Compensation reporting of occupationally acquired TB in health care workers in public sector hospitals, eThekwini Municipality, KwaZulu-Natal

ABSTRACT

In 2004 the incidence of community acquired tuberculosis in South Africa was estimated at 718/100 000 population. In South Africa occupationally acquired tuberculosis (TB) in health care workers (HCWs) is a compensable disease. This descriptive study conducted in eight public sector hospitals in the eThekwini Municipality of KwaZulu-Natal, highlights current practices of nurses in charge of the Employee Health Clinics with respect to the reporting of TB in HCWs for compensation. Claims for compensation were submitted for only 18.35% of the 583 HCWs diagnosed with TB between January 1999 and June 2004. Progress Medical Reports and Final Reports were submitted for 70% and 56.1% of these cases respectively. A lack of knowledge and compliance with reporting procedures for compensation of TB in health care workers, possible ambiguity in the definition of occupationally acquired TB and the absence of guidelines appear to have contributed to poor reporting. Recommendations for improving reporting are suggested.

INTRODUCTION

Tuberculosis (TB), a treatable disease, persists in South Africa, largely due to poverty, insufficient political commitment for TB control programmes and the persisting HIV epidemic. In 2004, South Africa ranked 8th in the world among the 22 countries with the highest burden of TB, having a TB incidence of 718/100 000 population. The TB incidence in KwaZulu-Natal (KZN) increased from 386.4/100 000 population in 1999 to 781.2/100 000 population in 2003. In 2002 the Joint United Nations Programme on HIV/AIDS estimated the population level HIV prevalence in South Africa to be 20%. More recently, the antenatal survey in 2004 estimated the prevalence of HIV amongst pregnant women (15–49 years) as 30% (95% CI: 29–31) for South Africa as whole, and 41% (95% CI: 39–43) in KZN. Studies conducted in both urban and rural settings in KZN have shown that there has been an increase in the burden of TB/HIV co-infection in hospital admissions. Three surveys of the prevalence of HIV infection in TB patients conducted in Hlabisa between 1993 and 1997 (1993=36%, 1995=59%, 1997=67%) demonstrated a progressive increase. Increased hospital admissions of TB cases are likely to pose an occupational risk for HCWs.

In South Africa, a weak notification system and poor occupational health services for health care workers (HCWs) has resulted in little information being available about TB in HCWs. Specifically the incidence of the disease among HCWs, the impact on the working life of diseased workers and their ability to access compensation, is poorly understood. The few studies that have partially investigated the problem have focused on TB incidence in HCWs and not compensation. In four dedicated TB centres in Mpumalanga Province, a review of health staff records from 1986 to 1997 estimated the annual risk for TB among HCWs to be 275/100 000 (95%CI: 33–991). Wilkinson and Gilks showed an increasing frequency of TB among staff in a district Hospital in KwaZulu-Natal from 1991 to 1996 (138/100 000 to 690/100 000). HIV infection among HCWs may also increase their occupational risk for contracting TB. In 2004, the estimated prevalence of HIV infection in HCWs in South Africa was 15.7%. There is no literature available on compensation for TB among HCWs in South Africa. South Africa has progressive occupational health and safety and compensation legislation in the form of the Occupational Health and Safety Act (OHS), Mines Health and Safety Act and the Compensation for Occupational Injuries and Diseases Act (COIDA). The Hazardous Biological Substances Regulations promulgated in terms of the OHS Act details workplace safety and controls for workers exposed to biological agents. TB acquired through occupational exposure is a compensable disease under COIDA in the following instances “(1) exposure to silica and (2) transmission to an employee during the performance of health care work from a patient suffering from active open TB”. Circular Instruction No.178 of the Office of the Compensation Commissioner specifically defines compensation for occupationally acquired TB in HCWs. According to this circular “Pulmonary Tuberculosis will be presumed to be work-related if Pulmonary Tuberculosis is transmitted to an employee during the performance of health care work from a patient suffering from active open tuberculosis or analysis or testing of infected body tissues or fluids”. The gold standard for determining person to person transmission of Mycobacterium Tuberculosis involves genotyping of the organism together with a thorough contact investigation. This will allow for differentiation between community acquired TB and occupationally acquired TB in HCWs. However, genotyping and identifying patient contacts are
often not practical in our current health care setting because of the limited resources available for TB control in provinces. An alternative to this would be to consider all cases of TB in HCWs as being occupationally acquired until proven otherwise. When reporting a case of an occupational disease, the attending practitioner must submit an Employer’s Report of an Occupational Disease (WCL1), a Notification of an Occupational Disease (WCL14), an Exposure History (WCL110) together with a First Medical Report (WCL22). In subsequent months a Progress Medical Report (WCL26) must be submitted and when the patient has stabilised, a Final Medical Report (WCL26) must be sent to the Compensation Commissioner.

The purpose of this study was to describe the compensation reporting by occupational health nurses of TB as an occupationally acquired disease among HCWs in public sector hospitals in the eThekwini Municipality of KwaZulu-Natal. The objectives were to describe (1) the use of workplace guidelines for reporting TB in HCWs, (2) the reporting of TB as an occupationally acquired disease; (3) the submission of a First, Progress and Final Medical Report to the Compensation Commissioner; and (4) the award of compensation for an occupational disease by the Compensation Commissioner.

HCWs were defined as all staff employed in a hospital, including nurses, doctors, paramedical, support staff and administrators. The study was part of a larger initiative which aimed to describe TB among HCWs with respect to its incidence, disease presentation and management in the same institutions, the results of which have been published elsewhere.

**Methodology**
This descriptive study was conducted from July 2004 to February 2005 in eight of the eleven public sector hospitals in the eThekwini Municipality of KwaZulu-Natal. The three hospitals which did not participate in the study were excluded for the following reasons: one did not have any records on TB in HCWs, one was in a transitional phase (from a specialist hospital to a day hospital) and the third hospital had been operational for only six months at the time of the study. The study population consisted of all OHNs in charge of the Employee Health Clinic in the study hospital and a record review of HCWs diagnosed with TB who were employed annually from January 1999 to June 2004, in the study hospitals.

In each study hospital (n=8) an initial meeting was held with the hospital manager who identified the designated nurse in charge of the Employee Health Clinic. These occupational health nurses (OHNs) were regarded as key informants for the study. Interviews, using a semi-structured interview schedule, were held with all of the OHNs (n=8). The recording and reporting system for HCWs diagnosed with TB that existed in each hospital was reviewed and discussed. Records were reviewed to establish the completeness of the medical forms submitted to the Compensation Commissioner and if compensation was paid to individual HCWs for occupational TB. Information on the number of workers employed in each hospital annually was obtained from the Directorate of Human Resources of the KwaZulu-Natal Provincial Department of Health.

Further data was obtained on all HCWs diagnosed with TB (pulmonary and extra-pulmonary TB) from January 1999 to June 2004 in the study hospitals. This was collected from records in the designated Employee Health Clinic by a trained field worker. A HCW was considered to have TB if there was a positive sputum smear or a clinical and radiological diagnosis of TB or a positive culture of sputum or body fluids. The OHN assisted in ensuring the completeness of the data obtained. Information was collected on the
demographics (age, gender, race, job description), clinical presentation, treatment outcome and reporting of an occupational disease for each HCW diagnosed with TB. The names of HCWs were not collected so as to ensure confidentiality. Data on HIV status of the HCWs was not collected because this was not available.

The annual incidence of TB in HCWs was calculated as the number of new TB cases relative to the “at risk population”. The “at risk population” was the total number of HCWs employed annually in the study hospitals excluding the HCWs previously treated for TB.

Ethical approval for the study was obtained from the University of KwaZulu-Natal’s Research Ethics Committee and the Provincial Department of Health.

RESULTS

Employee Health Clinic nurses’ knowledge and reporting of TB in HCWs for compensation

Only one (12.5%) of the eight study hospitals (n=8) had a guideline on the diagnosis and management of HCWs with TB. This guideline detailed the clinical management of HCWs diagnosed with TB but did not provide guidelines on reporting for compensation. Two (25%) of the OHNs were unaware that TB in HCWs was a compensable occupational disease while six (75%) of the OHNs had reported cases of occupationally acquired TB in HCWs. Two (25%) OHNs indicated that they routinely asked the HCW if they had been in contact with a TB patient and then followed up with the patient to confirm this before reporting the case as occupationally acquired TB. The remaining four (50%) OHNs did not follow any uniform guideline in deciding if a case of HCW TB was occupationally acquired or not. All of the OHNs reporting occupationally acquired TB (n=6; 75%) indicated that there were certain circumstances under which they would not report cases as being occupationally acquired. The commonest reasons cited were:

1. A family member of the HCW had TB in the last six months;
2. The HCW did not want/request that the case be submitted as occupationally acquired TB; and
3. The HCW had been previously treated for TB.

All of the OHNs who reported occupationally acquired TB (n=6; 75%) submitted the forms to the Human Resources Department of the hospital. Two of the OHNs reporting occupationally acquired TB (n=6, 25%) were aware that these forms would then be passed onto the HR Directorate in the Provincial Department of Health, from where they would be submitted to the Compensation Commissioner.

The process of reporting TB among HCWs as an occupationally acquired disease at hospital level

The claims submission process commonly followed by those nurses reporting occupationally acquired TB in HCWs as elicited from the key informant interviews has been summarised in Figure 1. OHNs reporting cases of TB in HCWs as an occupational disease have to submit forms to the Human Resource (HR) Department of the hospital which then submits them to the HR Directorate in the Provincial Department of Health. These forms are then submitted to the Compensation Commissioner. Responses from the Compensation Commissioner will follow a reversal of this process.

Occupationally acquired TB diagnosed from January 1999 to June 2004

A total of 583 HCWs were diagnosed with TB (pulmonary and extra-pulmonary) from January 1999 to June 2004 in the study hospitals. Three hundred and fifty-five HCWs were identified as being new TB cases. A new case was defined as a patient who has never had treatment for TB or who has taken TB drugs for less than four weeks. The incidence of TB in HCWs increased from 1024.0/100 000 HCWs in 1999 to 1640.5/100 000 HCWs in June 2004 (see Table 1). As stated, a more detailed description of the incidence has been published in another paper.
Submissions of a First Medical Report (WCL22) seeking compensation for an occupational disease were made in 107 (n=583,18,35%) cases of TB in HCWs. These cases included pulmonary and extra-pulmonary TB. In the cases initially reported (n=107), submission of Progress Reports (WCL26) (n=75; 70,1%) and Final Reports (WCL26) (n=60; 56,1%) decreased considerably (see Figure 2). Those reports that were submitted were filled in correctly. The OHNs and their records did not have any information on the outcomes of the cases which had been submitted to the Compensation Commissioner at a hospital level. This may be linked to the reporting process as described previously. The HR Departments or Directorate may have received feedback and not informed the OHN.

**DISCUSSION**

The gaps in the knowledge and practices identified among the OHNs in the study hospitals with respect to the reporting of occupationally acquired TB for compensation is a concern. Lack of awareness among the OHNs means that surveillance for cases of occupationally acquired TB is not routinely conducted. As a result, it is likely that a HCW will not be appropriately identified and managed should they acquire TB due to occupational exposure. Furthermore, being unaware of a case of occupationally acquired TB would mean that appropriate workplace interventions are not likely to be implemented to address the problem. This lack of knowledge with respect to compensation is also apparent in their uncertainty about reporting TB in HCWs as an occupationally acquired disease. Such a lack of knowledge about disease reporting is not uncommon. A study conducted among a group of general practitioners in the Western Cape showed a paucity of knowledge with respect to the reporting of occupational disease.22

However, lack of knowledge and inability to comply with the required reporting process for occupational diseases are not the only factors affecting the reporting of occupationally acquired TB among HCWs. Circular 17821 by its definition of occupationally acquired TB may appear ambiguous and thereby influence reporting of these cases. HCWs interacting with a patient after a diagnosis has been made are likely to be aware of the patient’s TB status. However, HCWs who acquired TB following an interaction with a patient, prior to the patient being diagnosed with TB, are unlikely to have their cases reported as occupationally acquired as they are unaware of the patient’s TB status. In such cases, stringent application of the definition of occupationally acquired TB in accordance with Circular Instruction No 17816 will disadvantage the HCW with respect to compensation. Furthermore, the circular instruction focuses on pulmonary TB in HCWs. This may have resulted in the non-reporting of other forms of occupationally acquired TB in HCWs.

The onus of deciding if a HCW has occupationally acquired TB lies with the Chief Medical Officer in the compensation office. Such a decision is complicated by difficulties related to establishing exposure to TB patients, availability of genotyping of TB strains and the increasing prevalence of TB in HIV positive HCWs. Hence OHNs should not be deciding on the submission of cases. Instead they should be encouraged to submit all cases of TB in HCWs to the Chief Medical Officer for a decision on compensation. In keeping with this sentiment, the definition of occupationally acquired TB as indicated in Circular Instruction No. 178 should be reviewed so that all HCWs with TB are afforded the opportunity for review by the Chief Medical Officer.17 This should increase the number of reported cases as opposed to limiting the reporting of cases as was seen in this study.

While this study is limited by its small sample size, the problems of a lack of knowledge and poor reporting of occupationally acquired TB by OHNs that have been identified indicate the need for corrective measures. Firstly, the fact that only one hospital had a
guideline is likely to have contributed to the low number of reports. Uniform guidelines for the reporting process at hospital level of occupationally acquired TB in HCWs should improve reporting. Secondly, all reports should be sent to the Compensation Commissioner by the OHN in the Employee Health Clinic. By centralising the point of submission, the number of contact points in the reporting process will be reduced. This should ensure that OHNs are more familiar with the reporting process and are responsible for monitoring and follow up of claims. The progressive decrease in report submissions from the First Medical Report to the Final Medical Report further underlines the lack of knowledge on the compensation reporting process and suggests that there is poor compliance at hospital level. Failure to send all required documents and complete the reporting process when seeking compensation can lead to delays in a final decision by the Compensation Commissioner. As a result, a HCW who qualifies for compensation may not receive a decision for several months or may not receive any compensation even if warranted. To address this problem, training programmes should be provided for OHNs on compensation processes and procedures to improve their reporting practices for occupationally acquired TB in HCWs.

While this study was conducted in a limited number of hospitals, the findings provide important information on the reporting of occupationally acquired TB in HCWs and indicates the need for further attention and intervention.

**REFERENCES**