School physical education and childhood obesity

OLIVEIRA, Luís Fernando de Lima [1]

COSTA, Célia Regina Bernardes [2]


SUMMARY

Childhood obesity is a major public health problem, which raises the rates of morbidity and mortality among children. Research in focus has as objective to understand the importance of school physical education as a factor in childhood obesity prevention. The methodology used in the research was the literature review, to search for articles published in online data bases. Is homogeneous among the authors that physical inactivity and poor diet are crucial for the maintenance of obesity. Minimize the time in front of the tv and choose healthy foods are ducts that help in weight loss. Demonstrate to children the bright side of a healthy lifestyle is role of parents and the school. During the physical education lessons should be provided to the child contact with a variety of activities, duly monitored by a professional, developing various psychomotoric. It is important that the school develop a work with children, to learn to pick your food, basing its nutritional value.

Keywords: physical education. Childhood obesity. Prevention. Treatment.
INTRODUCTION

Obesity during childhood phase is already considered a major public health problem. This pathology raises the rates of morbidity and mortality among children, as well as reveal chronic diseases like glucose intolerance, high cholesterol, heart disease, joint problems, among others.

The technological world has brought numerous benefits to humanity, but led in a profound social and economic transformation. The individual who previously was active, today's sedentary. The decrease in the physical practices and poor diet, associated with the continuous use of smartphones, computers and automobiles, brings numerous health risks.

As regards children, are inserted into an inert society. The violence "imprisons" small in their own homes; so, they have to play with electronic games, which hardly boosts any calorie expenditure or cardiovascular work. Fast food networks induce the consumption of unhealthy foods, which increases gradually the weight, having shaken their mental and physical health. We need to give children proper eating habits and the practice of physical activities.

On this subject, the present study seeks to respond to the problem: the extent to which the practices of the school physical education can contribute to the prevention of childhood obesity?

Through the application of physical exercises during the school period it is possible to promote an awareness of students about the importance of body care, such as having adequate food, practicing physical exercises and maintain psychophysical harmony. It is possible, through this strategy, ensuring more health and quality of life for the little ones.

The study has as its overall objective to understand the importance of school physical education as a factor in childhood obesity prevention. And, as specific objectives: identify the main causes of childhood obesity and recognize the importance of school, family and society in General in raising awareness and in combating this problem.

Research in focus has as a basis the meaning of physical activity, put into practice and his theoretical conception under the idle time as students with fun and games that contribute to a healthier life, providing a physical, psychic, emotional and social. The physical exercises, especially the collective, benefit the socialization and psychological aspects to a full social coexistence.

An active child can prevent chronic diseases more easily; These diseases affecting the human being earlier and earlier. Family, school and society have a vital role in the search for quality of life and health of children, and professionals working with agents and drivers of children's actions.
The methodology used in the research was the literature review, to search for articles published in online data bases.

Data collection web-essay, held between March and October 2016, was guided by articles published between 2006 and 2016; being grounded by keywords: childhood obesity, child development, childhood health, quality of life of the child and school physical education.

To reach the expected results, through this research are analyzed and discussed studies that address a wide range of essential aspects of childhood obesity; as well as the role of the school, the teacher and society in the dissemination of physical exercise and a healthy lifestyle.

1. CHILDHOOD OBESITY

1.1 concept of obesity

Obesity is a medical condition defined as the excessive deposit of fat in the body, which causes damage to health. Is an inherited disorder with multiple causes, where concern environmental factors, psychosocial, cultural, genetic, hormonal, and metabolic. "It is the accumulation of fat in addition to necessary functional and morphological balance healthy body. " (1)

The large amount of adipose tissue during the early stages of life involves improper eating habits, genetic propensity, ethnicity, psychological aspects and economic condition. Relevant to point out that 95% of cases of obesity have caused important external factors; the remaining 5% of situations are attributed to hormonal changes and genetic load. In this way, a lifestyle suited is the best preventive method for combating obesity in childhood or in adult life. (1)

Obesity is the result of excessive energy intake. This exaggerated consumption can begin during the first years of life, being determined by cultural influences and family habits. A person is considered obese when is 20% above your ideal weight. (2) obesity can be divided into four groups:

a) Obesity type I, characterized by excess body fat without any particular concentration of total fat in a certain body region; b) type II Obesity, characterized by excess subcutaneous fat in the abdominal area and trunk (Android); c) type III Obesity, characterized by excess abdominal fat-viscero; d) Obesity type IV, characterized by excess fat gluteal-femoral (gynoid). (2)

In the past decades malnutrition was determined as the food problem more relevant in developing countries; and, on the other hand, obesity was characteristic of people in developed countries. This scenario changed, Brazil being a developing country and that already have alarming rates of childhood
obesity. Before the people of each country were characterized as homogeneous units; in the current scenario, there is the mixed formula both overweight and nutritional deficit. (3)

1.2 childhood obesity and its causes

We can say that childhood obesity depends on two factors. The first is the genetic factor (endogenous), formed by the set of genes inherited through the parents. Even if the parents are not obese, your offspring can carry this genetic load. The less age have and heavier for the child, will have a greater likelihood of having these genetic particularities. (2)

The second aspect is the influence of the environment (exogenous factor). Children who are at home, in view of the TV and video games, live a sedentary lifestyle, which contributes a lot to childhood obesity. (2) Moreover, the lifestyle and nutritional factors, such as choice of food, as well as quantities and frequency that are ingested, are the most crucial in the context of childhood obesity. According to several studies in the area, currently are evident low consumption of vegetables, vegetables and fruits and the increase in the consumption of refined sugar and soda. The substitution of balanced meals for snacks, with inadequate nutritional values aggravates a lot too. (3)

Aspects during pregnancy and pós-gestacionais occurrences demonstrate-if risk factors for childhood obesity. The higher incidence of overweight occurs in infants children of mothers who did not have previous birth and presented at birth a weight greater than appropriate, developed overweight and obesity during childhood, maintaining that, children who are born with greater weight have bigger chances to present obesity when compared to other children born with normal weight or underweight. Another determining factor is the breastfeeding. If the withdrawal is incorrect, early or added to food errors in the first years of life, the risk of obesity increases. Exclusive breastfeeding for six months or more is an important protection to overweight and obesity. (3)

1.3 complications of childhood obesity

Formerly, obesity was seen only as a strictly aesthetic factor. Today, the obese child linked disorders are notable to the skeletal and circulatory system overload, related to individual and social performance. Several metabolic processes started during childhood continue into adulthood. Among girls, there's an anticipation of menarche, menstrual and variations plus a short stature. (4)

Excess weight is a determining factor for the onset of chronic degenerative diseases. The longer a person remains obese, the greater the chances of developing complications. (2)

Among the diseases associated with obesity are: hypertension, cardiovascular diseases, glucose
intolerance, hepatic steatosis and cholelithiasis, skeletal changes, breathing problems, poor quality of sleep, skin lesions, increased morbidity and persistence of obesity throughout adult life. According to several studies, the obese child before the age of six has 25% more likely to be an obese adult. \(^{(4)}\)

Another aggravating factor is the psychosocial aspect. The child who is overweight has affected your self-esteem and consequent isolation, rejection, and depression. When broken down by your body, have emotional disorders that can spread greater food excesses. \(^{(4)}\)

### 1.4 Treatment

Childhood obesity affects babies and children up to 12 years of age, the individual is characterized as obese when exceeds 15% of the corresponding average weight as ideal to his age. The treatment of childhood obesity is accomplished systemic form, being accompanied by a multidisciplinary team. \(^{(5)}\)

The treatment is based on dietary changes and an increase in the practice of physical exercises. In addition, the doctor may recommend appetite suppressants. \(^{(5)}\) During the reeducation of eating habits must be available flexible diets to meet the food needs of the child, since very strict diets are ineffective, causing losses to the development, in addition to highest rates of failure. Physical activity should be carried out in three to five times per week, lasting 50 to 60 minutes. The exercise preserve lean body mass and minimize the reduction of metabolic rate. Combined diet and physical exercises are more effective in the fight against childhood obesity. \(^{(2)}\)

The treatment of childhood obesity, in General, must be efficient, not only for aesthetics and decreased body weight and Yes back to psicopatológicas relations. \(^{(6)}\) the cognitive behavioral therapy is often used in the treatment of childhood obesity. Is a method of short duration, in which the patient is requested to cooperate in changing their own actions contributing to their obesity. The treatment uses food records, modification of eating habits, strategies to minimize contact with situations of inadequate consumption of food, training for troubleshooting, as well as relapse prevention. Through these attitudes, the child improves your integration with family and social environment, modifying their habits so that they are the healthiest possible. \(^{(7)}\)

### 2. CHILDHOOD OBESITY AND SOCIETY

#### 2.1 the family support for the obese child

Family means a group of people who may or may not have blood ties, but that are characterized as such by the legal system. The family is formed within the social nucleus for the preservation and well-being of its members, creating ties of affection. \(^{(2)}\)
The families are the largest children's reference to talk about food. This encompasses influence since the acquisition of food for family consumption, until the religion practiced and the culture in which they are inserted. You can determine that the parents are contributors to the overweight children, and great his responsibility for the healthy development of small. (8)

The family involvement to combat childhood obesity is essential. The environment represents for the child the example of conduct that must follow. That way, if the fast food "fast-foods and sedentary preponderarem lifestyle of the ones that make up this family, there are great chances of the child follow the same habits. "Children and adolescents are directly influenced by the habits of the medium in which they live. " (2)

One of the great dilemmas recorded in studies related to the theme is the difficulty that the parents have to recognize their children's obesity. It is necessary that parents recognize that your child is overweight and the consequences that this diagnosis can bring to his health. Only with the identification of this disease is that treatment and changes in lifestyle will be effective. (8)

Another important aspect that should be described is the Association of food with affection. In some families, since when the baby begins to eat solid foods, praise and reward the infant if eat too much, creating thus a linking "overeating" and affectivity. As adults, to feel alone, these individuals will seek in compensation for the lack of affection, which made repeatedly turns into compulsion. (9)

Parents should assist children to adopt healthy habits. That way, should avoid buying processed foods, focusing on introducing home varieties of fruits and vegetables, and preferably, prepare the steamed vegetables. The child should avoid offering soft drinks, natural juices and water. During the meal, it is important that the child feeds on a child-sized dish, being important to avoid that she be distracted by games or television. (5)

To enable the child to spend more energy through physical exercises, steps can be taken. The use of computer and other electronic media should be limited; on the other hand, the child should be encouraged by the family to practice outdoor activities. It is important to find activities of which children enjoy, so that the physical practice does not become an obligation. (5)

Even in the cognitive-behavioral therapy, parents should assist in the process of treatment. Parents and family are the people who most have with the child, it is very important that all have new habits, thus stimulating the child to change their. (7)

Therefore, the family is given responsibility for guiding the child in their habits and food choices, promoting healthy eating and a consequent appropriate development. Parents should engage intensely
with the child, her scientific paper expounding the strengths of a balanced diet. The path to a healthy lifestyle should not be achieved through critical constraints, because such conduct only worsen the picture of obesity, since the kids cash in food your frustrations. The accolades and the example in acquiring good eating habits are the best way to act. (2)

2.2 psychological and Social Difficulties of the obese child

Obesity carries a strong psychological suffering, either by social prejudice or discrimination. The obese person handbag for his own image, being led to a preoccupation with the body, which causes insecurity in time to keep the weight under control. The feeling of isolation and humiliation are big factors negative charge. (1)

The emotional distress of who is obese can often be the most important negative factor in this pathology. Mainly in Western society, the lean body is generally considered a great beauty attribute. So, who is overweight is conditioned to be insecure about your body, having low self-esteem and several other psychological disorders. (10)

Discrimination and social estigmatizarão collaborate to the development of negative feelings. Daily, the obese children are teased by his classmates, being less accepted within the society. In adulthood, this situation creates an individual with several difficulties of socialization, and restricted have routine activities like dating, buy something or study. (10)

A long time ago, it was believed that children and adolescents were not prone to develop depression. However, currently, several studies say otherwise. The depressive symptoms can interfere profoundly in the life of the child, harming their school performance and interpersonal relationships. Obesity often presents as behavioral difficulties consequences, interfering in the relationship of the child. (11) "depression is the most common psychological disorders among childhood obesity. Clinical observations are receiving support from epidemiological studies and suggest a relationship between excess weight and psychological symptoms. "In obese children depression presents with sudden changes of behavior which are not justified by stress factors, in addition to symptoms of sadness, irritability and aggressiveness. Adults who live with the minor should be alert to these acts, because the child can't relate to her emotional state with your excess weight. (1)

Anxiety is another psychological disorder that may be related to obesity, especially the unpleasant feelings experienced by the obese children that generate tension and apprehension on the part of them. (11) "; frequent crying, sadness and irritability suggest a depression and anxious, because the two are closely linked. " (1)
As above, obesity can bring economic social and psychological consequences. Generally, as studies in the area, the obese subjects remain for less time in school, have a smaller index of marriages and a lower household income. Dissatisfaction with body image contributes much to the effectiveness of these situations. (11)

Analyzing the obesity in the light of the psychology, the Act of eating, that is, keep active oral mechanisms, is related to the fear of suffering privations, need for love, desire to eliminate animosity and noticing a loss. Psychoanalysis determines an understanding of obesity as a symptom that represents a position of the unconscious of the individual, who fights in your inner man by the solution of a conflict. (10)

3. THE ROLE OF PHYSICAL EDUCATION IN THE FIGHT AGAINST CHILDHOOD OBESITY

The alarming rates of childhood obesity are registered in Brazil demonstrate how important it is for the prevention of overweight, being the school the site considered ideal to perform the necessary interventions, primarily through physical education. As a discipline that is characterized by promoting health, professionals should act as boosters of their students to always adopt an active lifestyle. The regular practice of physical exercises during the school encourages the adoption of healthy habits throughout life. (12)

The school is the protagonist in the prevention and treatment of childhood obesity, since children spend most of their day teaching centres. In this way shall be included on the education curriculum, in addition to being offered healthy snacks in school and a great incentive to the practice of physical exercises. (8)

Knowing how much the practice of physical activities is important for one's health is extremely necessary, since many children choose to watch tv and play with video games than run, jump, play ball. Physical inactivity during childhood is very damaging. Factors such as public insecurity and violence in modern society collaborate much to aggravate this situation. (13)

In this context, the school physical education became one of the few places for children to practice physical activities, having the opportunity to benefit from the advantages of having an activity directed by a professional fit, with advice not only during activity proposal, but issues related to health in General. (14)

The methods of preventing and combating overweight and obesity should be started in school age, being held in later years to be effective. There is to be a greater effort to ensure that the practices are adopted by students, especially to the ten years, because at the moment are aroused the interest and understanding about healthy habits. (15)
During the physical education lessons, the stimulation of overweight children to practice activities is increased if there is a preference for non-competitive activities, because usually these obese children are deleted. (2)

Currently, the school physical education is neglected. Students sometimes have no interest in performing moves, learning little or nothing about your body and the care they should have with him. Physical fitness must be understood as the involvement of the individual through physical practices taught, dance, sports, gymnastics or games. (12)

This course, even suffering the influence of less practice trends, should take the responsibility of being the diffuser well-being, health and quality of life of learners, aware them about the dangers of a sedentary lifestyle and the positive aspects of healthy eating. (12)

The physical education teachers are often understood as supporting players, and people who are there just to entertain the students. This professional must be valued, incorporating a new posture facing the educational system, where they adopt in their classes related to health promotion goals, developing and organizing experiences that put students in situations in which to see the importance of adopting a healthy lifestyle. (15)

The main goal of the health education programs through the school physical education is to provide theoretical foundation and practice that may lead students to incorporate knowledge, in such a way that the credence practicing health-related physical activity not only during childhood, but also in future in adulthood. Information about the relationship of physical activity with chronic degenerative diseases and incentives more overt about the regular practice of physical activities should be among the priorities in school physical education classes, next to the building of knowledge and psychomotor development. (15)

By adopting diversified exercises that can be performed by all the professional leave only the technique and uses the playful, making it the most attractive activities and providing students who are often excluded from games also participate. This is the stimulation of enjoyable physical activity, being of paramount importance for learning and the development of healthy habits in children. (14)

4. FINAL CONSIDERATIONS

Childhood obesity is a public health problem that grows increasingly in Brazil, raises Government spending, put in focus chronic degenerative diseases that previously were not detected in children, as well as carries several psychosocial disorders such as anxiety and depression.

Through this study, were outlined several positions on the combating and prevention of obesity, being
homogenous thinking among the authors that the confrontation of physical inactivity and poor diet is the best solution. Decrease the time in front of the tv and video games, as well as choose healthy snacks instead of fast foods, are conduits that aid in weight loss.

Educate children about the benefits of a healthy lifestyle is role of parents, who work together with the school. Educational centres, must be provided to the child the practice of physical activities, duly monitored by a professional, and, if possible, to provide the entire range of motion, developing various psychomotor areas. In addition to the practical part, it is important that the school develop a work with children so that they learn to pick your food, basing its nutritional value.

The child to understand the values of a healthy lifestyle becomes an adult also worried about preserving his health, being a great modifier of every family. Obesity is an evil that must be fought, together with the whole of society.

REFERENCES


14. BENEDICT, Leandro de Souza; et al. *School physical education*: in the fight against childhood


[1] Student in physical education of College Patos de Minas (FPM) forming in the year 2016.

[2] Professor of the course of physical education of the Faculty of Patos de Minas. Master in Health promotion from the University of France.