

## **Determinants of default from tuberculosis treatment among tuberculosis patients at a hospital chest clinic in Gezira state, Sudan**

### **ABSTRACT**

**Background:** Default from tuberculosis (TB) treatment is a major health problem among tuberculosis patient. High rates of default are still reported all over the world, especially in Africa despite availability of effective TB treatment. This study aims to determine the determinants of default from TB treatment among tuberculosis patients at a hospital chest clinic in Gezira State, Sudan.

**Materials and Methods:** This is a retrospective cohort study design involving newly diagnosed tuberculosis patients from 1<sup>st</sup> January 2014 to 30<sup>th</sup> June 2015. Data was collected from patients' case file using pro-forma. Default from TB treatments refers to patient who had stopped taking anti-TB medication for a period of 2 consecutive months or more after being on anti-TB treatment. Data analysis used IBM SPSS version 22.0. Chi square test was performed to determine the association between default from TB treatment and socio-demographic factors, type of diagnosis, anatomical site of TB, TB treatment duration, follow-up sputum smear microscopy result, HIV/AIDS co-morbidity and type of referral. Binary logistic regression was conducted to identify the determinants of default from TB treatment.

**Result:** The default rate was 15.0 % among TB patients. The determinants of default from TB treatment were age of the patients, TB site and TB treatment duration.

**Conclusion:** The study revealed that the rate of default from TB treatment is high. Age of the TB patient, TB site and duration of treatment were determinants of default reflecting that reassurance of TB patients, health education in addition to shorter treatment regimens are important factors in preventing default from TB treatment.

**Keyword:** Default; TB site; Tuberculosis treatment; Sudan