RR cannot be estimated, since it is the possibility of calculating prevalence, and not incidence.[4]

Another important aspect verified was that the 95%CI of estimators used was not published. In our opinion, their visualization is of great help in a proper analysis of results, because it allows estimating adequacy of sample size and verifying statistical significance of the association, besides being an extra aspect when searching for causal inference.

We hope to have contributed with our observations and suggest that, in studies of that nature, preference is given to estimation of strength of association by PR, always showing its 95%CI. Therefore, applicability and interpretation of statistical tools used in epidemiological studies are adequate to their purposes.

We stress the importance of that article and reinforce that reported inadequacies do not diminish the merit, nor invalidate results; presentation forms only need to be corrected.

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1. Rodrigues AN, Perez AJ, Carletti L, Bissoli NS, Abreu GR. The association between cardiorespiratory fitness and cardiovascular risk in adolescents. J Pediatr (Rio J). 2007;83:429-35.
2. Thompson ML, Myers JE, Kriebel D. Prevalence odds ratio or prevalence ratio in the analysis of cross sectional data: what is to be done? Occup Environ Med. 1998; 55; 272-7.
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Authors' reply

Dear Editor,

We read and appreciated the contributions sent by Professor Altacílio Nunes concerning the article "The association between cardiorespiratory fitness and cardiovascular risk in adolescents"[1] about application of statistical methods, an area in which we have much to learn.

The authors would like to clarify that, in that type of study, odds ratio (OR), although numerically higher, as shown in Tables 3 and 4,[1] follows relative risk (RR) and is a good estimate for it.[2] Such method (RR) has been recommended as first choice to determine exposure risk to a certain disease, and perhaps the most adequate to the objectives of that study.

However, it is inadequate in cross-sectional research studies, such as that being discussed here. Option for not using prevalence ratio (PR), although it can be used, is due to the fact that, in cross-sectional studies,[3] OR allows identification of possible associations in which PR may lead to false conclusions.[2]

The authors acknowledge not drawing attention to the fact that, although RR has lower values for investigated associations, due to methodological inadequacy, those that should be considered are OR values, an estimated approximation of RR. The authors do not acknowledge inadequacy of using OR in their research study.

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3. Kleinbaum DG, Kupper LL, Morgenstern H. Epidemiologic research. Beltmont, CA; Lifetime Learning; 1982.

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Data with unexpected values should be checked

Dear Editor,

I would like to stress the quality of the article "Nutritional assessment of iron status and anemia in children under 5 years old at public daycare centers," by Vieira et al.[1] (Jornal de Pediatria, Vol. 83, No. 4, 2007), and also ask the authors if there might be a typing error in the values of free erythrocyte protoporphyrin (FEP) in Table 3: should not it be, for instance, 67 (61-74), 55 (53-57) and 50 (48-52)? Even if they are geometric means (antilogarithm of arithmetic mean of original value logarithms), I cannot understand how transformed values were 6.7 (6.1-7.4), etc., as shown in Table 3 (compare with the value of 69.6% of children who had FEP levels higher than 40 µmol/mol heme, Table 1). Another possibility that I considered was that those values are actually arithmetic mean of original value natural logarithms (base e), but that is not included in the methodology, which makes this hypothesis less likely.

I would also like to confirm the values of serum ferritin, shown in Table 3, since the magnitude of such values is possible, although equally "weird," since they seem to be a little low in relation to the information in Table 1, which shows that 30.8% of the children had values lower than 12 ng/mL.

Thank you for being so kind to forward this request to the authors.

Reference

1. Vieira AC, Diniz AS, Cabral PC, Oliveira RS, Lóla MM, Silva SM, et al. Nutritional assessment of iron status and anemia in children under 5 years old at public daycare centers. J Pediatr (Rio J). 2007;83(4):370-376.

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Authors' reply

Dear Editor,

With regard to the article,[1] we would like to inform that the comments made by Dr. Marcos Borato Viana are entirely pertinent, since the data presented concern the values of serum ferritin (SF) and free erythrocyte protoporphyrin (FEP) in base 10 antilogarithm, and not in natural logarithm, as recommended. In this sense, if possible, we request inclusion of the corrected values in Table 2 below. We also request publication of the correct information for the values of SF and FEP in Table 3. Coherently, in Methods, page 371, fifth paragraph, fourth line, (log10) should read (logn).

Reference

1. Vieira AC, Diniz AS, Cabral PC, Oliveira RS, Lóla MM, Silva SM, et al. Nutritional assessment of iron status and anemia in children under 5 years old at public daycare centers. J Pediatr (Rio J). 2007;83(4):370-376.

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Table 2 - Iron parameters, by sex, in children < 5 years old in public daycare centers in Recife, PE, Brazil, 1999

	Sex				
	Male		Female		
Parameters	n	X ± SD	n	X ± SD	p*
Hb (g/dL)	87	10.5±1.5	66	10.8±1.4	0.26
SF (ng/mL)	72	15.1 (12.3-18.4)†	58	17.1 (14.3-20.7)†	0.32
FEP (µmol/mol heme)	76	55.3 (50.4-60.6)†	59	50.6 (45.0-56.9)†	0.24
SI (µg/dL)	83	42.0±25.5	65	48.4±32.1	0.18
TIBC (400 µg/dL)	85	317.1±64.6	65	297.9±52.7	0.05
%TSat (< 16%)	50/83‡	60.2±10.2§	39/65‡	60.0±12.3§	0.98||

FEP = free erythrocyte protoporphyrin; Hb = hemoglobin; SD = standard deviation; SF = serum ferritin; SI = serum iron; TIBC = total iron binding capacity; %TSat = transferrin saturation percentage.
* Student's *t* test for unpaired samples.
† Geometric mean + confidence interval.
‡ Total male-female.
§ 95% confidence interval.
|| Chi-square test.

Table 3 - Means and standard deviations for iron parameters, by age, in children < 5 years old at public daycare centers in Recife, PE, Brazil, 1999

	Age (months)			
	0 | - 24	24 | - 48	≥ 48	
Parameters	X ± SD	X ± SD	X ± SD	p*
Hb (g/dL)	9.5±1.3[a]	10.8±1.4[b]	11.3±1.2[b,c]	0.00
SF (ng/mL)	12.0 (8.2-17.3)†	16.3 (13.5-20.1)†	19.0 (14.9-24.0)†	0.08
FEP (µmol/mol heme)	80.8 (66.5-98.2)†a	50.8 (44.7-54.6)†b	43.2 (40.4-49.4)†b,c	0.00
SI (µg/dL)	35.4±25.3	47.1±28.5	45.2±30.5	0.2
TIBC (µg/dL)	340.3±73.9[a]	305.4±56.9[b]	293.8±49.7[b,c]	0.01

FEP = free erythrocyte protoporphyrin; Hb = hemoglobin; SD = standard deviation; SF = serum ferritin; SI = serum iron; TIBC = total iron binding capacity.
* p = ANOVA + Scheffé (different letters indicate different means between age groups at a level of 5%).
† Geometric mean + confidence interval.