15 - CHILDHOOD OBESITY IN BRAZIL: A COMPARATIVE STUDY BETWEEN PNSN/1989 POF/2008-09 BETWEE CHILDREN AND 5 TO 9 YEARS OLD

TEÓFILO ANTONIO MÁXIMO PIMENTA,
RENATO ROCHA
Universidade de Taubaté – UNITAU, Taubaté/SP, Brasil
teofilomaximopimenta@gmail.com

INTRODUCTION

Observed in Brazil in recent years a significant increase in the percentage of obese children. According to IBGE (2010) in 2009, one in three Brazilian children aged 5 to 9 years were overweight recommended by the World Health Organization, therefore, point overweight and obesity as a public health problem, emerging as a concern of the whole society.

Obesity is classified as an epidemic. Associated with capitalist logic, the process of urbanization, technological development and globalization. Thus, consider obesity as a multifactorial disease is the best way for a good intervention. In this sense the causes can be attributed to different factors such as genetic, psychological, medical and sociocultural. Especially among children in industrial societies and, due to too much consumption of industrial products,hours watching television and video game, not encouraged physical activity and few public sector initiatives in stimulating physical activity are important factors that could possibly contribute to its aggravation.

The great problem of obesity is the development of diseases such as diabetes, cardiovascular disease, cancers, reduced functional capacity, quality and life expectancy, osteoarticular diseases,mechanical limitations, difficulty breathing, skin problems and joint pain.

An important study that shows the transition of the nutritional status of Brazilian malnutrition to obesity was the Consumer Expenditure Survey / POF (2008-2009), published in 2010. The study was conducted by IBGE in partnership with the Ministry of Health conducted interviews, measurements of weight and heightof people in their homes in all states and the Federal District and compared with the National Study on Family Expenses / ENDF(1974-75) and the National Health and Nutrition / PNSN (1989).

According points POF - 2008/09 overweight and obesity in Brazil jumped significantly between the 1989 survey and research for 2008/09. So think about what happened in Brazil in the gap of 20 years is needed to understand the evolution of obesity and seek help in its effective intervention. Thus, this paper aims to compare the data presented in the National Health and Nutrition (1989) with the Household Budget Survey - 2008/09 discuss and its main results for the overweight and obese children.

METHODOLOGY

This study takes a descriptive, qualitative and quantitative approach on the development of obesity in Brazil. The data were cut from the National Health and Nutrition / PNSN (1989) and the Consumer Expenditure Survey / POF (2008-2009), held in partnership with the IBGE and the Ministry of Health.

RESULTS

According to HBS 2008-2009 the number of Brazilian children between 5 and 9 years of age overweight was 33.5%. Among the16.6% of boys interviewed were considered overweight and 11.8% of girls were in the same nutritional status. Comparing children from urban areas to the rural area of note was a significant difference in the prevalence of overweight as shown in table 1.

Table 1 - Frequency of overweight in urban and rural areas (%)

Gender	Urban Area	Rural Area
Boys	37,5	23,9
Girls	33,9	24,6

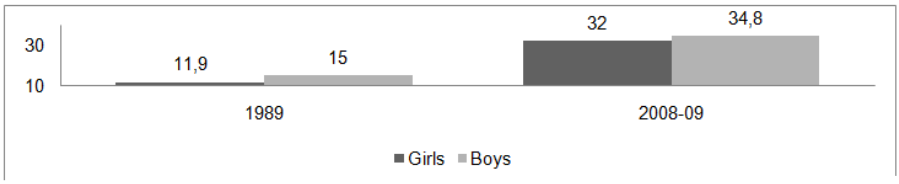
Source: IBGE

The Southeast is highlighted in two situations. In the first situation by owning 40.3% of boys and 38% of overweight girls and the second state to have more than one fifth of the population obese children.

The Midwest has increased considerably over 50% in 20 years from 13.8% in 1989 to 37.9% in 2008-09, in boys. In the same period the growth in girls was higher in the southeast region of 15% rose to 37.9%, obtaining the same expression that the Midwest.

The survey revealed quantum leap in the number of overweight children over 20 years in 1989 were 15% boys and 11.9% of girls, from 34.8% in 2008-09 to 32% of boys and girls (Figure 1).

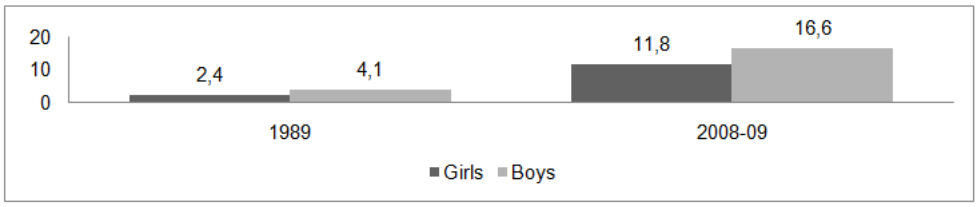
Figure 1 - The development of overweight in Brazilian children 5-9 years old over 20 years (%)



Source: IBGE

Obesity has grown significantly in the same period, four times with the boys (4.1% in 1989 to 16.6% in 2008) and five times in girls(2.4% to 11.8%, respectively) (Figure 2).

Figure 2 - The development of obesity in Brazilian children 5-9 years old over 20 years (%)



Source: IBGE

DISCUSSION

Comparing the PNSN (1989) and POF (2008-09) there is the significant increase in childhood obesity, both in girls as in boys, aged between 5 and 9 years. From these results we can think of the specificity of the Brazilian case of rapid evolution of obesity in a short time. Marchi-Alves et al. (2011), studies have found changes in their nutritional status in the scenario. We live in an epidemiological transition, from malnutrition to obesity and overweight. They reported that in 2004, the first time, the number of overweight people has surpassed the number of undernourished in the world.

To Fisberg Oliveira (2003, p. 107-108) "the increased consumption of foods high in simple sugars and fats with high energy density, and reduced physical exercise, [...] as well as advances technology such as computers and video games could somehow explain the higher prevalence of obesity. " Analyzing the phenomenon in this light we see how complicated it is to intervene on childhood obesity.

One of the many factors linked to the growth of individuals who are overweight, especially among children, the increase in violence is presented mainly in large cities, generating confinement in homes. For this reason the child ends up spending more time in front of the television, video games and computer. According to Oliveira et al. (2003, p. 149), "the facilities the modern world as a possibility of the use of TV, phones, video games, computers, among others, [...], also lead to a sedentary lifestyle."

We agree with Fragoso (2009), that violence has emptied the streets and public spaces imprisoning children in their homes, stealing their childhood, that television has contributed to its market-oriented logic, the child form the consumer, the supermarkets, with their sales strategies, put their goods in the visual field - the height of children encouraging them to use, and the factories invest in attractive packaging, with television characters to win this slice of small consumers, parents, due to his absence in home to seek compensation through out this period of consumption.

Malina and Silva (2003), indicated that no relationship between overweight individuals and prolonged in front of the television.The association of prolonged daily that the Brazilian child is watching television and low physical activity are contributing factors to the occurrence of overweight and obesity in children.The authors recommend that interdisciplinary teams are to participate in these factors. Suggesting that the decrease in the time of the child in front of the television and the increased level of physical activity interventions prove particularly important in the overweight population.

According to Roschel et al. (2006, p. 98), obesity has been defined in general as the "result of a caloric intake that exceeds caloric expenditure." Because of globalization, we acquired behaviors of other cultures, being the strongest point in the American food. An example that expresses well this proposition was that "from the twentieth century began to be observed an increase in the portions of food eaten in the U.S." coinciding with the strong role of marketing in the food industry "(NESTLE and YOUNG, 2002 apud. OLIVEIRA and FISBERG, 2003, p. 108), then our society incorporates this logic.

According to Mendonça and Anjos (2004) Obesity can be defined as a chronic degenerative disease, non-transferable, characterized by disorder induced by nutritional status in chronic imbalance between energy intake and expenditure. Brandão et al. (2005) argue that when obesity is present in childhood and adolescence likely to remain and be extended to adult life is great, so increasing morbidity and mortality.

For Pine and Petroski (1999, p. 62) the daily life of our society encourages "growing the economy of physical effort, causing an imbalance between food intake and energy consumption, which makes the resulting increase in the accumulation of fat body ".

Because of these numerous triggering factors, we can say that obesity is constituted as a problem of global dimension in modern society, which is associated the development of capitalism, population growth, technological development, the process of industrialization, globalization and the stimulus to a sedentary lifestyle among others. These factors contributed to the emergence of obesity as a public health problem worldwide and contributes to the maintenance and growth of the problem. Obesity is an epidemic and was walking quickly or "it is characterized as a pandemic for many" (LANCHA JUNIOR and LANCHA, 2006, p. 2).

Thus it is indisputable that public policies are fundamental regarding the control and reduction of suffering an epidemic of obese children. Such an attitude is justified when we see what Save (2006) reported after studying the genetics associated with childhood obesity. She points out that children of obese mother and father have 80% chance of becoming obese and that if one parent is obese the chance is 40% and if both parents are obese child has a 10% chance of becoming obese.

In addition to impairment in physical health consequences of obesity has as psychological damage, economic and social to the individual and his family. The obese child has difficulty in participating in group games that include movement. They are often victims of bullying, which can compromise their self-esteem and increasing their anxiety when exposed in public. According to Luiz et al. (2005) factors such as anxiety, depression and deficit social competence coexist concurrently with childhood obesity. The authors also call attention to the discrimination that obese children suffer in their social and behavioral problems that can present.

CONCLUSION

In Brazil there was an increase from 9% to 33% in the number of children 5 to 9 years of age overweight. With respect to obesity grew significantly over the 20 years, with growth of 4.1% in 1989 to 16.6 in 2008 in both boys and girls from 2.4% to 11.8% in the same period.

We emphasize that the government and society should be mobilized when it comes to finding solutions for treatment and prevention of childhood obesity. An interesting alternative would be the creation or expansion of local offices of interdisciplinary teams in public health services, which could help to reverse this alarming picture.

We observed that the growth of childhood obesity has been linked to socio-cultural factors, an association of sedentary habits the lack of security, the pressure to consumption and the changes in contemporary families. So with all this complexity, it is necessary the intervention of various professionals, working in interdisciplinary teams in the treatment of obese children.

REFERENCES

BRANDÃO, A. P.; BRANDÃO, A. A.; BERENSON, G. S.; FUSTER, V. Síndrome metabólica em crianças e adolescentes. **Arquivos Brasileiros de Cardiologia**, Rio de Janeiro, v. 85, n. 2, p. 79-81, 2005.

IBGE. Pesquisa de Orçamentos Familiares (POF_2008-2009). 2010. Disponível em:<http://www.ibge.gov.br/home/presidencia/noticias/noticia_visualiza.php?id_noticia=1699&id_pagina=1>. Acesso em 17 ago.2011.

FRAGOSO, P. A. D. A experiência da regulação das campanhas publicitárias de cigarros como subsídio para a comunicação de alimentos direcionados ao público infantil no Brasil. In: VIVARTA, V. (Org.). I**nfância e Consumo: estudos no campo da comunicação.** Brasília: ANDI; Instituto Alana, 2009. p. 47-58.

LANCHA JÚNIOR, A.H; LANCHA, L.O.P. Conceito de nutrição e exercício relacionado a obesidade. **In: Obesidade: uma abordagem multidisciplinar.** LANCHA JÚNIOR, A.H. Rio de Janeiro: Guanabara Koogan, 2006. p. 1-12.

LUIZ, A. M. A. G.; GORAYEB, R.; LIBERATORE JUNIOR, R. D. R.; DOMINGOS, N. A. M. Depressão, ansiedade e competência social em crianças obesas. **Estudos de Psicologia**, Maringá, v. 10, n. 1, p. 35-39, 2005.

MALINA, R. M.; SILVA, R. C. R. Sobrepeso, atividade física e tempo de televisão entre adolescentes de Niterói, Rio de Janeiro, Brasil. **Revista Brasileira de Ciência e Movimento**, Brasília, v. 11, n. 4, p. 63-66, 2003.

MARCHI-ALVEZ, L. M.; YAGUI, C. M. RODRIGUES, C. S.; MAZZO, A.; RANGEL, E. M. L.; GIRÃO, F. B. Obesidade infantil ontem e hoje: importância da avaliação antropométrica pelo enfermeiro. **Escola Anna Nery,** Rio de Janeiro, v. 15, n. 2, p. 238-244, 2011.

MENDONÇA, C. P.; ANJOS, L. A. Aspectos das práticas alimentares e da atividade física como determinantes do crescimento do sobrepeso/obesidade no Brasil. **Caderno de Saúde Pública,** Rio de Janeiro, v. 20, n. 3, p. 698-709, 2004.

OLIVEIRA, A. M. A.; CERQUEIRA, E. M. M.; SOUZA, J. S.; OLIVEIRA, A. C. Sobrepeso e Obesidade Infantil: Influência de Fatores Biológicos e Ambientais em Feira de Santana, BA. **Arquivos Brasileiros de Endocrinologia e Metabologia, São Paulo**, v. 47, n. 2, p. 144-50, 2003.

OLIVEIRA, C.L.O; FISBERG, M. Obesidade na infância e adolescência: uma verdadeira epidemia. **Arquivos Brasileiros de Endocrinologia e Metabologia**, São Paulo, v. 47, n. 2, p. 107-108, 2003.

PINHO, R.A; PETROSKI, E.L. Adiposidade corporal e nível de atividade física em adolescentes. **Revista Brasileira de Cineantropometria & Desempenho Humano**, Florianópolis, v. 1, n. 1, p. 60-68, 1999.

ROSCHEL, H.; LANCHA, L. O. P.; VIEIRA, P. Obesidade e atividade física. In: LANCHA JR, A. H. **Obesidade: uma abordagem multidisciplinar**. Rio de Janeiro: Guanabara Koogan, 2006. p, 97-124.

SALVE, M. G. C. **Obesidade e peso corporal: riscos e conseqüências.** Movimento & Percepção, Espírito Santo do Pinhal, v. 6, n. 8, p. 29-48, 2006.

Teófilo Antonio Máximo Pimenta
R. Reverendo Kennedy, 149 – Pindamonhangaba/ SP – Brasil – CEP: 12402-330
teofilomaximopimenta@gmail.com (12) 9600-6996

CHILDHOOD OBESITY IN BRAZIL: A COMPARATIVE STUDY BETWEEN PNSN/1989 POF/2008-09 BETWEEN CHILDREN FROM 5 TO 9 YEARS OLD

ABSTRACT

Introduction: Obesity is considered the biggest concern facilities accompanied by the achievements of the daily observed with advancing technology. It has also caused by multiple factors that result in excessive accumulation of fat in the body can be linked to the onset of diseases such as hypercholesterolemia, hypertriglyceridemia, hypertension, diabetes, appearing in childhood. Thus, early identification of childhood obesity is important, since the obese child can be tomorrow's obese adult. Method: This paper aims to compare the data on the incidence of overweight and obesity in children aged 5 to 9 years of age with the National Health and Nutrition/PNSN (1989) and the Consumer Expenditure Survey 2008-09. Results: We observed increase in the percentage of overweight children in 20 years comparison (nearly from 9% to 33% from 1989 to 2008, respectively). Thus, in Brazil there was an increase in the incidence of overweight and / or obesity in children in just over 20% in the period 1989 to 2008. Observed a growth of 4.1% from 1989 in 2008 to 16.6% in boys and in girls from 2.4% to 11.8% in the same period. Conclusion: With respect to obesity grew significantly over the 20 years. We observed that the growth of childhood obesity has been linked to socio-cultural factors, an association of sedentary habits the lack of security, the pressure to consumption and the changes in contemporary families. So with all this complexity, it is necessary the intervention of various professionals in interdisciplinary teams in the treatment of obese children.

KEYWORDS: Interdisciplinarity. Childhood overweight and obesity. Modernity.

OBÉSITÉ DE L' ENFANT AU BRÉSIL: UNE ÉTUDE COMPARATIVE ENTRE PSNS/1989 POF/08-09 ENTRE LE ENFANTS ET 5 À 9 ANS

RÉSUMÉ

Introduction: Aujourd'hui, l'obésité est considérée comme une préoccupation principalement en raison de son augmentation chez les enfants. Elle est causée par des facteurs multiples qui se traduisent par une accumulation excessive de graisse dans le corps et peut être liée à l'apparition de maladies comme l'hypercholestérolémie, l'hypertriglycéridémie, l'hypertension, le diabète, des pathologies auparavant présentes uniquement chez les adultes. Méthode: Cette étude visait à comparer les données sur l'incidence de surpoids et d'obésité chez les enfants âgés de 5 à 9 ans avec l'Enquête Nationale sur la Santé et la Nutrition / PNSN (1989) et l'Enquête sur les Budgets Familiales 2008-2009. Résultats: Le pourcentage d'enfants en surpoids ont presque triplé entre 1989 et 2008, passant d'environ 9% à 33%, respectivement. En comparant la prévalence de l'obésité et le sexe, nous avons observé une croissance de 4,1% à 16,6% chez les garçons et de 2,4% à 11,8% chez les filles dans la même période. Conclusion: Au cours des 20 dernières années a y lieu une augmentation significative de l'obésité infantile au Brésil. Cette augmentation s'est produite aussi bien pour les deux garçons que pour les filles, toutefois, elle a été plus

importante chez les filles. Puisque la croissance de l'obésité infantile est liée à des changements socioculturels (habitudes sédentaires, la pression à la consommation effrénée des aliments riches en calories, entre autres) et l'émergence de complications pathologiques (physique et psychologique), il faut un diagnostic précoce de l'obésité chez les enfants et la création d'équipes interdisciplinaires pour la prévention et le traitement de l'obésité.

MOTS-CLÉS: Interdisciplinaire. Le surpoids et l' obésité chez lês enfants. Modernité.

LA OBESIDAD INFANTIL EM BRASIL: UM ESTUDIO COMPARATIVO ENTRE INSN/1998 Y IPF/2008-09, EN LOS NIÑOS DE 5 A 9 AÑOS.

RESUMEN

Introducción: La obesidad es considerada como la mayor preocupación de la actualidad, acompañada por las sencillas tareas diarias, observado con el avance tecnológico. También, hay la causa multifactorial que no sólo favorece a la acumulación excesiva de grasa en el cuerpo, así puede ser relacionado con la aparición de enfermedades como: hipercolesterolemia, hipertrigliceridemia, hipertensión, diabetes, desde la infancia. Por lo tanto, la identificación temprana de la obesidad infantil es importante, ya que el niño obeso puede volverse el adulto obeso mañana. Método: Este trabajo pretende comparar los datos sobre la incidencia de sobrepeso y obesidad en niños de 5 a 9 años de edad, conjuntamente a la Investigación Nacional de Salud y Nutrición / INSN (1989) y la Investigación de Presupuestos Familiares 2008-2009. Resultados: Se ha observado el aumento en el porcentaje de niños con sobrepeso en 20 años de comparación (aproximandamente de 9% a 33%, entre 1989 y 2008). Por lo tanto, en Brazil hubo un aumento en la incidencia de sobrepeso y/u obesidad en los niños, en poco más de 20% en el período entre 1989 hasta 2008. Se ha observado un crecimiento de 4,1% a partir de 1989, en 2008, a 16,6% en los niños, y las niñas de 2,4% a 11,8% en el mismo período. Conclusión: Sin embargo En síntesis, la obesidad creció de manera significativa en los 20 años. Hemos observado que el crecimiento de la obesidad infantil se ha relacionado con factores socio-culturales; una asociación de los hábitos sedentarios, la falta de seguridad, la presión para el consumo y los cambios en las familias contemporáneas. Así que con toda esta complejidad, es necesario la intervención de varios profesionales en equipo Interdisciplinario en el tratamiento de los niños obesos.

PALABRAS CLAVE: Interdisciplinario. Sobrepeso y obesidad infantil. Modernidad.

A OBESIDADE INFANTIL NO BRASIL: UM ESTUDO COMPARATIVO ENTRE A PNSN/1989 E A POF/2008-09 ENTRE CRIANÇAS DE 5 A 9 ANOS DE IDADE

RESUMO

Introdução: A obesidade é considerada preocupação contemporânea acompanhada de facilidades nas realizações das tarefas diárias observado com o avanço da tecnologia. Possui causa multifatorial que além de resultar em acúmulo excessivo de gordura no organismo, pode estar vinculada ao acometimento de doenças, como: hipercolesterolemia; hipertrigliceridemia; hipertensão arterial; diabetes, sugindo ainda na infância. Assim, a identificação precoce da obesidade infantil é importante, uma vez que a criança obesa pode ser o adulto obeso de amanhã. Método: O presente artigo buscou comparar os dados referentes a incidência de sobrepeso e obesidade em crianças de 5 a 9 anos de idade junto a Pesquisa Nacional sobre Saúde e Nutrição/PNSN (1989) e a Pesquisa de Orçamentos Familiares 2008-2009. Resultados: Foi observado aumento na porcentagem de crianças com sobrepeso em 20 anos de comparação (aproximandamente de 9% para 33% de 1989 a 2008, respectivamente). Assim, no Brasil ocorreu aumento significativo na incidência de sobrepeso e/ou obesidade infantil em pouco mais de 20% no período compreendido entre 1989 a 2008. Obsevou-se crescimento de 4,1% de 1989 para 16,6% em 2008 nos meninos e, nas meninas de 2,4% para 11,8% no mesmo periodo. Conclusão: Com relação a obesidade houve crescimento significativo ao longo dos 20 anos. Observamos que o crescimento da obesidade infantil vem atrelado aos fatores socioculturais, associação de hábitos sedentários a ausência de segurança, a pressão pelo consumo e as mudanças ocorridas nas famílias contemporâneas. Assim, com toda essa complexidade, faz-se necessário a intervenção de diferentes profissionais em de equipes interdisciplinares no tratamento de crianças obesas.

PALAVRAS-CHAVE: Interdisciplinaridade. Sobrepeso e obesidade infantil. Modernidade.