH, Ph.D., who is a lecturer from the Faculty of Medicine at Riau University as well as the Field Supervisor of KKN Bangun Kampung Riau University 2023, held a hypertension counseling event, at the Banglas Village Office. The 2023 Riau University Integrated KKN students took part in the event by modeling the use of a digital blood pressure device and taking free blood pressure measurements.

In controlling the incidence of hypertension in Banglas Village, the 2023 Riau University Integrated KKN students conducted antihypertensive exercise training methods for villagers and PKK mothers every Sunday morning. Training methods are also carried out to increase understanding and awareness of clean and healthy living behavior (PHBS). This activity was carried out at SD Negeri 14 Banglas Village which began with morning gymnastics, introduction and education of PHBS, and followed by hand washing training according to WHO standards using movements and songs. For the success of PHBS at SD Negeri 14 Banglas Village, KKN students distributed free hand-washing soap and accompanied students directly in realizing the practice of washing hands using running water.

At SMP IT PERMATA, the 2023 Riau University Integrated KKN students conducted their health improvement program through counseling related to digital education. This counseling uses a descriptive method, starting with material presentation and continuing with discussion. It is intended for students to know the negative impact of digital technology on physical and mental health, how to prevent these negative impacts, and how to use technology properly so as to get good things too.

3. RESULTS AND TARGET ACHIEVEMENT

The 2023 Riau University Integrated KKN students conducted community service to improve the quality of health of the Banglas Village community by contributing to the Elderly Posyandu activities at the Village Office, Posyandu Balita in Dusun I, Posyandu Balita in Dusun III, Posyandu Balita in Dusun II, Posbindu in Dusun II, and Posyandu Balita at PAUD Bestari Dusun IV.

During the toddler posyandu activity, students of the University Integrated KKN Riau 2023 took part in measuring children's weight and height, recording information on mothers and babies, exploring child development, distributing food to children, and conducting counseling related to stunting. In this counseling activity, there was great enthusiasm and curiosity from the mothers and posyandu cadres to learn about the impact, causes, and prevention of stunting, as well as the

importance of nutrition for mothers and children. In addition to counseling, the 2023 Riau University Integrated KKN students also launched the "GeLas Stunting: Banglas Movement to Prevent Stunting" by distributing posters to every posyandu in Banglas Village. Of course, this movement was welcomed both by posyandu cadres and the community in Banglas Village. In Posbindu and Posyandu for the Elderly, the students also contributed to the measurement of height and weight, plus the measurement of waist circumference and blood pressure, as well as checking blood sugar levels. KKN students also provide brief education on healthy lifestyles to every community member who is enthusiastic about their health. This education was also welcomed by the posbindu and posyandu elderly cadres through healthy living implementation plans, one of which is by doing gymnastics together every Sunday morning.

In addition to posyandu and posbindu activities, the 2023 Riau University Integrated KKN students also contributed to hypertension counseling activities organized by Dr. Suyanto, MPH, Ph.D. and his mentoring students, namely KKN Bangun Kampung Riau University 2023 which aims to address the high level of hypertension in Banglas Village. The 2023 Riau University Integrated KKN students also took part by becoming a model to educate the community in using digital blood pressure devices and conducting early detection of hypertension through blood pressure measurement for the community who attended this counseling activity.

The real step of the 2023 Riau University Integrated KKN students in efforts to control hypertension is by realizing joint gymnastics every Sunday morning and becoming an instructor of antihypertensive gymnastics. This gymnastic activity went smoothly and certainly improved the health, physical fitness, and togetherness of the 2023 Riau University Integrated KKN students with Banglas Village residents.

The next health quality improvement program is the cultivation of a clean and healthy lifestyle (PHBS) from an early age. This work program was applied to students of SD Negeri Desa Banglas. The methods used were PHBS education and 6-step hand washing training using movements and songs. The results of the education showed that SD Negeri 14 Banglas Village was in a good category, where every time the speaker from the 2023 Riau University Integrated KKN students asked questions related to the material that had been delivered, the students of SD Negeri 14 Banglas Village were very enthusiastic in answering questions and could answer each question well.

When the 2023 Riau University Integrated KKN students came back to continue PHBS education and distribute free soap, the students of SD Negeri 14 Banglas Village still showed high enthusiasm, especially in implementing the 6-step hand washing practice. Thus, it is expected that students should realize the importance of and continue to apply clean and healthy living behaviors. The school is also expected to continue to improve the culture of clean and healthy living so that the health of its students also continues to improve.

Not only elementary schools, the 2023 Riau University Integrated KKN students also conducted a health improvement program at the junior high school level. However, the theme raised was digital education with the aim of preventing the negative impact of technology on children's physical and mental health. This activity was carried out at PERMATA IT Junior High School on August 4, 2023. The series of activities began with the opening, continued with the presentation of material with descriptive methods, and discussions, and ended with closing by the 2023 Riau University Integrated KKN students. This activity received attention from all students of SMP IT PERMATA because of their high curiosity about the negative impact of digital technology on physical and mental health, how to prevent these negative impacts, and how to utilize technology that has a positive impact. Their liveliness and enthusiasm were also very evident in the discussion sessions.

Thus, all the processes of implementing the 2023 Riau University Integrated KKN student work program to improve the quality of public health in Banglas Village have run smoothly and the target achievement, both from the toddler posyandu program, elderly posyandu, posbindu, stunting counseling; hypertension; PHBS; and digital education, as well as joint gymnastics have been in accordance with the targets carried out.

4. CONCLUSION

Community service activities in the health sector in collaboration with the implementation of the 2023 Riau University Integrated KKN work program through early detection methods, counseling,

training, and mentoring to the community, as well as students in primary and secondary schools by providing insight into the importance of maintaining blood pressure, nutritional needs of toddlers, clean and healthy living behavior, and the adverse effects of using digital technology. Through these activities, the community and local school students became enthusiastic about carrying out the recommendations of the work program that had been implemented.

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