

ABSTRACT

South Africa is one of the countries in sub-Saharan Africa that are severely affected by the HIV/AIDS pandemic. This epidemic has led to high mortality rates, decreased life expectancies, increasing poverty, and overburdened health systems.

Objective: To quantify the disease burden related to HIV/AIDS in Leratong Hospital, a level 2 public sector hospital in Gauteng Province of South Africa. In the context of the recent introduction of anti-retroviral therapy programme in the hospital, it is hoped that this study will assist in defining a baseline to which future evaluation of the programme will be compared.

Methods: This was a retrospective descriptive study on routinely collected hospital data. The records of all patients admitted into the four medical wards of the hospital in 2001 and 2004 (n=21,029) were analyzed. Data on their socio-demographic characteristics, discharge diagnoses, HIV status, clinical outcome and length of stay in the hospital were extracted and analyzed.

Results: More than half (52%) of the patients were aged between 21 and 40 years. Between the two years, the annual total number of admissions to the medical wards decreased by 6.6%, and this was more pronounced in the female wards where the decline was more than 10%. HIV-related diseases accounted for four out of the top five diseases in all patients. The proportion of chronic diseases, such as hypertension, diabetes, congestive cardiac failure and cerebrovascular diseases, decreased from 15.3% in 2001 to 14.3% in

2004. The average length of stay (ALOS) increased from 3.7 days in 2001 to 4.1 days in 2004.

Only 14% of all patients consented to HIV testing in the review period. Of these more than 90% were reactive to HIV. Although the proportion who had HIV tests decreased significantly from 16.9% in 2001 to 11% in 2004 ($p < 0.001$), the HIV positive rate increased significantly from 89.1% in 2001 to 92.4% in 2004 ($p < 0.001$). The proportion of patients admitted due to HIV-related diseases increased significantly from 52% in 2001 to 58% in 2004 ($p < 0.001$).

The crude mortality rate for all patients during the two years studied was 13.6%. This increased significantly from 12% in 2001 to 15% in 2004 ($p < 0.001$). Mortality was significantly higher in those patients with documented HIV results and those admitted with HIV-related diseases irrespective of their HIV status. While cause-specific mortality rate due to HIV-associated diseases either increased or remained very high, that due to diabetes mellitus decreased significantly between the two years studied ($p = 0.02$). Patients' length of stay in the hospital and mortality were both found to be associated with their age group, HIV status, diagnosis and year of admission.

The study has demonstrated some changes in the clinical profile of the patients towards a preponderance of HIV-related diseases and crowding out of other chronic non-infectious diseases. Based on these results, it is therefore recommended that all patients should have access to voluntary

counseling and testing (VCT) and emphasis should be placed on those diseases with high admission and mortality rates to improve patient care and outcome. Measures should be developed to ensure that patients with chronic noninfectious diseases are not crowded out.