better productivity, faster work pace, employee downsizing, temporary contracts and outsourcing among others. As a result, the rates of physical and mental illness among public servants have increased. Thus, the objective of this study was to establish the profile of illness-related absence, defined as time off from work due to illness certified by a physician, among workers of a Brazilian state public university in the year of 2012.

Methods In this cross-sectional study, secondary data were extracted from the institution's occupational medical examination systems and medical reports. Results have been reported as simple and cumulative frequencies, while associations were estimated by chi-square tests, and distribution differences determined by post-hoc Z tests with Bonferroni's correction coefficient.

Result During the study period, 538 workers were on sick leave. These consisted of married females aged over 41 years. Most of them had been working on the university's hospital for 11–30 years, holding intermediate level nursing positions, and had taken one sick leave. Of these, 11% undertook some sort of work readaptation. The most frequent causes for sick leaves, which lasted for up to 15 days, were mental/behavioural disorders, and osteomuscular and connective tissue diseases. Statistical analysis demonstrated that some sociodemographic characteristics, such as sex and age, and job characteristics, such as work unit and position, influenced the development of illness, which in turn influenced sick leave duration and work readaptation conditions.

Discussion Our results present the magnitude of the problem that illness-related absenteeism is to the public sector and can assist in planning preventive actions, prioritising the most vulnerable occupational groups.

Occupational Health for Health Care Workers

1013 OCCUPATIONAL TUBERCULOSIS IN SOUTH AFRICA: ARE HEALTHCARE WORKERS ADEQUATELY PROTECTED?

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Introduction Effective tuberculosis (TB) infection prevention and control (IPC) measures including education and training are crucial in limiting the spread of TB in healthcare settings. We aimed to explore how well HCWs adhere to TB IPC practices, the nature and extent of training related to TB IPC across demographic and occupational factors.

Method An interviewer-driven structured survey was conducted among HCWs in a provincial tertiary hospital in Gauteng Province, South Africa. Data were analysed using SPSS version 24. Pearson's Chi Square test or Fisher's exact tests checked differences between categorical variables; logistic regression assessed associations between covariates.

Results Of the 285 HCWs surveyed, only 43% reported having received training on TB transmission, signs and symptoms; 29.8% of nurses had been trained on the proper use of N95 respirators; only 5% of support workers were trained on

mode of transmission; and only 37.2% of all HCWs were aware of a protocol for managing TB patients. Only 56.3% of nurses and 66.7% of doctors reported they always or sometimes wore respirators when managing suspected or confirmed TB cases, although 70.5% of the nurses and 86.7% of the doctors reported that these personal protective equipments were not readily available. Importantly, non-clinical (support) HCWs were more than 7 times more likely to use respirators if trained on their proper use.

Discussion Major gaps persist in both availability of respirators and training of HCWs on TB transmission, both factors highly associated with lack of adherence to TB IPC. To protect HCWs, hospital management should ensure availability of respirators as well as effective trainings for all job categories, with particular attention to support staff, who seem to be particularly poorly trained and at high risk of TB.

1055 SCREENING FOR LATENT TUBERCULOSIS INFECTION IN HEALTH CARE WORKERS: TUBERCULIN SKIN TEST OR INTERFERON GAMMA RELEASE ASSAY?

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Introduction Screening for latent tuberculosis infection was conducted among 505 health care workers in a high TB incidence country in Sub-Saharan Africa. The study assessed the level of agreement between TST and IGRA, identified factors associated with discordance between test results and compared sensitivity and specificity of the tests using a latent class model.

Methods Three tests for TB infection were employed: Tuberculin skin test, Quantiferon-gold-in-tube and TSPOT.TB. Agreement was measured between test outcomes. Factors associated with discordance were analysed using a multinomial logistic regression model. Latent class analysis using a fixed effects model that allowed for conditional dependence between QFT-GIT and TSPOT.TB was used to fit the data and allow for a direct comparison of test sensitivity and specificity.

Result There was fair agreement between TST and QFT – GIT ($\kappa=0.28$) and T-SPOT.TB ($\kappa=0.25$), respectively. Marked discordance was noted between the TST and IGRA results in HIV positive individuals OR: 6.35, those who reported previous TB treatment OR: 3.00 or were symptom screen positive for TB, OR: 2.95. TST had the highest sensitivity (93%) and lowest specificity (55%) of the three tests. IGRAs displayed equivalent sensitivity (79%–84%) and higher specificity (94%–97%) with marginal change following the application of a latent class model.

Discussion Marked discordance between TST and TSPOT.TB outcomes in HIV infected individuals reflects potentially greater sensitivity of this assay in immunocompromised persons. In high TB incidence settings IGRA assays do not display significantly greater sensitivity or specificity in diagnosis of LTBI among health care workers following the application of latent class analysis model that allows for conditional dependency between IGRAs.