

Parental perception of toddlers body image

Summary

Currently, weight disorders, have reached a large part of the world population. Obesity in children, including toddlers, is a serious public health problem. There are many parents who do not recognize their children's overweight/obesity and toddlers parents of are less likely to recognize this problem.

It is known that identifying overweight/obesity is critical to implementing prevention strategies and interventions as early as possible.

We carried out a descriptive study of quantitative approach. It was applied: "Toddler Silhouette Scale" to parents of toddlers who attend day care centers in located the district of Viseu, Portugal. Data processed using IBM-SPSS24.

It was concluded that 83.3% of the parents reported that their child had normal weight, 13.3% underweight and 3.3% overweight. Regarding the silhouette that they consider ideal, the totality of the parents, select silhouettes referring to the normal weight. In the evaluation of the current silhouette of the child, 6.7% opts for the image 1 (low Weight) and 3.3% for the image 6 (overweight), all the others select images of normal weight. According to the weight records of the individual health report, 3.3% of the children were underweight, 10% overweight and 6.7% obese. Our results corroborate those of the author of the scale who concluded that most parents correctly identify the silhouette that matches their child's actual weight. A study carried out in Portugal, revealed an absence of parental perception about the excess weight of the children.

KEYWORDS: BODY IMAGE; PARENTS; NUTRITIONAL STATUS; TODDLERS.

Introduction

Currently, weight disorders, both low and overweight, have reached a large part of the world population¹. Obesity is a chronic disease that presents a higher prevalence than malnutrition or infectious diseases, and is thus presented as the global epidemic of the 21st century².

The increase in the prevalence of overweight and obesity in childhood is considered to be a public health problem worldwide^{3,4}, affecting also toddlers (1 to 3 years old).

It is estimated that 42 million children under 5 years old were overweight or obese in 2015, an increase of about 11 million in the last 15 years⁴.

Portugal was no exception, a study carried out⁵ revealed that in toddlers the percentage of overweight girls and boys was 15% and 13.3% and with obesity of 2.8% and 3.5%, respectively. The authors also reported that almost 28% of Portuguese children were overweight or obese (19.7% and 8.2%, respectively), with a higher prevalence in girls than in boys.

This problem deserves special attention, since childhood obesity is directly associated with the persistence of this condition in adulthood and with the greater occurrence of associated comorbidities⁶. Eating habits and pref-

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erences built during childhood persist for life⁶, with the family having a strong influence on children's diet and lifestyle^{7,8}. Thus, parents play an important role with regard to the nutritional status of children and the prevention of overweight and obesity^{6,9}.

Theoretically, the proper nutritional status (eutrophic) results from the balance between food consumption and organic nutritional needs at each stage of life. Imbalances in this relationship are manifested in nutritional deficiencies (general or specific deficiencies of energy and nutrients) or nutritional disorders (caused by scarcity or excess of food that lead to malnutrition or obesity¹⁰).

Up to 5 years of age, children are experiencing an accelerated growth process, which makes this period vulnerable to the occurrence of nutritional problems. It is therefore fundamental that health professionals evaluate and monitor the growth and development of these children¹⁰.

The first step in preventing childhood obesity is to identify overweight children. There are many parents who do not recognize the overweight / obesity of the offspring, some authors suggest that the parents of toddlers are less likely to recognize this problem¹¹. Parent's

satisfaction or dissatisfaction with their children's bodies, and the assumptions that they are fat or thin, can influence the child's satisfaction with his or her own body. Studies in different populations revealed that most parents could not associate body image and actual weight of their children^{12,13}.

Parents need to recognize and be prepared to take precautions about their child's overweight^{14,15}. Hence, awareness of the nutritional status of children should be the first approach in the implementation of strategies to prevent or regress the epidemiological picture of childhood obesity, which we are facing today. The efficacy of health programs to combat overweight implies a recognition by the parents regarding the correct nutritional diagnosis of the children and also the possible health consequences in the short, medium and long term¹⁶.

Obesity is a chronic condition that can have serious health consequences¹⁷, since it increases the risk of diabetes, hypertension, cardiovascular disease, cancer, sleep apnea^{4,17}. Over the years it has been shown that overweight or obesity has negative effects on the psychosocial adaptation of children and adolescents¹⁸.

Because of the low success rate in treating childhood obesity, prevention is the most appropriate strategy to combat the growing number of overweight children. Family-focused intervention is critical to produce changes in eating and physical activity behaviors, promoting a healthy lifestyle that should support parent-child relationships¹⁹. The altered perception of the parents about the nutritional state and body image of the children represents an obstacle, with respect to the adoption of healthy habits of physical activity and food. In this sense, the lack of perception of the excess weight of the children can be a factor that contributes to the development of childhood obesity^{16,19}. Adequate perception of the nutritional status of the children by the parents is essential for the early recognition of overweight and obesity^{9,20}.

The family plays a key role in food education and nutritional monitoring of children, as tastes and food preferences are shaped by the habits and behaviors acquired within the family. It is the responsibility of parents to provide an environment conducive to healthy child growth and to the adoption of healthy behaviors and habits¹⁶. They determine which foods are available to the child in quantity and quality, and are most responsible for establishing an emotional environment in which obesity can or can not be discouraged.

Food diversification is a crucial factor for the child's growth and development. At 12 months children should be included in the family food standard, provided that it follows the principles of a balanced and varied diet. It is in this age range that food preferences begin to shape and many are maintained throughout life. It is therefore of paramount importance that parents / family be able to reconcile the introduction of new foods with their educational role, helping to build healthy habits¹⁶ in order to avoid underweight or overweight / obesity of their children.

Nutritional surveillance aims to promote and protect the child from the adverse effects that an inadequate nutritional status (sub or overnutrition) can have on children's current and future health²¹. The identification of overweight / obesity in toddlers is fundamental for the implementation of early prevention and intervention strategies¹⁴. This identification is evaluated by nutritional status. The most commonly used index to characterize nutritional status is the Body Mass Index (BMI) – weight to square of height quotient since it is an easy to use, inexpensive, non-invasive and relatively sensitive method²².

Anthropometry is, therefore, the method of measurement that evaluates the process of the body growth of children and adolescents. This allows the assessment of the nutritional state of children and adolescents, at in-

dividual and community level²². The Portuguese Directorate-General for Health (DGS) affirms that growth curves are an extremely important instrument for monitoring the nutritional status and growth of children and adolescents, allowing the early identification of excess weight, a problem of concern and high prevalence in Portugal²³ and the identification, not only of children and adolescents who are already obese, but also of those at risk of becoming obese²⁴.

The BMI value in pediatric age should be evaluated in percentiles, as well as anthropometric variables, which serve as the basis for its calculation, based on WHO reference tables, is:

- a) BMI values of percentile < 3 allow the diagnosis of low weight;
- b) Values of BMI percentile ≥ 3 and < 85 allow to make the diagnosis of normal weight;
- c) Values of BMI percentile ≥ 85 and < 97 allow the diagnosis of overweight;
- d) Values of BMI percentile ≥ 97 allow the diagnosis of obesity^{2,23}.

The use of body image assessment instruments can be an aid in detecting parents' perception of the nutritional status of their children.

The Silhouettes Scales consist of a set of style figures, usually silhouettes or schematic drawings, which vary according to body size. They allow parents to choose the image they consider to be more like their child ("real" body image) and what they would like them to have ("ideal" body image)^{15, 25}. The discrepancy between "real" and "ideal" body image is used as an indicator of dissatisfaction with body image^{15, 25}.

Parental perception of the nutritional status of the children is essential for the prevention and treatment of nutritional disorders, since it is the recognition of an altered nutritional status that generates concern for the state of health and represents the first step in the search for health care⁹. Several studies that ad-

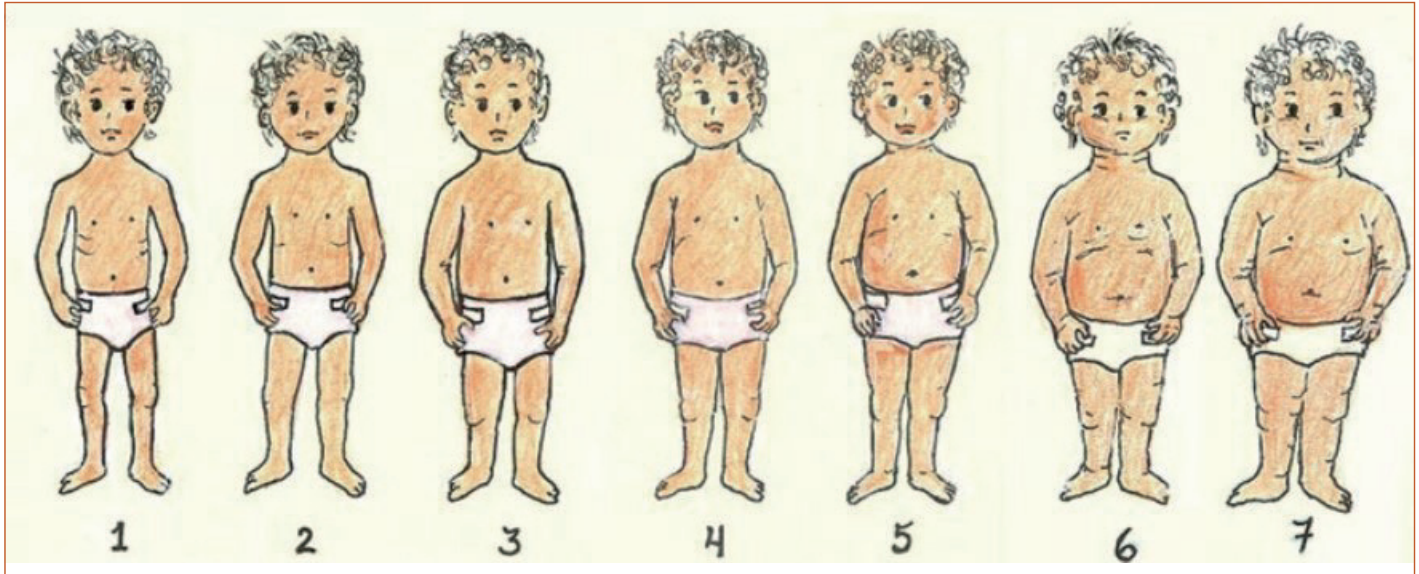


Figure 1. Toddler Silhouette Scale. Hager, McGill & Black¹⁴.

dress the maternal perception of children's nutritional status indicate that mothers present difficulties in recognizing cases of overweight or obesity^{9,13}. Others have shown that this difficulty causes parents to tend to underestimate the nutritional status of their children and therefore do not worry about the consequences of overweight in childhood¹³.

Thus, parents need to be guided and elucidated to the importance of healthy eating as well as habits of physical activity that contribute to the maintenance of family health and quality of life. It is thus essential that the nurse implements strategies that involve the family through health education and alert the importance of acquiring healthy habits.

Methods

This is a descriptive exploratory study with a quantitative approach. The purpose of the study was to test the instruments that will be used in a study that is being carried out with parents of children between 12 and 36 months in the central region of Portugal, in order to identify the eating habits of toddlers, to determine the prevalence of underweight, weight and obesity in the toddler, identify parental perception about the silhouette of toddlers, analyze parental knowledge, about toddlers feeding.

The population of this study is made up of the parents of children between 12 and 36 months old, of both sexes, attending public and private day care centers in the district of Viseu, Portugal. The convenience sample consisted of 30 parents.

The following inclusion criteria were defined in the sample:

- Being a parent of a child between 12 and 36 months of age, not suffering from chronic diseases that may directly interfere with the nutritional status.
- Accept participation in the study.

For data collection, a questionnaire on toddlers' dietary habits and physical activity was used, encompassing the Toddler Silhouette Scale¹⁴. The data was collected during the pre-test of the instrument from January to June of the year 2017.

All participants signed the informed consent document.

Data were processed using the IBM Statistical Package for Social Sciences (SPSS) 24. Descriptive and inferential statistics will be used for data processing. For the diagnosis of children's nutritional status, the WHO² international criteria were used.

The Toddler Silhouette Scale is a seven-point scale, created and validated in 2010 by Hager, McGill & Black¹⁴ to assess perception and satisfaction with the body size of children between 12 and 36 months of age. It allows you to evaluate the silhouette that parents consider ideal for their child and which one most closely resembles the child's current silhouette.

Findings and discussion

It was concluded that 83.3% of the parents reported that their child had normal weight, 13.3% underweight and 3.3% overweight. Regarding the silhouette that they considered ideal, the totality of the parents selected silhouettes referring to normal weight (figure 1: image 2, 3, 4 and 5). In the evaluation of the current silhouette, 6.7% opted for image 1 (referring to low weight) and 3.3% for image 6 (overweight) (figure 1) all the others selected images of normal weight.

When comparing the two answers, no parents considered the image 1 (low birth weight) (figure 1) as ideal, but 6.7% thought that their child had this silhouette. No parents considered silhouette 6 to be ideal (overweight) (figure 1) but 3.3% considered it to be the current silhouette of their child. Regarding the silhouettes corresponding to the

normal weight (image 2 to 5) 46.7% of the participants considered them as an ideal silhouette. 43.3% of the parents considered silhouette of the image 4 as the current silhouette of their child.

We concluded that the majority of children (80%) had normal weight and 3.3% low weight, 10% overweight and 6.7% obesity.

Comparing the current percentile of toddlers and parental perception, we verified that 6.7% of the cases identified by the parents as underweight had in fact normal weight and 6.7% cases identified as normal weight were actually overweight. 3.3% of the parents reported that their child was overweight (figure 1: image 6) which did not correspond to reality because the child was in the normal weight percentile. The same percentage of parents reported that their child had normal weight (figure 1: image 3), yet it was found to be in the low weight percentile.

Our results corroborate those of the author of the scale who concluded that most parents correctly identify the silhouette that corresponds to their child's actual weight, although some parents have with difficulty in perceiving the silhouette of their children.

Likewise, our results support those obtained by other researchers. In a study carried out in Portugal, there was an absence of parental perception about children's overweight²⁶. Other study comparing the parents' real perception with the nutritional status of the children through the BMI percentile, concluded that parents do not recognize the existence of obesity in their children, since they do not attribute body image proper²⁷.

Conclusion

In this study, as in others, the results indicate that some parents have a distorted perception of the children's body image, and there is a tendency to underestimate the true nutritional status of the children¹⁶.

The lack of parental perception about the nutritional status of the children can condition the adoption of preventive measures or treatment to states of excess weight. Thus, the identification of low weight / overweight / obesity in toddlers is fundamental for the implementation of prevention and intervention strategies as early as possible.

In order to intervene on the problem of low weight / overweight / obesity in the child, it is important for the nurse to evaluate the parental perception of the child's body image.

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