

LETTERS TO THE EDITOR

DISEASE BURDEN ON KWA ZULU-NATAL HOSPITALS- 2000

Dear Editor

Morbidity and Mortality data are the basis for assessing the health status of population and are necessary for public health services and policies. The aim of health services is to improve the health status of the population through reduction of morbidity and mortality. The burden of diseases in the community and health facility directs appropriate planning for services, resources allocation etc. Based on the “Ten points plan” developed by the National Department of Health in the strategic framework (1999-2004), reduction of morbidity and mortality rates through strategic intervention ranks top on the list.¹

The true measure (epidemiological purpose) of disease profile of a population would be to conduct a Community based survey or measure. Facility based measures (user’s selection) thus fulfil some management objectives. Facility-based data collection was conducted in Kwa Zulu-Natal (KZN) during 2000 (January to December).

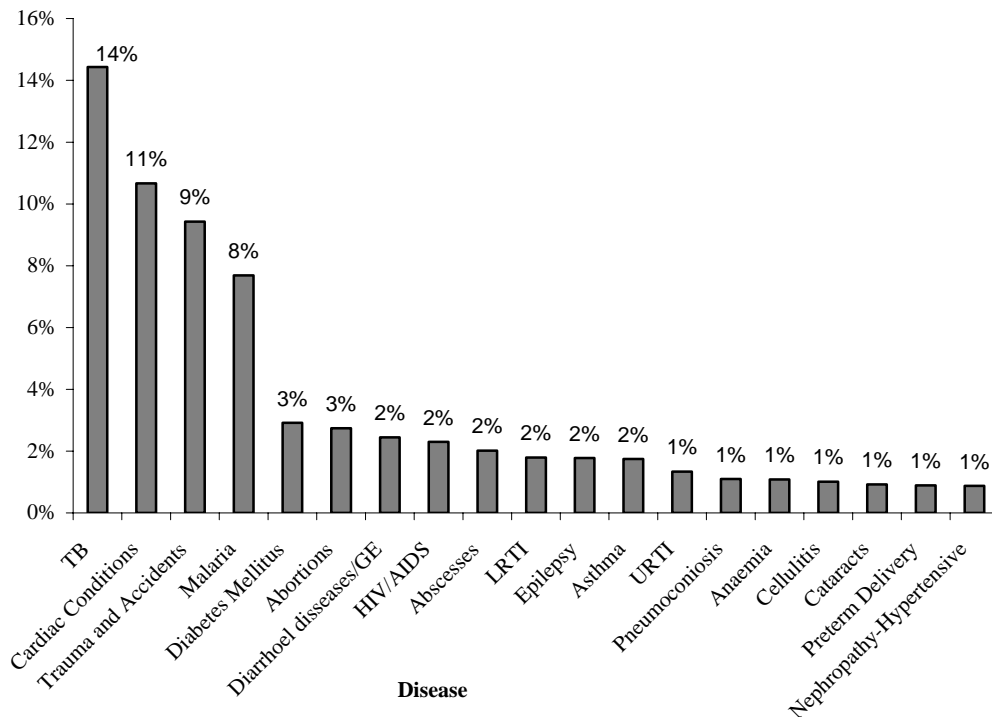
A data collection tool was developed along with a guideline to collect Hospital in-patient data (discharge

diagnosis of all patients). Thereafter requested to all hospitals of the Province to collect daily, summarize monthly and then submit to Epidemiology unit. The data was divided into two groups – Adults (>13 years) and children. Adult discharges data (morbidity) are presented here.

A total of 32 hospitals (Tertiary, Regional and District) among 60 public hospitals in KZN contributed towards compilation of the Provincial hospitals disease burden. A total of 55018 discharge data from the participating hospitals were analyzed and presented. Incomplete submissions were excluded. This data does not represent the province due to poor response rate. Re-admissions during the data collection period, referrals to other facilities, multiple diagnoses might have influenced over estimation of condition/s. Private and other facilities were not included in the study. Thus this is considered as crude estimation of burden of diseases on health facilities.

Tuberculosis (TB) is the commonest cause (as a single diagnosis) of hospitalization (14%) among the reported conditions followed by Cardiac Conditions (11%), Trauma and accidents (9%), Malaria (8%), Diabetes (3%) and Abortions of all types (3%) respectively (Figure 1).

Figure 1: Adult morbidity (proportional) in Kwa Zulu-Natal, 2000 (n = 55,018)



In the year 2000 the crude disease burden of KZN clearly demonstrates the predominance of communicable conditions. While non-communicable diseases accounted for approximately 30% of morbidity in KZN (after grouping the single causes). It is thus the evidence of double burden of diseases. KZN within the context of South African Society, like many other developing societies is pre-eminently a society in epidemiological transition and this is reflected in its diseases burden. Reasons for high incidence of TB in KZN could be contributed to high incidence of HIV infection, emergence of multi-drug resistance TB (MDR), inadequate or poorly implemented control program resulting in poor management of cases, poor socio-economic circumstances, improved surveillance system and access to care. This finding is higher than the 1995 Hlabisa Hospital TB admission² (8.3%) in KZN. It is also estimated that SA has a TB/HIV co-infection rate of 254/100,000.³

Trauma is the third most common (9%) cause of hospital burden in KZN. In 1992, 14.4% of all KEH VIII admission was due to Trauma.⁴ HIV related conditions might have been underestimated due to limitation of reporting. Higher proportion of hospital admissions for abortions may be due to failure of termination of pregnancy and adoption of other means.

In order to estimate the disease profile and monitor health sector achievements of its goals, a representative sample survey or sentinel surveillance sites should be developed with comprehensive demographic and epidemiological data items so that risk groups, risk areas, morbidity and mortality trends are identified for implementation of appropriate interventions.

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PROTOCOL FOR MAJOR SURGERY ON HIV/AIDS PATIENTS IN U.C.H. IBADAN

Dear Editor

The human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) pandemic in Africa has made it imperative that hospitals inaugurate systems by which such patients can be cared for with dignity without jeopardising the health of the care-givers themselves. This is particularly pertinent for surgeons, anaesthetists, scrub-nurses and other theatre staff who may be directly exposed to such patients' body fluids. This report of a female patient who had a mastectomy for breast cancer illustrates the system that has been put in place by the authorities of the University College Hospital (UCH), Ibadan, Nigeria to illustrate the objectives of the universal precautions for staff-at-risk.

A 35-year-old business-woman presented at the surgical outpatients clinic of the U.C.H. Ibadan with an eight-month history of a progressively enlarging left breast mass. She had an incisional biopsy at a general hospital and the histopathology report showed an invasive ductal carcinoma. Her husband volunteered the information that they were both HIV-positive for about twelve months and it was through him that his wife got infected. She had a modified radical mastectomy and was discharged after first course of cytotoxic chemotherapy.

Patients with HIV/AIDS may develop diseases which may be in the purview of the surgeon and these patients should not be denied access to surgical care because of the presence of their retroviral infection. However in managing these patients special precautions have to be taken to prevent cross-infection of HIV-disease.

The current seroprevalence in Nigeria is 4.5% in antenatal women and estimated to be 2.5% in the general population.¹ It is estimated that the risk to a surgeon working in a high prevalence American or European inner city area over a 30-year career is roughly a 1 in 800 chance of acquiring HIV infection.² In Africa where the prevalence of HIV disease is thought to be much higher, a similar career risk has been estimated to be as high as 1 in 4.²

Thus many hospitals have put in place protocols to ensure the adoption of universal precautions to protect staff members who may be exposed to blood products and body fluids especially when treating patients who are known to be HIV-positive. The practice in the University College Hospital Ibadan as it impacts on the surgical care-givers will be discussed under two headings: protection to the care-givers and other patients, and treatment of care-givers in case of accidental inoculation e.g. from needle-stick injury.

The chairman, Medical Advisory Committee, consultant anaesthetist, consultant haematologist and theatre matron were notified of the patient one week

before the intended operation.¹ The theatre matron then provided a list of items that the patient had to procure for use during the procedure. The list consisted of protective clothing and goggles, bottles of bleach, plastic aprons, sterile drapes and essential anaesthetic apparatus like the circuit, endotracheal tubes and sucker tubing to name a few. These items were purchased by the patient and they were used and incinerated immediately after the operation.¹

All instruments to and from the surgeon, especially the scalpel, were passed inside a kidney dish.² There were no sudden movements.

It should be noted that double-glove wearing may not reduce the incidence of puncture as it has been estimated that surgeons puncture their gloves in up to 30% of operations and injure themselves with needles or knives in 15-20%,³ however skin contamination from glove perforation can be reduced 5-fold by wearing 2 pairs of gloves.² Extensive splashing of mucous membranes and skin has been reported to produce HIV infection, hence the protective goggles, waterproof aprons, elbow gloves, waterproof shoe-covers are essential.² Needle-stick injuries account for transmission of the virus in about 0.3% to 0.5% of cases.²⁻⁵

Disposable anaesthetic apparatus are important to avoid droplet transfer of secretions from an infected patient to an unsuspecting uninfected patient. In addition to universal precautions, some authors have advised (and sensibly so!) that one should not operate on an HIV-positive patient when you are tired at the end of a list.³ This is the time when one is less alert and likely to be less careful. Our patient was the only person placed on the operating list for that morning.

The U.C.H. Ibadan has put in place preliminary treatment for members of staff who are accidentally exposed. This is in accordance with Centre for Diseases Control guidelines regarding needle-stick

exposure especially if the patient is a known HIV-positive person.^{4,5}

Patients with HIV/AIDS need not be excluded from elective surgery since with proper precautions they can be safely accommodated in theatre with little risk to the care-givers.

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