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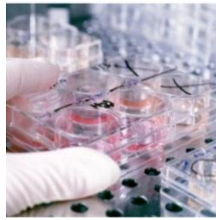

Occupational Health for Health Care Workers

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History and background

- Erasmus Commission of Inquiry 1974
  - Inadequacies in provision of health services in industry
  - State of legislation affecting occupational health was grossly deficient
  - Resulted in passing of the Machinery & Occupational safety Act in 1983
- Occupational Health and Safety Act (Act No. 85 of 1993)
  - Passed in 1993
  - Offered more protection for workers and outlined responsibilities of employers
- Compensation for Occupational Injuries and Diseases Act (Act No. 130 of 1993)
  - Passed in 1993
  - Replaced Workmen's Compensation Act
- The Abdullah Report 1996
  - Investigation into Occupational Health services in South Africa
  - Proposals for a coherent OH&S system
  - Indicate role of DOH at National. Provincial and District levels
- Mine Health & Safety Act 1996
  - Specific protection for H&S for persons working at mines
- The White Paper for the Transformation of the Health System of South Africa 1997
  - Set of policy objectives and principles in which a Unified National Health System of South Africa will be based
  - Aligned as a key priority of the Reconstruction and Development Programme (RDP) and the DOH

- **Benjamin and Greef Report 1997**
  - Investigation report suggested that the practice of OH&S across industries in South Africa is uncoordinated, fragmented and a burden on resources
  - Work-related ill health imposes a considerable cost on SA economy and society
  - Committee suggested failure to meet challenges of technology, expectations of employees, requirements for enhanced productivity and competitiveness, and the obligations of the state, will result in increased/ongoing occupational health injuries & diseases, taking an immense toll on human and economic resources
- **The Provincial Health Restructuring Committee (PHRC) 1999**
  - Meeting 21 & 22 January 1999
    - Agenda item 6.1 "Establish OH services for staff of the Department of Health, render assistance to other governmental departments in this regards and provide Occupational Health services fro the general public at health facilities with health districts"
- **OH Services for Health Care Workers in the National Health Service of South Africa – A Guideline Booklet (Department of Health, May 2003)**
  - Know How Fund study into the development of Occupational Health facilities for health service staff in the public sector
  - One of the outcomes was the suggestion of a booklet that OHPs could use as a resource
- **2015 Ebola outbreak**
  - Liberia Study (Estimated - 0.11% of the general population died / 8.07% of the countries doctors, nurses & midwives)

OH SERVICES FOR HEALTH CARE WORKERS IN THE NATIONAL HEALTH SERVICE OF SOUTH AFRICA
A GUIDELINE BOOKLET
DEPARTMENT OF HEALTH
May 2003

The neglected burden of tuberculosis disease among health workers: a decade-long cohort study in South Africa

BMC Infectious Diseases 2017 17:547

- **Study done in Free State (FS), South Africa**
- **Health workers (HW) and TB infection over a 10 year period (2002 – 2012)**
- **HW in FS have higher rates of TB than the general population (3x)**

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Defining "Health Care Workers"

Health worker = "all people engaged in the promotion, protection or improvement of the health of the population"; not limited to those who provide direct patient care but extended to all who work in a healthcare facility such as cleaners, porters, security etc. (*O'hara et al. BMC Infectious Diseases (2017) 17:547)*)

Health care worker = Academic qualification (previous exposures) +/- versus daily role & responsibility (current exposures)

- **Clinicians**
- **Medical Administrators**
- **Radiology**
- **Pharmacists**
- **Dieticians**
- **Physiotherapy / Occupational Therapy**
- **Laboratory workers**
- **Scientists**
- **Paramedics**
- **Ambulance drivers**
- **…..etc.**

Homogenous exposure groups (HEGs)

- **Risk Assessment (Risk-Based Approach) – occupational exposures**
- **Occupational Risk Exposure Profile (OREP)**

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Need and approach of OH in HCWs should follow general industry

- Risk-Based Approach
- HIRA
- OREP
- Occupational Hygiene
- Hierarchy of controls
  - ……
  - Administrative
    - Policy and procedures
    - Vaccinations
  - PPE
  - …….etc.

Other:

- Emergency medical services
- Fitness for work / Medical incapacity
- Disability
- Employee Assistance Programs
- Primary health care
- Sick absence management

Medical surveillance (include secondary tasks for risk analysis)

- **Risk based medical**
- **Selective acute and monitoring medical surveillance following HBA exposure**

- **Executive medical**
- **Travel medical**
- **Drivers medical**
- **Radiation medical**

Challenges with HBA exposure

- Multitude of exposures (prioritize)
- Making the association within the workplace
- Monitoring exposure (1 Microorganism needed for infection)
- Screening and Diagnostic tests
  - Availability sensitive and specific screening tests
  - Invasiveness of the testing, repeatability of such tests
  - Costs, Capacity, Resources
  - Administration
  - …etc.

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Health Care Worker = no different to any other risk worker

(but they are easily forgotten in the system)

"Expectation "HCW" know how to look after themselves"

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Influenza Vaccination uptake among Healthcare Workers at a Malaysian Teaching Hospital

Southeast Asian J Trop Med Public Health 2015; 46(2):215 - 225

- **85,3% of respondents stated influenza vaccination is important for disease prevention, the vaccination uptake rate in the study was low – 53.1% clinical staff and 44.1% non-clinical staff**

Vaccination of Health Care Workers for Influenza: Promote Safety Culture, Not Coercion

Can J Public Health 2010;101(Suppl.1):S41-S45.

- **Focus group participants pointed out the importance of health and safety at work generally and felt that creating a healthy workplace culture is necessary to promote vaccine uptake**
- **Ensure vaccine campaigns do not appear coercive to HCW's**

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Compliance with anti-H1N1 vaccine among healthcare workers and general population

Clin Microbiol Infec 2012; 18 (Suppl.5) 37-41

- General acceptance of H1N1 influenza vaccine has been low worldwide
- General public concerns included
  - Lack of understanding of the health risks with Influenza A (H1N1 strain)
  - Distrust of vaccinations
  - Concerns of vaccine safety
- Health workers
  - Concerns around vaccine safety
  - Distrust of health authorities

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Overcoming healthcare workers' vaccine refusal – competition between egoism and altruism

C Betsch University of Erfurt, Germany

http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=2097

- Skewed risk perceptions
  - Fear of side effects
  - (perceptions of risk are subjective and do not necessarily mirror objective numbers)
  - Weighting the risk of infection versus the risk of side effects
  - When the perceived risk of vaccination is high, vaccination is less likely
  - When the perceived risk of infection is high, vaccination is more likely
  - Skewed risk perceptions are amongst the most important reasons why HCW do not get vaccinated
  - Perceptions of risk are not necessarily reality, and are formed from:-
    - Stories people hear
    - Experience and education
    - Media
- Protecting others (Pro-social motivation)
  - HCW will only get vaccinated if personal risk is low including the costs (to protect others)
  - HCW are more likely to get vaccinated for personal risk reasons rather than for "protecting others"

- Individual interests are at odds with collective interests
- Weighting individual risks

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Challenges with OH service implementation in HCWs

- Common
    - Resources & Capacity
    - Facilities
    - …etc.

- Unique (Depends on the extent of the OH services)
    - Applying OH services to ones self – Conflict of interest
        - Who does the RA, MS program, monitoring, auditing….etc. for OH services if you are also the provider
    - Confidentiality (staff and colleagues)
    - Challenges with managing and dealing with "people-in-the-know" / academics / levels of seniority
    - Defining "Health Care Worker" versus true "roles and responsibilities" accompanying hazardous exposures
    - Inclination of medical staff to help colleagues unintentionally sacrificing good corporate governance
    - "To many cooks spoil the broth"
    - Vaccination (Hepatitis B – Intervals between vaccines prior to employment/task initiation)
    - Post exposure prophylaxis (and resistance patterns)
    - Acceptance of sick certificates issued by colleagues of health staff
    - Incapacity and rehabilitation/accommodation challenges (skilled staff)

DISCUSSION, QUESTIONS