## ARTICLE IN PRESS

J Pediatr (Rio J). 2016;xxx(xx):xxx-xxx



# Jornal de Pediatria



www.jped.com.br

#### ORIGINAL ARTICLE

- Association between maternal socioeconomic factors and nutritional outcomes in children under 5 years of
- ₄ age<sup>☆,☆☆</sup>
- ola Tatiane Géa-Horta<sup>a</sup>, Mariana S. Felisbino-Mendes<sup>a</sup>, Renzo J.F. Ortiz<sup>b</sup>,
- Gustavo Velasquez-Melendez<sup>c,\*</sup>
- <sup>a</sup> Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brazil
- 8 Q2 b Fundação Oswaldo Cruz (Fiocruz), Rio de Janeiro, RJ, Brazil
- c Universidade de São Paulo (USP), São Paulo, SP, Brazil
- Received 17 December 2015; accepted 19 February 2016

### **KEYWORDS**

11

12

13

14

15

16

19

20

21

22

23

24

Stature; Overweight; Socioeconomic factors; Child; Epidemiological surveys; Brazil

#### **Abstract**

*Objective*: To estimate the association between maternal socioeconomic factors and the occurrence of nutritional outcomes in children under five years of age in a representative sample of the Brazilian population.

Methods: This was a cross-sectional study that evaluated data from the latest National Survey of Children and Women's Demographics and Health, carried out in Brazil in 2006–2007. Maternal employment and maternal level of schooling were the main exposures. The following nutritional outcomes in children were considered: height/age <—2 standard deviations (SD) for short stature and BMI/age >2SD for overweight. Generalized estimating equations (GEE) were utilized as the regression method.

Results: After adjustments, it was observed that children whose mothers had low level of schooling had a higher chance of having short stature (OR = 3.97, 95% CI, 1.23–12.80) and children whose mothers worked outside the home were more likely to have excess weight (OR = 1.57, 95% CI, 1.02–2.42). Maternal employment was not associated with short stature in children (OR = 1.09, 95% CI, 0.67–1.77).

E-mail: guveme@ufmg.br (G. Velasquez-Melendez).

#### http://dx.doi.org/10.1016/j.jped.2016.02.010

0021-7557/© 2016 Sociedade Brasileira de Pediatria. Published by Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

<sup>\*</sup> Please cite this article as: Géa-Horta T, Felisbino-Mendes MS, Ortiz RJF, Velasquez-Melendez G. Association between maternal socioeconomic factors and nutritional outcomes in children under 5 years of age. J Pediatr (Rio J). 2016. http://dx.doi.org/10.1016/j.jped.2016.02.010

<sup>\*\*</sup> Study carried out at the Department of Maternal-Child and Public Health, Escola de Enfermagem, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil.

<sup>\*</sup> Corresponding author.

32

33

37

43

45

47

51

52

53

54

58

59

60

61

62

65

66

67

68

71

72

73

74

75

76

77

78

2 Géa-Horta T et al.

26 27 28 29 30 31 Conclusion: Maternal level of schooling was associated with short stature in children and maternal employment with overweight, indicating the need to take into account the socioeconomic factors when proposing programs and strategies aimed at health and nutrition improvement of children, considering inter-sectoral interventions.

© 2016 Sociedade Brasileira de Pediatria. Published by Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### PALAVRAS-CHAVE

Estatura; Sobrepeso; Fatores socioeconômicos; Criança; Inquéritos epidemiológicos; Brasil

# Associação entre fatores socioeconômicos maternos e desfechos nutricionais em criancas menores de 5 anos

#### Resumo

Objetivo: Estimar a associação entre fatores socioeconômicos maternos e a ocorrência de desfechos nutricionais nas crianças menores de cinco anos em uma amostra representativa da população brasileira.

Métodos: Trata-se de um estudo transversal que avaliou dados da última Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher, realizada no Brasil em 2006-2007. Trabalho materno e escolaridade materna foram as exposições principais. Considerou os seguintes desfechos nutricionais nas crianças: estatura/idade <-2 desvios padrão (DP) para baixa estatura e IMC/idade >2DP para excesso de peso. Utilizou-se o método regressão de equações de estimação generalizadas (GEE).

Resultados: Após ajustes, observou-se que crianças cujas mães possuíam baixa escolaridade tiveram maiores chances de baixa estatura (OR = 3,97; IC 95% 1,23-12,80) e crianças cujas mães trabalhavam fora de casa apresentaram maior chance de excesso de peso (OR = 1,57; IC 95% 1,02-2,42). O trabalho materno não se associou a baixa estatura em crianças (OR = 1,09; IC 95% 0,67-1,77).

Conclusão: Escolaridade materna associou-se à baixa estatura nas crianças e trabalho materno ao excesso de peso, indicando a necessidade de se levar em conta os fatores socioeconômicos na proposta de programas e estratégias de melhorias da saúde e nutrição das crianças, tendo em vista intervenções intersetoriais.

© 2016 Sociedade Brasileira de Pediatria. Publicado por Elsevier Editora Ltda. Este é um artigo Open Access sob uma licença CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### Introduction

The increasing prevalence of childhood excess weight is a global public health problem, a recent phenomenon that has occurred over the past three decades and can affect children's health in the short and long term. <sup>1,2</sup> In 2010, the number of overweight children worldwide was 42 million; it increased around 10–40% in most developing countries over the last 10 years, being more prevalent in the age group of five and six years of age. <sup>3</sup> A population-based survey performed in Brazil estimated that 7.3% of children under five years of age were overweight, with a higher prevalence in the South of Brazil (9.7%). <sup>4</sup>

On the other hand, short stature is also a public health problem in Brazil<sup>5</sup> and in most developing countries, often associated with childhood morbimortality.<sup>6-8</sup> In Brazil, there has been a significant reduction in its prevalence, which was attributed to improved sanitation, increased maternal level of schooling, greater access to health care and consumer goods, and the decline in fertility.<sup>9</sup>

Among the factors jointly attributed to malnutrition in the long-term and childhood excess weight, one may cite weight gain during pregnancy, inadequate child nutrition, single mother, parental overweight, pre-pregnancy weight, physical inactivity, lack of breastfeeding, and greater inclusion of women in the labor market.  $^{3,8-10}$ 

Maternal employment affects the mother-child relationship and family dynamics, as it makes it difficult to conciliate time for household chores, work outside the home, and care for the children. In low- and middle-income countries, economic crisis exercises greater pressure toward the participation of women in the labor market as a source of supplemental family income. Additionally, low social investments and the lack of infrastructure for child care in these countries overburden women, who are responsible for domestic and economic activities of the family. Such a situation can result in harm to the child, such as less contact with the mother and impaired growth and development. 12

The association between maternal employment and childhood excess weight has been observed mainly in populations of developed countries. Studies have shown that maternal employment is associated with an increased risk of weight gain in children<sup>2,13,14</sup>; on the other hand, the association between maternal employment with nutritional deficit in the long term has been demonstrated in populations from South Asia and Africa. <sup>15,16</sup>

In addition to maternal employment, maternal level of schooling is one of the main factors that can influence

JPED 389 1-7

80

81

92

93

94

95

100

101

102

## Download English Version:

# https://daneshyari.com/en/article/8809867

Download Persian Version:

https://daneshyari.com/article/8809867

<u>Daneshyari.com</u>