ABSTRACT

BACKGROUND:

Human immunodeficiency virus (HIV)-infected patients are known to present with increased frequency of respiratory symptoms and impaired ventilatory function. The study was done in Nnamdi Azikiwe University Teaching Hospital Nnewi.

OBJECTIVES: This study is aimed at determining the frequency and pattern of respiratory symptoms, as well as the pattern of ventilatory function in HIV positive patients. It also sets out to determine any association between ventilatory function and respiratory symptoms as well as CD4 count level.

SUBJECTS: A total of 80 HIV positive patients was recruited, together with 80 control subjects

MATERIALS AND METHODS: Materials used were a weighing scale, a height metre, a thermometer, a spirometer and questionnaires, sample bottle for CD4 count. Each subject read an informed consent proforma with explanation given where necessary before signing it. Each subject completed the questionnaire under the guidance of the researcher. Temperature, height and weight of each subject were measured. Thereafter ventilatory function tests were conducted on each subject by means of the spirometer. Blood sample was taken for CD4 count estimation.

RESULTS: 55.6% of HIV positive males and 47.7% of HIV positive females had respiratory symptoms, the commonest being cough, nasal stuffiness and breathlessness. Mean FEV₁, FVC and FEF25%-75% values were significantly lower in HIV positive males when compared to their HIV negative controls. Mean PEFR and FEV₁/FVC values were significantly lower in HIV positive females compared to their HIV negative controls. CD4 count level showed positive correlation with ventilatory function indices in both male and female HIV positive patients.

CONCLUSION: This study showed that HIV positive patients have high prevalence of respiratory symptoms as well as significant ventilatory function impairment.