

The Importance Of 3m Abc Gymnastics For Early Children's Growth, Development And Health

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Abstract

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INTRODUCTION

The COVID-19 pandemic has been spreading for more than two years in Indonesia with its various variants. Such a rapid spread has an impact on various areas of human life, including education. At the beginning of its deployment, all levels of education were not allowed to carry out face-to-face learning. This is carried out to prevent and break the chain of spread of COVID-19 at various levels of schools. Online learning is an option for learning activities to continue. The implementation of online learning, of course, is not easy for schools, teachers, students, and even parents. Many problems are found in the implementation of online learning, especially in the level of Early Childhood Education. (Retnaningsih et al., 2021).

The new normal period is a new normal life, it means that the life we live is a normal life with a new pattern. What is meant by the new lifestyle here is how to implement health protocols by maintaining distance, washing hands with running water and soap or using a hand sanitizer, using masks, and meeting nutritional intake by drinking vitamins, exercising diligently, and eating nutritious foods.

At this time, the implementation of health protocols is key in carrying out every life activity to stay safe. The implementation of this health protocol is very important to be given to children from an early age. Early childhood is the most important period in the span of human life. At this time the child experiences rapid growth and development so that the stimulation given to the child must of course be in accordance with the stages of development and characteristics possessed by the child. (Sujiono, 2010).

For early childhood, the way that can be done to get used to the implementation of health protocols is through gymnastics movements. One of the gymnastics that can be applied is 3M ABC gymnastics. This gymnastics is a form of 3M ABC campaign and a fun educational tool for children in understanding the importance of 3M (Washing Hands, Wearing Masks, Keeping Distance) and fulfilling ABC (Nutritional Intake, Active Moving and Cheerful) against Covid 19. 3M ABC gymnastics was created by sports health specialists from PDSKO by incorporating the movements of the 3M health protocol and the ABC healthy lifestyle. The importance of implementing 3M ABC gymnastics needs to be known by teachers, parents at home. The application of this gymnastics will affect the growth, development and health of children, especially in this new normal period.

Based on the above presentation, the researcher conducted an in-depth literature study related to the importance of applying 3M ABC gymnastics in early childhood growth and health. The hope is that it can provide more understanding for all parties who will implement this 3M ABC gymnastics.

3M ABC Gymnastics

Sport is a form of physical exercise that can increase and improve one's physical abilities if done correctly and regularly. (Irsyada et al., 2018). Gymnastics is a part of sports that can be applied to early childhood. The selection of gymnastics must of course be adjusted to the characteristics of the child, both the selection of movements and the musical instruments.

The gymnastics referred to here is a combination of body movements accompanied by music, and is not gymnastic. ABC's 3M gymnastics is a gymnastics created in 2021. This gymnastics was launched by the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) together with Kalbe Consumer Health. This 3M ABC gymnastics was compiled by the Association of Sports Medicine Specialists. Dr. Ade Jeanne D.I Tobing, Sp. KO stated that the preparation of 3M ABC gymnastics was in accordance with the rules that should be. It starts with practicing warm-up, core, and cooling. Warm-ups are made with a light tempo of intensity such as inhaling movements, clapping hands, greetings and salutes. Furthermore, the 3M movement is to demonstrate the movement of wearing a mask, maintaining distance and washing hands properly.

This gymnastics is 13 minutes long, combines 3M movements (Washing Hands, Wearing Masks, Keeping Distance) and meets ABC (Nutritional Intake, Active Moving and Cheerful), combining aerobic gymnastics movements that include 4 stages, namely warming, stretching, core, and cooling with joyful music so that children are excited, actively moving, cheerful and more interested in doing gymnastics.



Gambar 01. Poster Senam 3M ABC

This 3M ABC gymnastics has elements of heating, core and cooling. There is a warm-up with a light intensity tempo such as inhaling, clapping hands, greeting and respect. Furthermore, doing the 3M movement is wearing a mask, keeping a distance and washing hands properly. In addition, it is also equipped with stretching movements that help the flexibility of the body which will make the body safe and comfortable when moving. This small movement of light intensity while warming up is a transitional movement with an activity preferred by the child, namely the modification of the masked satria movement, performed between 2 core exercises. But the whole point of all ABC gymnastics moves is to train heart and lung endurance. Gymnastic movement exercises designed for children from an early age. The movements in 3M ABC Gymnastics are easy to implement and fun for children with a duration of 13 minutes can be done together at school or alone at home.

Early Childhood

Early childhood is an individual who is undergoing a process of rapid and fundamental growth and development both physically and mentally. Early age is a very important age for a child's growth and development. This age is the foundation for future development. (Retnaningsih & Rosa, 2022).

Berk (in Sujiono, 2010) states that early childhood is a child who experiences a process of rapid growth and development in various aspects of the human life development span. The stimulation given to the child must pay attention to the characteristics at each stage that the child has.

According to the NAEYC (National Association for the Education of Young Children) early childhood is a child who is in the age range 0-8 years. Meanwhile, in Indonesia, according to Law no. 20 of 2003 early childhood is in the age range 0-6 years (Sujiono, 2010). Theoretically, the early age limit is reinforced by the results of research conducted by Keith Osborn, Burton L, White, and Benjamin S. Bloom stated that children's intellectual development occurs very rapidly in the early years of life. About 50% of children's intellectual development occurs at the age of 0-4 years. The next 30% increase occurs at the age of 8 years, and the remaining 20% in the middle or end of the second decade (Suyadi and Ulfah, 2013). That is one of the things that underlies why early childhood is referred to as children aged 0-8 years who are currently experiencing a very rapid period of growth and development in various aspects. This period determines the formation of a child's character and personality. This is the basis for why this early age is often referred to as the golden age.

Golden age is the most appropriate time to provide strong provisions to children. At this time the speed of growth of the child's brain is very high from the overall development of the child's brain. (Sujiono, 2010). This can be interpreted to mean that the golden age is the right time to explore all the potential of children's intelligence and optimize all aspects of development in children.

Early childhood is a child who is in the age range of 0 to 8 years. Early age is often referred to as the golden age because at this time the growth and development of children is very rapid and is the period that determines how the child develops next. Therefore, proper stimulation needs to be considered so that the child's development is optimal according to the stages of development that are being passed because this golden age cannot be repeated throughout human life which only comes once. (Retnaningsih & Rosa, 2022).

Early Childhood Growth and Development

Physical activity is a form of physical movement carried out by the body as a support for daily activities. (Oktriani, 2019) Every time the body makes a movement, there will be an increase in energy and energy expenditure or calorie burning. Physical activity is categorized as sufficient if a person does physical exercise or exercise for 30 minutes every day or at least 3-5 in a week. The activities carried out can be creative, competitive, and sports for health or fitness. (McMillan et al., 2016). Through the movements made, children's growth and development will be more optimal in the child's physical, mental and spiritual development.

The best age for stimulation in a child should be started as early as possible. Providing proper stimulation according to the age level will obtain oprimal results. Growth and development emphasizes 4 aspects of children's basic abilities that need to get stimulation, namely gross movement ability, smooth movement ability, speech and language skills, as well as sociability and independence. (Rismayanthi, 2018).

Sport has an important role for the growth and development of early childhood both in terms of physical, mental and emotional. In the physical aspect, sports have an important role for early childhood, especially in physical growth and development. Where the stimulation of the right physical activity is given will spur the growth and development of children optimally. Some of the positive impacts of sports activities carried out by early childhood: (1) Organic Growth and Development. Growth is an increase in the size of both volume, weight and number of cells. While development is the change of cells towards a more mature state. Activities that are carried out enthusiastically, regularly and consistently are important for thickening the joints, strengthening the bonds to the bones, and binding the bones in the body. It also affects the ability of the lungs, heart and blood vessels to supply oxygen to tissues, strengthens and strengthens bones and maintains body fat tissues, reduces body fat composition and can control obesity due to increased body energy expenditure, as well can support the growth and development of cells so that they develop optimally by doing physical sports activities; (2) Neomuscular/Motoric Skills. Motor development is the development of controlling body movements through coordinated activities between the nervous system, muscles and spinal cord. Motor development consists of gross motor and fine motor. Gross motor is more on movements that involve large muscles while fine motor is movement that involves smooth muscles. Implementation of gymnastic activities can develop children's gross motor skills through the movements carried out by children starting from warming up, core to cooling down; (3) Intellectual Development. Sports activities are beneficial for intellectual development. This sport can give children the opportunity to move to express themselves, shouting sounds according to the movements they make. Activating cognitive functions through symbolic thinking, developing symbols, integrating information and solving problems in the next age development; (4) Social Emotional Development. Physical education is useful for individual personal development to be able to socialize with other individuals. Social values such as cooperation, commitment, leadership, honesty, and responsibility and tolerance need to be taught through participation in teaching using activity-based activities. Through physical activity can increase self-confidence and social awareness. Physical abilities are closely related to children's self-image. Children who have more physical abilities in sports will cause them to be valued in the eyes of their peers. Physical activity can also provide opportunities for children to release emotional tension in appropriate ways. If participation is shown by the child being supported by the environment, it can increase their feelings of selfesteem, can release the tension they feel, and develop initiative, self-direction and be more creative. (Gabbard C, LeBlanc B, 1994). Gymnastics is one of the activities that can stimulate early childhood motor physical development. Gymnastics accompanied by music and songs makes children's musical intelligence also fostered. ABC 3M Gymnastics activities can also develop children's compound intelligence, so that healthy, intelligent and noble children can be realized. In addition to children's growth and development, with the habituation of exercising in children, one of which is through gymnastics activities, it is hoped that children like to exercise because exercise is one of the ways that is done and is important so that body fitness is maintained. (Rismayanthi, 2018).

Early Childhood Health

One of the factors that support children's growth is health and nutrition, therefore knowledge about health and nutrition has begun to be given early. According to the results of UNICEF WHO's survey The World Bank Joint Children Malnutrition Estimates 2012, it is estimated that 165 million children under five years of age worldwide are stunted, and there are 101 million children under the age of five worldwide underweight. Factors that affect growth are good nutritional status, nutritional intake is needed to meet the physical and mental needs of children, nutrition rich in nutrients also affects the growth and development of the brain and other organs. The wrong process of selecting and processing food will affect its nutritional content, besides that it will also have an impact on the emergence of degenerative diseases. Supplementary feeding is the best thing to improve the nutrition of the child. (Leniwati, 2021).

For early childhood, the intake of foods that have high nutritional value is very necessary to maintain, maintain health, growth and development. A balanced diet for children according to the sports activities they are engaged in will help children get the energy they need to move. The intake must also be considered for quality and quantity. (Primasoni, 2012).

Healthy behavior in early childhood is related to early childhood diet and this is related to the nutritional status of children. (Mardhiati, 2013) Children's health, when viewed from indicators from the Ministry of Health 2009, several criteria for healthy children are: weight increases according to the growth line following the green ribbon on the Card Towards Health (KMS), or rises to the color band above it; the child increases in height; the ability to increase with age; rarely get sick; cheerful, active and lively.

The culture of healthy living by exercising must certainly be a lifestyle for every individual at every age level, especially for early childhood. The habituation of being happy and fond of exercising, of course, starts from the child's closest environment, namely family and school. When at home, parents can invite children to participate in sports activities, because if the child has enough movement, of course, his motor development will be good and avoid obesity and all kinds of diseases. In this era, early childhood participation in sports is growing rapidly. This can be seen from the many opened sports clubs or football schools or other sports clubs. (Nichols, 1994).

Early childhood who receive education and coaching from an early age related to health can have healthy habits, have knowledge about health and be

able to have the responsibility to behave healthily. Clean and healthy living behaviors aim to form behaviors that are preventive against disease. (Mardhiati, 2013).

The five basic messages of how to live a healthy life in the school environment include: washing hands and brushing teeth cleanly, consuming nutritious food, keeping the school environment clean, doing regular exercise, and managing rest time well. (Mardhiati, 2013).

Methods

This type of research is a literature study research where researchers study and analyze various theories related to the application of 3M ABC gymnastics, theories about sports, growth and development, and health in early childhood.

Results

Chairman of the Association of Sports Medicine Specialists (PDSKO) dr. Leny Pintowari SpKO said that children are recommended to do 3M ABC gymnastics regularly for at least 10-12 weeks to be able to get benefits such as increasing endurance, maintaining and increasing heart and lung resistance, increasing muscle and bone strength, increasing flexibility, helping children's physical, mental, social, behavioral and cognitive development, and protect against sedentary diseases, namely obesity, diabetes, hypertension, bone loss (osteoporosis), and other diseases.

Complete and balanced nutritional intake is the key to optimal growth and development in children. Face-to-face learning needs to be an important concern by parents and teachers in order to ensure that children comply with health protocols and carry out the ABC lifestyle by maintaining adequate nutritional intake, moving actively every day and staying cheerful.

Nutrients consisting of water, carbohydrates, fats, proteins, minerals and vitamins have a flexible role to maintain a person's body metabolism. Vitamins are organic substances that play a role in maintaining the body's normal growth and metabolism, there are fat-soluble vitamins (vitamins A, D, E, and K) and water-soluble (Vitamins B and C). (Irsyada et al., 2018).

ABC's 3M campaign aims to educate children throughout Indonesia to recognize the importance of implementing the 3M health protocol and meeting nutritional intake, active movement, and cheerfulness to fight Covid 19.

This children's gymnastics is designed with a variety of fun activities in the form of play activities so that children want to move together at school or independently at home. Taking advantage of free time by carrying out gymnastics activities is very well done. This gymnastics is composed of warm-up, core and cooling activities. In warm-ups of mild intensity starting from: (1) Taking a breath, clapping encouragingly; (2) Best regards; (3) Carry out the 3M health protocol (wearing a mask, maintaining distance, and 6 steps to wash hands).

The core activity consists of 8 sessions, where generally it is mediumhigh intensity (aerobic) heart-lung resistance training with various skills and strength training in the form of movements: (1) Jumping; (2) Running; (3) Between each core session, a transitional movement is made with an activity that children love, namely the modification of the movement of the masked knight. At mild intensity cooling, stretching exercises are predominant. Doing this series of gymnastics children are introduced to health-related fitness.

3M ABC gymnastics is a form of education for the nation's children to always be active, enthusiastic, and optimistic so that they become smart, characterful, and strong children so that they can become great generations in the future. The Covid pandemic has made people aware of the importance of maintaining a healthy lifestyle in daily life, maintaining health protocols, namely 3M (wearing masks properly, maintaining distance and washing hands using soap and running water).

The education that wants to be instilled in 3M ABC gymnastics activities is the importance of paying attention to nutritional intake for children's growth and development and health, but nutrition alone is not enough so that children's growth and health remain optimal. It needs to be accompanied by body exercise to remain diligent in moving so that the body becomes healthy and strong. This will improve the cardiovascular system and respiratory function, maintain endurance, optimize child growth and development and make children's muscles strong and prevent chronic diseases early. In addition, it is able to improve cognitive abilities so that it is able to maximize children's learning abilities, prevent depression and remain cheerful.

Sport is a barometer for the progress of a nation, with good sports achievements will certainly be the pride of a nation. Therefore, the preparation of the quality of human resources in the field of sports begins from an early age. The early age period is the forerunner of the next generation of the nation, so that in order to achieve optimal development and proud achievements, it is necessary to be prepared and formed from an early age. (Rubiyatno, 2014).

The development of children's mobility will be visible through various activities that are able to be carried out and mastered by children. The development of children's mobility must consider motion taxonomy as a reference for achieving the basics of motion that will be able to equip the achievement of more complex motion abilities. (Wicaksono, 2017).

Aerobic exercise is an exercise in which the process of providing energy comes from the aerobic system. Aerobic systems use oxygen (O2) in the process of changing power. The ability to work aerobics is largely determined by the functions of the organs of the body including: the respiratory organs, the heart and blood circulation, the amount of blood circulating, the number of erythrocytes and hemoglobin in the blood, and the ability to diffusion of muscle cells and capillaries. (Bafirman, 2006).

The implementation of sports activities with dominant aerobic activity, energy metabolism will run through the burning of carbohydrate stores, fats, and a small part of the breakdown of protein stores contained in the body to produce large amounts of energy, so as to be able to form 34 adenosine triphosphate (ATP). Such energy metabolism processes occur using oxygen. (Umar, 2014).

Increased energy requirements during exercise require rapid circulation adjustments to meet increased oxygen and nutrient needs, eliminate metabolic end products such as carbohydrates and lactic acid, and remove excess heat. The existence of metabolic changes occurs through the coordinated activity of body systems, including the neuromuscular, respiratory, cardiovascular, metabolic, and hormonal systems. The body's physiological response to exercise can be observed acutely or chronically. Assessment of the acute effects of exercise can be carried out at the time of exercise or immediately after a single exercise, while the chronic effect of exercise is carried out after a period of chronic exercise repetition, that is, after a few weeks or months. (Irsyada et al., 2018).

Discussion

3M ABC gymnastics combines 3M movements (Washing Hands, Wearing Masks, Keeping Distance) and fulfilling ABC (Nutrition Intake, Active and Cheerful Movement), combines aerobic gymnastic movements which include 4 stages, namely warming up, stretching, core, and cooling down with music happy so that the children are excited, active, cheerful and more interested in doing gymnastics. This exercise was launched by the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) together with Kalbe Consumer Health in 2021. This exercise was prepared by the Sports Medicine Specialist Doctors Association. The results of the study show that 3M ABC gymnastics is very important for the growth and development and health of early childhood. The results of the study show that 3M ABC gymnastics is very important for the growth and development and health of early childhood. The benefits of this 3M ABC exercise if done regularly for 10-12 weeks are to maintain and increase heart and lung endurance, increase muscle and bone strength, increase flexibility. supports the physical, mental, social, behavioral and cognitive development of children, Protects from diseases caused by sedentary activities such as obesity, diabetes, hypertension, bone loss (osteoporosis).

Conclusions

The application of 3M ABC gymnastics to children will affect children's growth and development and health. The benefits of 3M ABC gymnastics when done regularly for 10-12 weeks are (1) Maintaining and increasing the endurance of the heart and lungs, (2) Increasing muscle and bone strength, (3) Increasing flexibility, (4) Supporting children's physical, mental, social, behavioral, and cognitive development, (5) Protecting against diseases caused by sedentary inmobility such as obesity, diabetes, hypertension, bone loss (osteoporosis).

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