REVIEW

A narrative review of physical education's contribution to children's healthy development

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ABSTRACT

Introduction: The study aims to investigate and evaluate the impacts of physical education on children's healthy physical and social development.

Materials-Methods: In the search for scientific literature related to this review the US National Library of Medicine (PubMed) used MEDLINE and Sport Discus data and the terms "physical education", and "childhood health", and "physical activity" were used. The relevant literature has also taken its source from the research of relevant articles from reference lists derived from data studies.

Results: Exercise is essential for children's development and is the main foundation for a physically active and healthy lifestyle. Physically active children have a bigger possibility to adopt all the other healthy lifestyles. Physical education will present a unique opportunity for school-age children to practice health-enhancing physical activities.

Conclusion: To maintain the good healthy development of children's performance, physical activity is a crucial factor. It is without a doubt that physical education in schools will reduce the risk factors of health issues prevalent in children.

Keywords: physical education, childhood health, physical activity

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INTRODUCTION

Today, depending on technological developments, a more sedentary lifestyle is being adopted. Among the age groups affected by this lifestyle are children and adolescents. Childhood and adolescence are critical periods for developing mobility skills, learning healthy habits, and building a solid foundation for lifelong health. Regular physical activity in children and adolescents promotes health and wellness; improves cardiorespiratory fitness, and muscle and bone strength. Bone-strengthening activities remain particularly important for children and young adolescents, as the greatest gains in bone mass occur during pre-adolescence and adolescence [1]. Kids are gaining more and more weight, thus becoming

overweight and obese due to not nutritious food choices, fast food, and an increased, and still increasing sedentary lifestyle [2]. Food with a high level of calories and increased sedentary activities, for example watching TV or playing computer games, are laying the foundation of the unhealthy lifestyle epidemic in children. However, it is reported that obesity and other risk factors for these diseases such as high insulin, blood lipids, and blood pressure are increasingly occurring in children and adolescents [1]. The United States Centers for Disease Control and Prevention 2011; stated that the consequences of a sedentary existence are evidenced by the addition of a new number of patients suffering from the disease in children and adults each year [3].

The movement develops fine and gross motor skills provides intermuscular coordination and increases sensorimotor sensitivity and response-reaction skills. Previous experiences facilitate the learning of new movements and the transfer of knowledge and experience is ensured. The broader and stronger the foundation is, the faster new motor skills can be learned [3]. Therefore, it is important to develop a comprehensive movement repertoire [4]. Physical activity also has brain health benefits for school-aged children, including improved cognition and reduced symptoms of depression. Evidence suggests that both acute and regular moderate to vigorous physical activity improves cognitive functions of memory, executive function, processing speed, attention, and academic performance for these children [1]. With children engaging in a lot of physical activity and eventually gaining extensive knowledge and experience, neuronal growth is contributed, which can improve brain performance [5-8].

Philipp, emphasizes the effects of physical activity on psychosocial development in children and youth, mediating emotions such as joy, coping with success and failure, and positive aspects on personality traits (self-confidence, assertiveness, etc.). He also stated that it can increase the development of social skills (justice, solidarity, tolerance, thought, conflict and reconciliation, helpfulness, etc.), stress control, attention, and concentration [9]. In addition, it has been reported that physical activity and sports have effects on the development of cognitive and mental emotions such as children's well-being, the joy of life, school success, and spatial imagination.

Physically active children have a bigger possibility to adopt all the other healthy lifestyle-friendly behaviors, such as avoiding psychotropic substances such as alcohol, tobacco, or drugs, just as they tend to show higher academic achievements at school [10]. The US Department of Health and Human Services (USDHHS) recommends that children and adolescents spend 60 minutes per day engaging in physical activity that is muscle and bone strengthening [11]. Schools are in an ideal position to influence children’s health. Because children spend most of their time in school settings, schools can improve physical activity participation.

DISCUSSION

One study conducted by Raitakari et al. indicated that there is a significant link between

one's physical activity behavior as an adult and as a child. The study argued that when children are involved in physical activity at a young age, they are likely to move this habit forward in the future [12]. Trudeau et al. stated in their study that physical education in the school environment highly contributes to the physical activity level of a child [13].

An early study that was conducted in France focused on physical education in schools. In the study, researchers replaced the regular school curriculum with a physical activity-dominant curriculum. The results were surprising since the new program increased participation, children's interest in school, and academic levels were not affected negatively. Recent research investigated the same situation. They argued that when physical education program hours are increased in schools, academic levels even improve [14].

Few studies investigated the possible outcomes of physical education in schools on children's health. They indicated that school-based physical activity helps decrease risk factors for cardiovascular health problems and diabetes [15-16-17-18]. Some researchers stated that when physical activity hours are increased in schools, children's physical fitness levels are likely to develop [19-20-21]. A study in France was conducted in 19 primary schools. Children were provided with two additional hours of physical education a week. In six months, it was seen that children's BMIs showed a meaningful improvement. Furthermore, children with obesity showed better improvements in the research period [22]. Similarly, another study that included low-income children in school arranged a 15-week physical education program in school. According to the result, skinfold thickness levels seemed to be lower at the end of the program [23].

Research by Mo-suwan et al., in Thailand kindergartens, targeted kindergarten children of 4-5 years. The children were provided with a 30-week physical education program that included walking and aerobics. BMI of children showed significant improvements. Moreover, girls were estimated to have lower BMI at the end of the period compared to boys [24-25]. In Chile, researchers chose 11-year-old children as the subject group among five primary schools. Researchers put children in nutrition and physical education programs for six months. According to the results, while boys' BMI levels improved positively, there was no meaningful alteration in girls' BMI levels [26]. A study was conducted in a New York public school on 14-year-olds. Children were given a nutrition and physical activity program for 3 months. The study aimed to decrease diabetes risk in children and adolescents. The results demonstrated that after the program, body fat and BMI levels improved meaningfully [27].

CONCLUSION

The factors of weight gain are not solely based on consuming excess calories without expenditure. The environment in which the individual spends most of their time is also a key factor. Ecological models indicate that the environment has an important role in promoting healthy, active lifestyles or promoting sedentary lifestyles. It has been

identified that students are less likely to be overweight if their school environment has parks, playgrounds, and other open areas that allow for physical activity. The results of many academic research studies illustrate that physical activity and healthy nutrition education among school-aged children were most effective for those children who were overweight or obese.

Parents must encourage and educate their children to engage in physical activity and healthy lifestyles, as they have such a huge impact on shaping their children's lives. As it is known that physically active children tend to have higher academic achievement in school and it is known that the problem of childhood obesity can be solved by such a physically active lifestyle, the importance of exercise in children's health is very clear. Since the impact of family education on children's identity development is very important, it is very effective for family members to include healthy eating and regular exercise habits in their own lives to help family members motivate their children to acquire the habit of healthy, balanced nutrition and regular exercise will be so effective.

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AUTHOR'S CONTRIBUTIONS

All authors read and approved the final version of the manuscript.

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