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MANAGING MULTIDRUG-RESISTANT TUBERCULOSIS IN HOSPITALIZED PATIENTS AT SIZWE TROPICAL DISEASES HOSPITAL: A FIVE YEAR REVIEW OF TREATMENT OUTCOMES

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RESEARCH REPORT ABSTRACT

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ABTSRACT

Management of multidrug-resistant tuberculosis (MDR-TB) is more expensive, lengthy and is associated with less favourable outcomes and more adverse reactions than management of susceptible tuberculosis. The aim of this study was to review the management and treatment outcomes of registered MDR-TB patients hospitalized at Sizwe hospital during a five-year period.

A cross-sectional study with both descriptive and analytic features was done on 237 MDR-TB patients hospitalized from the beginning of June 1998 to the end of May 2003. Data were analysed using SPSS version 12 Software. Main outcome measures were interim treatment outcomes at the end of hospitalization period. These outcomes comprised culture conversion rates, time to culture conversion, transfer out, interruption, and death rates. Multiple logistic regression analysis was performed to determine risk factors for poor treatment outcomes. These poor outcomes were defined as treatment interruption, failure and mortality rates.

The burden of institutional care for MDR-TB patients in this setting was found to involve high numbers of MDR-TB patients for whom the allocated hospital beds were insufficient. Patients with primary MDR-TB, who had no history of non-adherence to treatment, were paradoxically more likely to be hospitalized shortly after diagnosis. Acquired MDR-TB patients were mostly managed as outpatients immediately after diagnosis only to be hospitalized later due to persistent non-adherence or disease severity. Overall, acquired MDR-TB patients were hospitalized in larger numbers than those with primary disease. This reflects the higher prevalence of acquired MDR-TB compared to primary MDR-TB.

Culture turnaround time was on average 19 days. The overall culture conversion rate of the hospitalized patients was low at 41.9 percent. This low culture conversion rate resulted in protracted hospitalization periods and high interim mortality rates. The mean duration of hospitalization, 3.52 months, correlated favourably with the time interval to the first culture conversion of 2.96 months. Hospitalization did not guarantee the expected adherence to treatment. Surgical interventions were done belatedly with resultant high mortality outcomes.

The main reasons given by patients for refusing hospital treatment were visiting traditional healers, solving socioeconomic problems and attending to family matters. A large percentage of hospitalized patients were co-infected with HIV. HIV care and support was incomplete as antiretroviral drugs were not available at the hospital. Among the main findings of the study was the powerful influence HIV status had on poor hospitalization outcomes.

Recommendations arising from the study include the need to provide ARVs at the Sizwe hospital. Admission and discharge guidelines aimed at ensuring adequate beds are reserved for deserving patients should be formulated. Continuing education for service providers must be encouraged and rewarded. Infection control procedures at both community and health institution level ought to be vigorously promoted. Patients known to be hopelessly non-adherent should at least be partially hospitalized in the interest of public health.