

Rate and Factors Affecting Sputum Smear Non-conversion among Newly Bacteriologically Confirmed Tuberculosis Patients at Martin-Preuss Urban Clinic in Lilongwe, Malawi

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Abstract

Background: Tuberculosis (TB) remains a disease of public health importance in developing countries. A 2014 Malawi National TB prevalence survey demonstrated higher prevalence of TB in urban than rural areas.

Intervention or response: The National TB Control Program (NTP) has a surveillance system where all newly bacteriologically confirmed TB patients, either through baseline smear microscopy or Cepheid GeneXpert MTB/RIF assay, are routinely followed up with direct smear microscopy at two months of anti-TB chemotherapy to determine their ability to turn smear negative. In facility TB registers, we retrospectively reviewed records of newly bacteriologically confirmed TB patients at Martin-Preuss, an urban hospital, from Jan 2016 to Dec 2017 to assess the rate of sputum smear non-conversion.

Results: Out of 408 newly bacteriologically confirmed TB patients, 301(73.7%) and 107 (26.3%) were males and females respectively. Of the 408 patients, 333 (81.6%) and 75 (18.3%) baseline sputum smear densities of 2+, 3+ and 1+, scanty respectively. 4 patients (0.98%) had baseline GeneXpert MTB/Rif detected densities of very low and low, 43 (10.5%) medium and high. At 2 months sputum smear follow up, 367(89.9%) patients had converted to smear negative while 41(10.0%) patients were still smear positive, showing a prevalence rate of 10% within that review period.

Conclusion and key recommendations: Rigorous measures in TB case management by health care clinical teams during intensive phase of anti-TB treatment is required to prevent increase in sputum smear non conversion rates at two months follow up, which in turn may lead to treatment failure and thus drug resistant TB.



Biography:

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