Isoniazid preventative therapy (IPT) defaulting: Who is responsible?

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Introduction and problem statement

TB is the most common cause of morbidity and mortality among the HIV-infected population in South Africa; and studies have shown that TB accelerates the progression of HIV/AIDS. [1]

Isoniazid preventive therapy (IPT) is one of the interventions that the WHO and the South African NDOH recommend to prevent progression to active TB disease in people living with HIV (PLHIV). The WHO, with high quality of evidence, strongly recommends that these individuals receive IPT irrespective of their degree of immunosuppression.

Notwithstanding the absence of definitive evidence from randomised controlled trials on optimal duration of IPT in HIV-infected patients, data from several observational studies demonstrate that IPT is cost-effective and beneficial in that it combats low bacillary load in latent TB which serves as a reservoir for recurrent disease.

Aim

The aim of this study was to describe the incidence of tuberculosis among clients who received IPT, the defaulter rate among those who commenced with IPT therapy and the challenges concerning defaulting.

Methods

A quantitative non-experimental descriptive retrospective cohort study was utilised in a clinic in an industrial area adjacent to a formal urban settlement in a Health District. The clinic provides the full complement of HIV/AIDS/TB management to the inhabitants.

Consecutive sampling was used to obtain 441 applicable records for the study. Among the 441 clinic records, 104 of HIV-infected adult clients met the eligibility criteria and formed the sample. The inclusion criteria were: evidence that the patient tested HIV-positive; is older than 18 and has commenced with IPT. A self-developed data-capturing instrument, based on the objectives of the study and pre-tested, was used to gather the data.

Ethical approval was obtained from the Research Ethics Committee of the custodian university as well as from the applicable Department of Health, the District Department of Health and the Management of the Clinic. Anonymity and confidentiality were ensured, as files were coded with no names or numbers of patients.

Data was analysed, using the IBM SPSS statistical software program version 21. While descriptive statistics were used to describe the demographic characteristics, analytical statistics using the Chi-square test measured the associations between gender and age distributions of the respondents and those who completed IPT at six and nine months. The 95% level of confidence (95% CI) and a probability of p<0.05 were used as the definition of significance while comparing the groups.

Results

None of the 66 respondents who completed IPT at the end of nine months was diagnosed with TB at the end of data gathering. The study findings confirmed the results of other studies that IPT for at least six months or up to nine months successfully prevented TB disease. An incidence rate of 0.80 per 100 person years [2] and 2.3 per 100 person-years [3] was reported elsewhere.

A indicate in Figure 1, only five (13.2%) of the respondents who defaulted IPT treatment were responsible for the default. The other 33 (86.5%) defaulted because IPT was either not prescribed or out of stock.

Conclusions

It was evident that IPT for at least six months successfully prevented TB disease. Therefore, it remains a serious concern that inadequacies or possible incompetence of healthcare providers were the main reasons for defaulting Isoniazid Prevention Therapy, despite positive evidence of the effectiveness. It is however important to note that the study was conducted in the catchment area of one clinic, in one health district and cannot be generalised to all other contexts.

Bibliography


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