
Planning in case control studies: A comment on the relationship between lung function and indoor air pollution among rural women in the Niger Delta region of Nigeria

Sir,

This is in reference to the article, “The relationship between lung function and indoor air pollution among rural women in the Niger Delta region of Nigeria” published in Lung India 2014;31:110-5.

The authors have done a commendable task to evaluate the association between the long-term biomass smoke exposure and lung function among the women who smoke fish in the Niger Delta region of Nigeria. For this survey, the authors conducted a case control study (Material and methods) with 342 women engaged in smoking of fish as cases and 346 women from the same community who were mainly engaged in fishing but were not involved in smoking of fish as controls.^[1]

However I have a few concerns regarding this study.

As this is a case control study, the authors should have matched for the confounding variables which can affect the outcome of the study. The authors have mentioned that

fish smoking process is usually carried out in indoors in drying huts and have explained the condition of these dry huts where the cases used to work. However the authors have not matched the cases with controls on the account of the condition of the homes of all those women who were taken as controls.

Housing, being a part of the total environment of man, is responsible for the status of man’s health and well being. A strong relationship can be established between the poor housing and the respiratory infections such as bronchitis.^[2]

The authors should have matched for the indoor environmental factors also e.g. the building material used in the roof and walls, ventilation; combustion equipment used at home, any coal combustion, any aerosol sprays being used etc. The indoor environment in any building is a result of the interaction between the site, climate, building system, construction techniques, contaminant sources and building occupants.^[3]

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3. Factors Affecting Indoor Air Quality. Available from: http://www.cdc.gov/niosh/pdfs/sec_2.pdf. [Last accessed on 2014 Apr 03].

REFERENCES

1. Umoh VA, Peters E. The relationship between lung function and indoor air pollution among rural women in the Niger Delta region of Nigeria. *Lung India* 2014;31:110-5.
2. Park K. Housing and health. In: Park K, editor. *Park's Textbook of Preventive and Social Medicine* 21st ed. Banarsidas Bhanot Publishers; 2011. p. 693.

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