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Occupational Infections among Health Care Workers in a Secondary Care Hospital Saudi Arabia

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Keywords: Occupational infections; Health care workers; Seroconversion

Introduction

Health care workers (HCWs) are de ned as all paid and unpaid persons working in health-care settings who have the potential for exposure to patients and/or to infectious materials, including body substaces, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. HCWs might include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual sta not employed by the healthcare facility, and persons (e.g. clerical, dietary, housekeeping, laundry, security, maintenance, administrative, billing and volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from HCWs and patients [1,2].

While performing their duties, healthcare workers (HCWs) *Corresponding author: Mervat M El Dalatony, MD of Industrial Medicine and are frequently exposed to dangerous infectious agents. e risk of occupational Health, Public Health and Community Medicine Department, transmission of vaccine-preventable infections, both from patients HQRX¿\D 8QLYHUVLW\ (J\SW (PDLO PHUYDW PRK DEG#JPDLO FRP to HCWs and from personnel to patients, other HCWs, and visitors is substantial [3,4]. Measles, rubella, varicella, hepatitis A andeceived 6HSWHPEHU Published hepatitis B(HBV) are all vaccine-preventable diseases that are readify RYHPEHU transmitted in healthcare facilities [5-9]. e mortality and morbidity Citation: Assiri AM, Hathout HM, Anwar MM, El Dalatony MM, Abdel Kader NM

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Assiri AM, et al. 7 K L V L V D Q R S H Q D F F H V V D U W L F the terms of the Creative Commons Attribution License, which permits unrestricted XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PH source are credited.

e tuberculin skin test (TST) is one of the few tests developed in the 19th century that still in present use in clinical medicine and it is the recommeded tool for T.B screening of health care workers [15]. In several reports, from 4% to 79% of health care workers exposed to mycobacterium tuberculosis develop positive tuberculin skin test [9]. Without known exposure, the yearly conversion rateuberculin for health care workers averages 0.1%-5.0% [16].

Aim of the Study

- 1. Assessment of some occupational infections among health care workers in a secondary care hospital- Najran province- Saudi Arabia during the period (2009-2012).
- 2. Study distribution of sharp injury incidents among professional categories during the study period.
- 3. Review of follow up data of the reported needle stick and sharp incidents for the same study period.

Materials and Methods

Descriptive study involved health care workers (HCWs) in a secondary care hospital with bed capacity of 300 beds in Najran district located in the Southern province-Saudi Arabia to estimate the incidence of occupational infections and sharp injury exposure during the period (2009-2012).

HCWs included in the study were categorized as: physicians, nurses, technicians and housekeepers with average numbers (254, 452, 85 and 209; respectively), during the study period.

Methods

Retrospective review of the complete electronic medical records for the working medical sta members in di erent job categories and all facility departments e.g. ICU, ER, OR, Isolation rooms, Infectious diseases, Pediatrics etc, to determine the following:

1. Occupationally acquired infections (droplet and air borne infection) to which HCWs were exposed during the study

of hepatitis B vaccination implemented for all newly hired employees in the studied health care facility in KSA ensuring high antibodies titer indicating individual immunity; in addition to maintaining high level standard of infection control practices [29].

Conclusion

e most common occupational infection among studied healthcare workers was chicken pox. Nurses' group was the most a ected occupational category during the study period as regards exposure to sharp injuries and air borne infections so, management policy to prevent occupational infectious diseases must focus on nurses.

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