

Introduction The risk of transmission of blood-borne pathogens, including hepatitis B virus (HBV) to healthcare workers (HCWs) is well known. Under current European Union (EU) legislation, all employers have to perform a risk assessment to identify workers exposed to HBV and offer them vaccination. Immunisation should be done as early as possible after the start of their career to avoid HBV infection and the development of an infectious carrier state. In 2005 we performed a survey on HBV prevention in HCWs in the EU; in 2010, a new EU Directive (2010/32/EU), on sharp injuries, to be implemented in national legislation by 11 May 2013, made an update of the 2005 survey necessary.

Methods We performed an electronic survey of national representatives from the Occupational Medicine section of the European Union of Medical Specialists (UEMS) in all countries, to find out how policies have been put into practice in the European countries.

Results Answers were received from 21 countries, representing 78% of the population in the EU-28. HBV vaccination was mandatory for medical and nursing staff in 10 countries, mandatory for other paramedical staff, medical and nursing students in nine countries, for paramedical students in eight countries, for cleaning staff in 6 countries, for technical staff in 5 countries. It was recommended in all other participating countries. Serotesting before vaccination was done in eight countries. The vaccination schedule most often used was 0, 1, 6 months (18 countries). Serotesting after vaccination was done in 18 countries, boosters were recommended in 14 countries. A non-responder policy, including testing for carrier state, was present in 18 countries.

Discussion More consultation between key actors from countries at EU level could help to optimise the way this matter is dealt with in different countries in order to contribute to further reducing HBV transmission to HCWs.

531 (MIS)USING RANDOMISED CONTROLLED TRIALS AS A HEGEMONIC WEAPON: THE CASE OF MANDATORY INFLUENZA VACCINATION FOR HEALTHCARE WORKERS IN CANADA

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Introduction In 2013, British Columbia, Canada, instituted a Policy requiring healthcare workers (HCWs) to accept influenza vaccination or wear a mask at work throughout the influenza season. The Policy's stated objectives (prevent influenza transmission to vulnerable patients; reduce influenza morbidity and mortality; and reduce worker absenteeism) did not refer to the health of HCWs. Moreover, the four randomised controlled trials (RCTs) cited as evidence supporting this influenza vaccine-or-mask policy were misinterpreted (or misrepresented) by its proponents, which, we argue, not only threatens the health of workers, the public and patients, but jeopardises the credibility of public health institutions.

Methods Plausibility of the four RCT findings attributing indirect patient benefits to HCW influenza vaccination were assessed by international experts comparing percentage reductions in patient risk reported by the RCTs to predicted values; we synthesise the results of the analysis and discuss the political factors that may explain the (mis)use of the RCT evidence.

Result Each RCT violated the basic mathematical principle of dilution by reporting greater percentage reductions with less influenza-specific patient outcomes and/or patient mortality reductions exceeding even favourably derived predicted values by at least 6–15-fold. Contextual factors more likely to explain the RCT results were ignored. The prioritisation of quantitative data masks the economic and political agendas of policy makers.

Discussion This policy is a case of (mis)use of RCT evidence as a weapon against workers while transferring large amounts of public funds to a questionable program and ultimately to pharmaceutical companies. We argue that worker acceptance of influenza vaccination should be voluntary, and public resources be more appropriately allocated to measures more likely to result in greater public health benefit, such as improved sick leave to encourage ill workers to stay home, or more staffing to allow HCWs to be more vigilant with infection control procedures.

66 OCCUPATIONAL PATHOLOGY IN DIGESTIVE ENDOSCOPY: RISKS, DISEASES AND PREVENTION

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Personnel working in an endoscopy digestive laboratory may be exposed to a series of harmful factors to health. Among them, the most common are patients' biological waste, potentially infected with transmissible bacteria in the healthcare practices, chemicals used for cleaning and disinfection of the endoscopic equipment, which may determine allergies, radiation, different movements and postures, which by overload may determine musculoskeletal diseases. Selected protective equipment, used and removed properly protects the medical personnel of harmful factors at which may be exposed while working in digestive endoscopy laboratory. However, some studies made on digestive endoscopy personnel have shown a deficient conformation at standard precautions for the control of infections' transmission, and other studies have shown that very few endoscopists have modified their activity with the purpose of preventing some maladies linked to occupational health.

In this paper we propose an overview of occupational pathology in digestive endoscopy, insisting upon description of harmful factors that may be exposed the medical staff working in a digestive endoscopy laboratory and of ways of diminishing the risk of developing various diseases. Romanian medical literature dedicated to occupational pathology in digestive endoscopy is very poor, which indirectly indicates the low level of awareness of this medical problem importance, in which, inadequate information merges with ignorance and legislative gaps.

688 WHAT ARE THE ISSUES AND THE FUTURE FOR HEALTHCARE WORKERS AND WHAT PART DOES OCCUPATIONAL HEALTH AND SAFETY PLAY?

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Introduction Health, safety, wellbeing and work are inextricably linked. In healthcare these are interrelated with patient safety and quality of experience, care and outcomes. The World Health Organisation (WHO) identifies that creating 'Healthy Workplaces' is the right, legal and smart thing to do (2010). What importance is given to this in healthcare?

Methods A recent Masters studies in a large healthcare facility revealed an abundance of evidence of the critical relationships in creating healthy workplaces. These were reinforced through a ground level qualitative audit and ongoing work. They were, aligned with a Maori cultural perspective of health, *Te Whare Tapa Whā* and the WHO 'Healthy Workplaces' definition and action model.

Result Through ongoing collaborative work, using an environmental scan and gap analysis, we have developed a three year strategic, quality improvement strategy with fifteen aims. The thematic analysis from the study is guiding our journey.

Discussion Psychosocial risks are noted as being one of the greatest health and safety challenges of the modern day workplace. Do we have enough focus or understanding on these and how to manage them? What are the effects on healthcare workers?

The international health sector is seeing signs of increasing burnout, stress, moral distress, emotional exhaustion and increasing reports of bullying and harassment. Additionally it has an ageing workforce; known effects on shiftworkers; increasing long term conditions inclusive of poor mental health; new ways of working; changing technology and people having to do more with less. These are already impacting on workers and workplaces.

Where does Occupational Health and Safety fit in? What are we doing and is it time to bridge the gap with more connected, collaborative approaches with public health, organisational health and others? We cannot afford to ignore the critical interfaces, as the cost of inaction is high at many levels.

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SHARP DEVICES INJURIES AMONG RESIDENT PHYSICIANS IN ISMAILIA HOSPITALS

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Introduction Injuries to health-care workers from needle stick and other sharps carry significant risks of transmitting blood borne pathogens such as HBV, HCV and HIV, with serious consequences. The aim was to determine the incidence and assess the context of Exposure Incidents (EI) among residents and nurses at Suez Canal University hospital.

Methods A self-administered questionnaire was distributed to 217 residents who were less than 3 years of work/training experience. The questionnaire included details of exposure incidents of high risk and low risk exposures. 'high risk' exposure includes; a penetrating injury caused by a needle or other sharp object, and causing visible bleeding. 'low risk' as (a) a slight, superficial abrasion caused by a needle or other sharp object without obvious bleeding or (b) an existing skin wound coming into direct contact with blood or other body fluids. Also, activities/procedures leading to exposure incidents, and preventive measures used were recoded. All participants had informed consent.

Results One hundred seventy one (78.8% of the participants) responded to the questionnaire, 117 workers (68.4.8%) reported to have (EI) (either one or more), and two hundred and thirty seven (EI) were recorded over 12 months with corresponding incidence of 0.68 and 2.1 (EIs) per worker/year. Seventy seven of exposure incidents (32.4%) were considered 'high risk', while 67.6% were 'low risk'. Injection needles were the most common device (53.7% of exposure episodes) causing (EI) followed by suture needles (37.8%). Phlebotomy/injection and suturing were the most common procedures of exposure episodes (44.7% and 39.1%, respectively). Workers always recap needles/IV-catheters (47.1%) after use, and only (7.9%) always uses PPE during procedures.

Conclusion Sharp device injuries are common among physicians in their early years of work/training, and are often not reported or lack a reporting system. Improved prevention/safety practices and reporting strategies are needed.

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WORK-RELATED PSYCHOSOCIAL AND PHYSICAL RISK FACTORS AND UPPER LIMB DISORDERS IN HAND-INTENSIVE HEALTH CARE WORKERS – AN APPLIED EPIDEMIOLOGICAL PERSPECTIVE

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Introduction Musculoskeletal injuries are common in health-care workers. Research and prevention have been focussing on back injuries, the scientific evidence on work-related upper limb disorders (WRULDs) is scarce. Physical and psychosocial work exposures are considered as relevant in the aetiology. Hand-intensive health care occupations, e.g. physiotherapists are commonly exposed to physical risk factors including repetitive movements while applying force and sustained awkward positions. The objective was to investigate associations between physical and psychosocial work exposures and ULDs while adjusting for non-work-related explanations.

Methods Cross-sectional with 347 Irish Chartered Physiotherapists, Physical and Athletics Therapists in hospitals and private practice (proportionate cluster and random sampling). Participants completed questions about neck, shoulder, elbow, wrist, thumb and finger symptoms (Nordic Questionnaire); psychosocial work exposures (COPSOQ), rest breaks, scheduling, physical work load, Physical Exertion (Borg scale), lifestyle and mental health. Logistic regression with psychosocial and physical factors and ULDs with adjustment for lifestyle-related issues (bmi, smoking), depression (GHQ) and leisure time injury.

Result Work tempo (OR=1.17), predictability (OR=0.76), peer support (OR=0.81) and supervisory support (OR=0.71) were significantly associated with UL symptoms in the past 12 months, work predictability (OR=0.82), influence at work (OR=0.91), supervisory support (OR=0.81) and peer support (OR=0.77) were significantly associated with incapacitating symptoms. Therapists who did not schedule their appointments were twice as likely for ULDs in a least one body site (OR=2.3), those with rests breaks below 5 min after each treatment were at increased odds for incapacitating symptoms. (OR=2.3), physical exertion and repetitive movements were associated with 12 month prevalence (OR=1.3). All analyses adjusted for confounders.