

Absenteeism Among Employees in a Southeastern Ontario Hospital: A Novel Application of Syndromic Surveillance

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OBJECTIVES

1) To identify and describe Occupational Health (OH) visits (overall and specific conditions) among full-time Kingston General Hospital (KGH) employees, according to frequency, duration, workplace variables and seasonality. 2) To consider the association between absenteeism and Health Care Worker (HCW) exposure risk to infectious diseases based on a proxy variable defining level of patient contact. 3) To examine the potential for integration of this occupational health data stream into an existing Emergency Department Syndromic Surveillance (EDSS) system.

BACKGROUND

Sickness absence is particularly pronounced within health care organizations where job demands and work environment expose workers to an increased risk of illness and injury, potentially leading to an inability to attend work^{1,2}. HCWs, especially nurses who are primarily responsible for front-line patient care, are at high risk of acquiring infections from direct patient contact. In addition, there is greater risk of exposure to contaminated human blood and body fluids^{3,4}.

METHODS

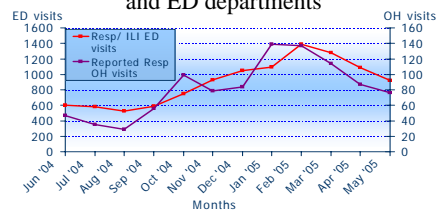
A retrospective cohort design was conducted, involving a unique record linkage of two anonymous KGH departmental databases: Occupational Health (illness/injury reporting) and Human Resources (HR) (absenteeism). The time frame was June 1, 2004 to May 31, 2005 inclusive, and included only full-time employees. Data linkage was performed using sex, postal code, and date of birth, as names and addresses were excluded from the databases. The conditions/syndromes within the OH visit data are predetermined by the system, and classified by an OH nurse according to the HCWs' reporting of symptoms. Febrile Respiratory Illness, Lower and Upper Respiratory Illness were combined into a Respiratory syndrome. The various departments were grouped based on *a priori* departmental similarities and levels of patient contact.

RESULTS

A total of 1964 full-time employees were included in the analysis. Seventy-two percent (n=1411) reported at least one absence, with a median number of 2 ab-

sence events, and 7 day median annual duration of absence. Surgical department employees had the highest rate of absence (5.3 events/ year), followed by General Medicine employees (4.9 events/ year). Gastrointestinal and respiratory illnesses are the main conditions associated with OH visits. General Medicine had the highest percentage of employee absence not reported to OH (44%). Patient contact did not remain statistically significant after adjusting for covariates. HCW respiratory illness reporting followed a similar seasonal trend of ED visits among the community (Figure 1). Further analysis of this relationship will be conducted.

Figure 1: Respiratory Illness Reporting at KGH to the OH and ED departments



CONCLUSIONS

This information may be used to: monitor trends in HCW absenteeism, identify potential outbreaks requiring further investigation, and alert hospital administration and public health to increase infection control procedures to protect both staff and patients and reduce the spread of infectious diseases. This additional data stream can be combined with an existing EDSS system to integrate alerting of anomalies and create an innovative, real-time system, to provide early warning of community illness and protect front-line workers.

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