



Evaluation of School Health Unit and Nutrition Education Implementation of Yogyakarta High Schools During COVID-19 Pandemic

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Abstract. Background: School health unit (SHU) play an important role in increasing access to health services of students. However, there are still obstacles in implementing school health and nutrition programs during COVID-19. Objective: This study aims to evaluate the implementation of SHU and nutrition education program of High School in Yogyakarta. Methods: This study was descriptive observational research design. Four teachers who were the coordinator of SHU involved as informants from each school. All of data were collected by interview based on a questionnaire. SHU questionnaire contained of eight components. The percentages of SHU development and implementation were based on the number of questions that meet the maximum score. Results: The findings showed that most schools were ready and had the provisions to accelerate the development and implementation of SHU. Several components appeared to be lacking were the process of facilitating local wisdom, partnerships and community participation, the role of school principals, teachers, parents and the community, and quantity and quality of trained SHU personnel. The school curriculum which contains nutritional material is in the subjects of Biology, Entrepreneurship, Basic Culinary, and Food Knowledge. The most frequent nutrition educators in schools were from public health services, the methods were classic lecture, and the media were slide presentation and poster/graphic. Conclusion: It was necessary to increase the quality of the resources in the SHU management system. Cross-sector collaboration was needed to foster and support the implementation of the SHU program.

Keywords: management · school health unit · nutrition · education · adolescents

1 Introduction

School health unit (SHU) play an important role in increasing access to health services, especially for children (students), families, and the community in general. Health services in schools that are implemented by various stakeholders have a positive impact

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both in the short and long term. These positive impacts consist of four categories, namely finance, physical health (including medical, vision, and dental), mental health, and education. However, the impact of education still requires further attention, especially on the effectiveness of the results and the methods applied [1]. Students who use services at school health unit are satisfied. They experience improved health, more physical activity, and consume more healthy foods [2]. School health and nutrition programs are considered to have a positive impact on students, schools and communities. The impact is improving the health of students and the school environment as well as increasing public awareness. However, there are still obstacles in implementing school health and nutrition programs, including lack of coordination between stakeholders, lack of resources, limited training opportunities, and doubts about the sustainability of the program [3].

About 80% of children in Indonesia whose age range is 6–18 years are school children [4]. Education on balanced nutrition can be implemented with a school approach, as children spend most of the day doing activities at school. Programs on balanced school-based nutrition include weight monitoring, socialization of balanced nutrition, nutrition education, nutrition and health curricula, access to healthy food / drinks (healthy canteens / school feeding), initiation of food supplies, sanitation facilities, and student physical activity [5, 6]. Students are the strategic targets of health programs, because they are large in number and easily accessible [4].

The proportion of chronic energy deficiency in non-pregnant women of reproductive age (aged 15–19 years) in Indonesia is 36, 3%. This prevalence is greatest when compared with other age groups of fertile women [7]. Anemia cases at the age of 5–14 years in Indonesia are around 26% [8]. Although as many as 76% of young women get blood booster supplements, and 81% is provided by school. However, it is unfortunate that the level of supplement consumption is still low. In addition, only 50% of Indonesia's population at the age of ≥ 10 years can wash their hands properly. The achievement of the clean and healthy behavior program or water, sanitation, and hygiene (WASH) program at the junior and senior high school level is 61% and 48% [9].

Health risk factors at the age of 10–14 years include poor eating habit, lack of dental healthcare, lack of physical activity, and having parents smoking. Moreover other health risk factors include active smoking, alcohol consumption, drug consumption, forced sexual intercourse, and sexual intercourse [10]. Therefore, it is necessary to implement WASH behavior and provision of healthy meals in schools, as well as improve life skills education, practice of worship, reproductive health education, no smoking areas, drugs, and violence. Life skill education in schools is considered insufficient, such as how to avoid sexual harassment and how to prevent HIV/AIDS [11].

As many as 63% of Puskesmas (Public Health Center) in Yogyakarta Province organizes youth health activities [7]. Activities undertaken by the provincial government of Yogyakarta Province in fostering adolescent reproductive health, including Adolescent Care Health Services in Puskesmas which is integrated with the School Health Unit (SHU) program, youth health campaigns in schools, youth health jamboree with a healthy youth ambassador contest as well as education and consultation as well as socialization of adolescent reproductive health programs through social media (website) [12]. The achievement of the results of implementing SHU varies greatly from one province to another, even between districts cities within one province. For health coverage at the

primary school level, for example, in 2013 the national achievement was only 73.91%, and the distribution between provinces was very uneven, ranging between 13.68 - 100%. The results of the evaluation demonstrated that there were still obstacles to the human resources, management and facilities of SHU [4]. The nutrition education program in schools is aimed at increasing the nutritional knowledge of teachers and students as well as the nutritional attitudes of students. However, the program did not provide a significant improvement in the dietary behavior of both teachers and students [13].

Based on conditions above, SHU has a very important role in improving public health, especially adolescents, but there are still many SHU do not carry out management functions such as monitoring and evaluation. Not much data was available on the effectiveness of SHU program and nutrition education activities based on school approach and it is difficult to determine follow-up for the next program. This study aims to evaluate the management and implementation and School Health Unit and nutrition education program of High School in Yogyakarta, Indonesia.

2 Methods

The analysis of the implementation of the SHU program and the nutrition education process in schools used a descriptive observational research design. School participants were recruited by random determination based on high school sampling frame in Godean District. There are four teachers as informants from each school who are responsible for the implementation of SHU.

In general, there were two types of data, the implementation of the SHU program and school-based nutrition education. Data of SHU program was collected by interview based on a checklist form from the Guidelines for Acceleration of SHU Development and Implementation by the Directorate General of Nutrition and Maternal and Child Health, Ministry of Health. There are eight criteria or components analyzed, including situation assessment; the process of strengthening the legal basis; the capacity building process; the roles, functions and responsibilities of institutional and competency of SHU implementation team personnel; process of increasing the quantity and quality of SHU trained personnel; process of strengthening the active role of students in the implementation of SHU; the process of enhancing the role of school principals, teachers, parents and the community around the school; the process of strengthening partnerships and community participation, and the process of facilitating local wisdom. Each components contained several questions that performed SHU activities. Each component has a different value according to the number of questions. The percentage of achievement in the development and implementation of the SHU program is based on the number of questions that meet the maximum score.

School-based nutrition education was a process or content of nutrition education that has been or was being carried out in schools, whether included in the curriculum, extracurricular activities, or other activities at school. This data was collected by interview using a form that contains questions about the implementation of nutrition education in schools, such as nutrition curriculum, topics of nutrition material, nutrition educator, delivery methods, and media for nutrition education. The scores of school-based nutrition education implementation were applied based on the high diversity and

the wide distribution of curricula covering nutrition topics each grade, frequency at the class level, diversity of topics, number of nutrition educators, as well as the diversity of methods and media for nutrition education in schools.

3 Results

A. Acceleration of Development and Implementation of School Health Unit

Eight criterias of SHU implementation were analyzed. The following graphic was the recapitulation of the achievements of the SHU development and implementation components by schools in the past year.

The Figure 1 shows that in terms of the results of the situation assessment it can be assessed that most schools are ready and have sufficient provisions to carry out the acceleration of guidance and implementation of SHU, already have a legal basis for running SHU, and have sufficiently explained the process of increasing capacity, roles, functions and responsibilities, institutional and personnel competencies of the SHU implementation team. This readiness is seen based on the existence of policies that support SHU efforts, availability of data, readiness of facilities and infrastructure. One school confirmed that they were not have a vision, mission, and school programs that support the implementation of SHU; not have a SHU implementing team decree; not have data on trained supervisors; not have data on follow-up results of health screening and data on visits of health workers from Puskesmas in the framework of fostering a healthy school environment; and not have data on diseases of school age children and adolescents based on the results of health screening and periodic health checks. As many as two schools confirmed that they do not have data on visits to health center health workers in the context of school child immunization month. All schools have facilities and infrastructure referring to the full SHU standard.

Several other components whose achievements appear to be lacking are the process of facilitating local wisdom, strengthening partnerships and community participation, enhancing the role of school principals, teachers, parents and the community around the school, strengthening the active role of students in implementing SHU, improving quantity and quality of trained SHU personnel.

In strengthening the legal basis component, one school confirmed that there had never been an internal meeting to discuss the preparation of a SHU work plan, and a coordination meeting of the SHU implementing team had never been held.

In capacity building, roles, functions and institutional responsibilities and competence of SHU implementing personnel component, one school confirmed that it had never held a SHU implementing a team meeting, and had not implemented a work program as planned. Two schools confirmed that they do not have reports on the results of SHU activities (Table 1).

In improving the quality and quantity of trained personnel component, one school confirmed that there are no trained peer counselors, last year no principal has attended SHU orientation / socialization, the principal has not been active in coordinating SHU, and in the last year there were not any students who attended training peer counselor. Two schools confirmed, there were no teachers who had attended SHU training in the

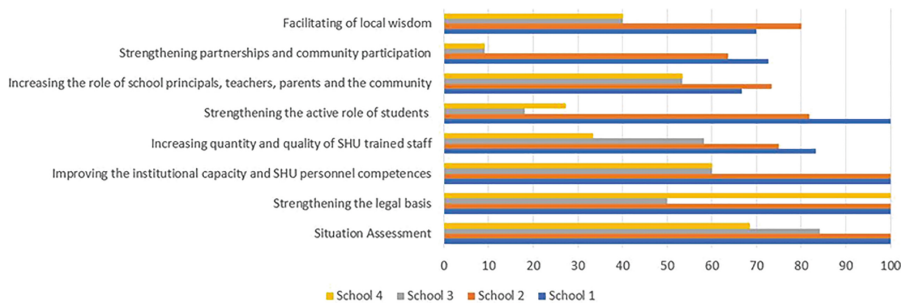


Fig. 1. Percentage of Development and Implementation of School Health Unit (SHU)

Table 1. The Achievements of School Health Unit (SHU) Development and Implementation

Components of Development and Implementation of SHU	Achievement (%)			
	School 1	School 2	School 3	School 4
Situation Assessment	100	100	84	68
Strengthening the legal basis	100	100	50	100
Improving the institutional capacity and SHU personnel competences	100	100	60	60
Increasing quantity and quality of SHU trained staff	83	75	58	33
Strengthening the active role of students	100	82	18	27
Increasing the role of school principals, teachers, parents and the community	67	73	53	53
Strengthening partnerships and community participation	73	64	9	9
Facilitating of local wisdom	70	80	40	40

last year, no students had attended the training for little doctors or youth health cadres. Three schools confirmed that they do not have trained SHU tutors, do not have a number of small doctors or school health cadres, 10% of the total number of students, and do not yet have peer counselors reaching 10% of the number of students.

In strengthening the active role of students in implementing SHU component, one school confirmed that it was not active in facilitating students to choose activities at SHU as an extracurricular activity and had not actively motivated students to become school health cadres (little doctors, youth health cadres, and peer counselors). Little doctors or youth health volunteers and peer counselors have not played an active role as recipients of confidences and motivators for their peers. They have not yet actively in planning, implementing, and evaluating SHU activities, or together with health workers to carry out periodic health checks for all classes. Two schools confirmed that little doctors or youth health volunteers and peer counselors had not played an active role in preparing

and implementing health screening, periodic checks, and other health services. They have not actively together with health workers carry out health screening for all students at the first level. Three schools confirmed that little doctors or youth health volunteers and peer counselors have not played an active role as health cadres in their neighborhood (for example, community integrated services/Posyandu cadres). They have not collaborated with health workers carrying out other health service activities (for example School Children Immunization Month, supplementary feeding for school children, School Dental Health Unit).

In increasing the role of school principals, teachers, parents and the community around the school component, there is one school which confirmed that the principal, teachers, parents of students, and people who have been trained / oriented have not played an active role in the preparation and implementation of health examinations or other health services and health education. There were three schools which confirmed that in the past year no principal had attended training / orientation, and there has been no socialization / orientation of SHU to the community around the school. All schools confirmed that in the last year there were no other school communities including school canteen officers who attended training / orientation, and there were no socialization and advocacy towards school committees including the board of trustees, to get support for implementing SHU activities.

In strengthening partnerships and community participation component, one school confirmed that in the past year the School Committee had not played an active role in planning, implementing and evaluating SHU. Two schools confirmed that they had not carried out an inventory of potential partners in the guidance and implementation of SHU, parents who had the potential to support the implementation of SHU (for example doctors or other health workers, entrepreneurs, NGO administrators). They had not collaborated with the business sector in the utilization of Corporate Social Responsibility (CSR) and has not facilitated community organizations, youth organizations / organizations (for example, youth organizations, youth mosques, church youth), or health education institutions to provide implementation support. Parents have not played an active role in implementing SHU. Three schools confirmed that they had not taken advantage of the School Committee meeting to discuss SHU, yet made approaches to parents of students and school alumni who had the potential to help implement SHU. There were no NGOs, community organizations or health education institutions that helped implement SHU in the last one year. All schools confirmed that there was no business sector that helped implement SHU using CSR in the last year.

In facilitating local wisdom component, one school confirmed that it had not conducted an inventory of the potential for developing local wisdom (for example a private company, Private and Government Banks, State-owned Enterprises and Regional-owned Enterprises, health education institutions, health service institutions, private practicing doctors and midwives) who can be involved in implementing SHU. There were no traditional arts and religious events that can be facilitated to play a role in the dissemination of SHU. The implementation of SHU in schools has not been assisted by schools or Health Personnel Education Institutions, health care institutions, doctors, midwives, private practice nurses, who play a role in implementing SHU, as well as implementing SHU in schools have not been supported by local culture / traditions, religious activities

that are used to disseminate messages about health in the context of implementing SHU. Two schools confirmed that in the last year there had been no approach and outreach to the Health Education Institution, Health service institutions, doctors, midwives, private practice nurses, traditional arts, and religious figures, who have the potential to play a role in implementing SHU. All schools confirm that the implementation of SHU in schools has not been assisted by the business sector (for example, private companies, banks, state or regional enterprise), and the implementation of SHU in schools has not been assisted by the parents of students who are health workers.

B. Implementation of School-Based Nutrition Education

School-based nutrition education is reviewed based on whether there is content or material about nutrition (nutrition, food, and diseases related to nutrition) in the school curriculum, what subjects contain nutritional content, in what class the nutritional content is carried out, nutrition education methods anything that has been applied by schools, who are the presenters / implementers of nutrition education in schools, nutrition education

Table 2. School-Based Nutrition Education Implementation

Nutrition Education Components	School I	School II	School III	School IV
Curriculum of food/nutrition content	Biology	Entrepreneurship	Basic Culinary, Food gredients Knowledge	-
Grades	X, XI	XI	X Cullinary art	-
Nutrition education topics that students obtain	Balanced nutrition	The importance of nutrition in the development of young teenagers	Overcoming anemia in adolescents	Be careful in choosing food
Presenter / implementer of nutrition education in schools	Teachers, Students / Students, Public Health Center Officers	Public Health Center Officers	Teachers	Public Health Center Officers
Nutritional education methods in schools	Outreach / lectures, counseling, group discussions	Counseling / lectures, group discussions	Counseling / lectures, practice, group discussions	Counseling / lectures
Media / teaching aids used for nutrition education	Posters / pictures, Power points, leaflets / brochures	Posters / pictures, videos	Posters / pictures, Power points, books, leaflets / brochures	Power point

tools or media that have been used, as well as what nutrition education topics have been given in schools.

The Table 2 shows the comparison of the implementation of nutrition education at the research site. The school curriculum which contains nutritional material is in the subjects of Biology, Entrepreneurship, Basic Culinary, and Food Knowledge. The nutritional content in these subjects is given in first and second grade. One school confirmed that there was no nutrition content in the curriculum. The secondary school curriculum structure is adjusted to the types of High School and Vocational High School. The speaker or nutrition education implementer who most often delivers nutrition content or content in schools is the health centre officer, then the teachers and students themselves. The nutritional education method most often used by schools is counselling with lectures, then group discussions, counselling and hands-on practice. The media or nutritional education props most often used by schools are posters and power points, then leaflets / brochures, books and videos.

4 Discussion

Understanding of management is something that cannot be separated from the SHU program. The entire scope of management activities includes planning, organizing, coordinating and monitoring. Management activities start from setting goals followed by finding ways to achieve goals, allocating resources according to the capacity of the task that can be accounted for, the ability of leaders to influence members, providing motivation to monitoring the implementation of activities or programs and taking corrective action if something goes wrong or deviation. All of these activities will be followed by a control program to determine whether the program has been implemented according to established standards. Thus it will be easy to know the level of effectiveness and efficiency achievements. There is a need for improvement in the coordination function of existing human resources, namely through regular meetings between school principals and SHU supervisors [14].

Schools that are the object of this research have not been optimal in implementing comprehensive management practices in achieving goals. This is indicated by the results that are not fully in line with expectations.

The participation of school principals, teachers, parents and the community around the school is related to the environmental or ecological conditions of the school. Support and cooperation between sectors were needed, including the higher education institution sector in school education, for example through the school canteen, which starts from the nearest school environment, is easy to reach, is continuous, and ensures the sustainability of educational activities in order to get maximum results. The concept of the Social Ecological Model can be used to shape behavior and habits in choosing diverse, *halal* and nutritious foods [15].

The findings of this study indicate that based on the results of the situation assessment, it can be assessed that most schools are ready and equipped to improve the guidance and implementation of the School Health Unit. Other components that are still lacking are in the process of facilitating local wisdom, the process of strengthening partnerships and community participation, the process of enhancing the roles of school principals,

teachers, parents and the community around schools, the process of strengthening the active role of students in implementing SHU, and process of increasing the quantity and quality of SHU trained personnel. This occurs because the practice of the school health service component is not good enough. The contributing factors include poor infrastructure, unfulfilled school health budget funds, gaps between parents and school administrators. [16]. The importance of implementing management activities starting from the planning, organizing, coordinating and monitoring stages. School, Health and Nutrition is carried out by involving related parties in planning and distributing tasks according to their respective responsibilities. Schools are unable to carry out health and nutrition functions if they only work alone. All related parties work integrated with each other [16]. The involvement of all stakeholders in achieving the objectives of the effectiveness of implementing the school health business program is a major factor [17].

The school health unit contributes to ensuring the health of students by providing access to primary health care and preventive health care services. The school health unit also provides health services to underserved children and adolescents. The school health unit is managed by a multidisciplinary team consisting of nurses or medical assistants, doctors, psychologists, and support staff including health educators, substance abuse counselors, dental health experts, nutritionists, school authorities and others [18]. The school health unit provides the basics of primary health care, including health assessments, disease prevention guidance, vision and hearing screening, immunizations, acute disease care, laboratory services, mental health care, social services, dentistry, and health education [19]. Students stated that they felt the benefits of the school health unit because of guaranteed confidentiality, free services, comfort, and youth-friendly service providers [2]. The results of the model for implementing the SHU guidance model in primary schools include SHU activities that are integrated with school activities, comprehensive commitment, improving SHU facilities and infrastructure, improving health and hygiene sanitation practices, improving nutritional status, reducing the number of sick students [11], health and nutrition education, healthy canteen, and improving physical activity. The nutrition education program is carried out by trained teachers using standard guidelines. A healthy school food environment can be implemented by canteen food handlers by providing healthy menus to children during school breaks [7].

Based on the School Health Unit Guidance and Development Manual, there are three main SHU functions known as the SHU Trias, namely health education, health services, and fostering a healthy school environment. At the high school level, health education in curricular activities includes not smoking, washing hands with soap, consuming healthy drinks and food, using healthy latrines, participating in sports activities at school, eradicating mosquito larvae, monitoring weight and height regularly, removing trash in its place, coughing and sneezing ethics, management of hygiene during menstruation, dental and oral hygiene, dangers of drugs and alcohol, dangers of HIV/AIDS and free sex, reproductive hygiene, understanding and avoiding infectious diseases, understanding of physical fitness, and bullying. Health education can also be carried out through extracurricular activities such as counseling, competitions, healthy living guidance, live pharmacies, school gardens, Youth Red Cross, Scouts, community service, field visits, and other health promotions. The approach used can be an individual approach and a group approach, such as class groups and peers. This health education method is carried

out by group work, discussion, role playing, lectures, simulations, and demonstrations. The second function is health services that require trained personnel such as teachers, trained cadres, and health services at the Puskesmas. Health services in schools are more promotive, preventive, and first aid. The third function is a healthy school environment, which consists of a physical and non-physical environment. The physical environment includes space and buildings, lighting, ventilation, classroom density, blackboard spacing, hand washing facilities, noise, noise, toilets, garbage, waste disposal, school canteen, yard, mosquito larvae, as well as student tables and chairs. Meanwhile, the non-physical environment includes personal hygiene behavior, behavior in choosing healthy snacks, and non-smoking behavior [20].

In the Basic Competencies of Senior High School which contains the topics of nutrition, food, and their relationship with health, including in Core Competencies and Basic Competencies of Physical Education, Sports, and Health, namely at first grade is analyze and select healthy foods and drinks. Basic Competencies for Craft and Entrepreneurship at first grade in the field of processing, namely understand concepts and procedures, identify production processes, and plan to make products of various types of preserved vegetable and animal materials and process cleaning products with local cultural approaches and others. As well as making vegetable and animal food preparations with the preservation process. At second grade in the processing sector is listed in making vegetable and animal food preparations by means of a fermentation process. Whereas in third grade the processing sector is making local traditional vegetable and animal food preparations and their modifications.

In the Basic Competency of the Specialization Group, the field of Specialization in Mathematics and Natural Sciences, the Basic Competency of Biology in second grade is the calorie needs of individuals based on BMI (Body mass Index) and compiles a one-day menu for themselves based on BMI, and then also conducting experiments test food substances on various types of foodstuffs and compile a report on the results of the experiment. In third grade, describes the process of catabolism and anabolism of carbohydrates, relates the process of carbohydrate catabolism to protein and fat catabolism, conducts sugar fermentation experiments using *saccharomyces* and links the process of carbohydrate catabolism in the body and presents the results, makes a relationship scheme carbohydrate, protein and fat metabolism, presents the identification of food, beverage and medicinal products as a result of the implementation of the concept of metabolism in everyday life. Then in the third grade Basic Chemistry Competence, it is found at describing the structure, writing method, nomenclature, properties and classification of macromolecules (polymers, carbohydrates, and proteins); describes the structure, nomenclature, classification, properties and uses of fat; experiment to describe the properties of macromolecules (polymers, carbohydrates, and protein); and presents and communicates data about the properties and uses of fat and its effect on the human body [21].

At Vocational High School it is also adjusted to the areas of expertise found in schools. In the Vocational High School curriculum, there are Basic Competencies for the Compulsory Subject Group for Vocational High Schools which contain nutrition, food and their relationship to health. Basic Competencies of Physical Education, Sports, and Health, namely in first grade are having healthy behaviour in picking food and drinks,

abuse of drugs, and hygiene of reproductive organs; analyze various types of food and drink that are beneficial to health, growth and development of the body; analyzes the role of physical activity in disease prevention and reduction of health care costs; and presents the results of the analysis of various types of food and beverages that are beneficial to health, growth and development of the body.

Basic Competencies for Craft and Entrepreneurship, are in second grade in the Processing component, namely understanding product design and processing packaging from vegetable and animal materials into regional specialties based on the concept of working with local cultural approaches and others; analyzes the processing production process from vegetable and animal materials into regional specialties in the local area through observations from various sources.

Basic Competencies of the Vocational School Basic Subject Group in the Vocational High School Health Expertise, in the second grade were Basic Chemistry Competence, which choosing bio molecules (water, carbohydrates, proteins, lipids and nucleic acids) based on their properties. Basic Competency of Biology at first grade were understands the role of enzymes in metabolic processes and reasoned about how enzymes work in the metabolic processes of plants and animals through the process of observation. Whereas in second grade were understand the principles of human reproduction to cope with population growth through family planning programs and improving the quality of life of human resources (exclusive breastfeeding), also describing the role of enzymes in the metabolic process, presenting data on population growth control through family planning program and improving the quality of life of human resources (exclusive breastfeeding).

Basic Competencies of the Vocational School Basic Subject Group in the Vocational High School Tourism Expertise in Applied Science Basic Competence are choosing carbohydrate compounds based on their types and properties, reasoning about the occurrence of food damage events, cloth shrinkage, and their use in cosmetics based on the properties of protein [22].

Meanwhile, the nutrition curriculum that is appropriate for high school age is the first stage, namely understanding the human life cycle and where students are positioned in the life cycle. At this stage, studying nutrition in the life cycle, as well as puberty and self-concept. The second stage is to learn what things are needed to grow healthy. At this stage, it discusses balanced nutrition, the contents of my plate, protein, consumption of vegetables and fruit, micronutrients, food exchange ingredients, fat salt sugar, food and beverage labels, school canteens and healthy snacks, physical intake and activity, body mass index and malnutrition, anaemia and iron, healthy breakfast, personal hygiene, menstrual hygiene management. Then the third stage is about healthy socializing, which contains friendship and healthy relationships. Then, the fourth stage is understanding one's vulnerabilities and risks and the fifth stage is about planning a healthy future [23].

Nutrition education in schools can be carried out by combining and empowering the environment around the school and the availability of human resources in schools. For example, this collaboration occurs between subject teachers who carry out an integrated educational process covering the topics of nutrition, food and health. The concept of nutrition education in schools includes four basic parts of an approach that is field in nature or can be applied in schools. The first part is the individual level, which assesses the student's diet, aspects of religiosity, culture, and resources. The second part is the

interpersonal level which is the interaction between students and their families. The next section is the regulatory function, as manager and supervisor to align the concept of nutrition education in schools with target sector stakeholders such as health centers, health offices, or Corporate Social Responsibility (CSR), and the community. The fourth part is policies and systems, providing feasibility targets and monitoring the effectiveness of nutrition education activities [15].

Previous research stated that students had good nutritional behavior after getting local content about nutrition. Teaching methods are concerned with forming students' attitudes towards acceptance of local content about nutrition [24]. Meanwhile, during the COVID-19 pandemic, there were guidelines for providing education. Face-to-face learning in education units located in the green and yellow zone areas must be carried out with strict health protocols and monitored by cultivating a clean and healthy lifestyle in the context of preventing and controlling COVID-19. One of the guidelines related to nutrition is that during the transition period it is not allowed to open a canteen, and residents of education units are advised to bring food/drinks with a balanced nutrition menu. Meanwhile, during the new habit period, the canteen may be opened while maintaining health protocols. Before leaving for face-to-face activities, residents of the education unit do breakfast / consume balanced nutrition, bring their own food along with eating utensils and drinking water as needed [25].

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