

The need for skin preparation prior to injection: point — counterpoint

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Current recommendations to discontinue routine pre-injection skin preparation may jeopardise patient safety and increase the risk of infection. However, the best available evidence and theoretical rationale may offer sufficient support for recommendations to abandon this practice. Both sides of this argument are explored in this 'point-counterpoint' review.

Key Words: Pre-injection skin preparation • injections • healthcare-associated infections • skin disinfection • evidence-based practice

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Hospital medical waste management in Shandong Province, China

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Medical waste refers to those hazardous waste materials generated by healthcare activities, including a broad range of materials, and remains as an issue on both public health and environment. In China, there was inadequate

information on the implementation of management systems in hospitals based on the national regulatory framework. The objectives of this study were to assess the current situation of medical waste management and to identify factors determining the implementation of a management system based on the national regulatory framework in hospitals. We investigated 23 general hospitals in both urban and rural areas of Shandong Province, China, by both quantitative and qualitative approaches. The medical waste generation rate was 0.744, 0.558 and 1.534 kg bed⁻¹ day⁻¹ in tertiary hospitals, urban secondary hospitals and county hospitals, respectively. There is a wide disparity between implementation in tertiary, secondary and county hospitals. With increasing financial, technological, and materials investment, a management system has been established in tertiary and secondary hospitals. Financial support and administrative monitoring by the government is urgently needed to build a sound management system in hospitals located at remote and less-developed areas. In those areas issues in the financial, administrative and technical aspects should be further examined.

Key Words: Hospital • medical waste • national regulations • management system • generation rate • disposal methods • wmr 08—0103

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Accurate Data: An Essential Component in Reducing Needlestick Injuries

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Needlestick injuries are a known risk to health care workers, especially nurses, but the actual number of occurrences can only be estimated. Methods of reducing needlestick injuries have been available for years, but action by federal agencies such as the Occupational Safety and Health Administration (OSHA) and the Food and Drug Administration and through legislation has been slow. Although OSHA's newest regulations mandate the use of safer medical devices, recording of needlestick injuries is still not mandatory. Therefore, accurate data are not yet available to document the baseline and assess the progress of interventions.

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Needleguard systems: an evaluation

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Aims: The National Blood Service is responsible for ensuring that the NHS demand for blood products is met. The use of needles forms a fundamental procedure in the collection of blood. A common engineering control used to minimize needlestick injury is a needleguard. This study investigates the effectiveness of needleguards as a risk reduction measure. Injury rates, performance and the effectiveness of training are also addressed.

Methods: The methodology adopted two techniques for collecting data, namely database analysis and questionnaire analysis. In examining the accident database, it was identified that the incidence of needlestick injuries fell when needleguards were introduced in 2001. However, a rise in injuries was observed over the 12 months of 2003.

Results: Although the questionnaire showed that staff directly involved in the collection of blood believed that needleguards act to reduce the risk of injury, they also reported difficulties in the operation of the needleguard system. An association was identified between the perceived quality of training and the reported difficulties. It was also identified that training provided by external organizations had the least effect in reducing the operational difficulties.

Conclusions: The study concludes that the use of needleguards as a successful control measure requires further investigation and that further research should be carried out to ensure the effectiveness of training in reducing injuries.

Key Words: needleguard • needlestick • injury • blood • prophylaxis

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Self-reported incidence of accidental exposures to patients' blood and body fluids by resident doctors in Nigeria

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An anonymous survey of 149 resident doctors was conducted to estimate the extent of accidental exposures to blood and body fluids of patients over a one-year period. There was a total of 1142 exposures. Ninety-three percent of respondents reported one or more exposure incident(s).

Analysis of events and procedures leading to accidental exposures revealed that recapping needles was involved in 17%, suturing accounted for 14%, setting up intravenous lines 11%, cuts with scalpel 9% and phlebotomy 9%. Surgical residents had a threefold greater risk of exposure compared with medicine residents. No trend was found for accidental exposures by level of residency training. Seventy-four percent of the residents used universal precautions 50% or less of the time. Only half of the doctors could recall formal instruction on correct course of action after exposure and 5% of them had as undergraduates hepatitis B vaccine prior to the commencement of venepuncture duties. All but one of the residents' exposures were not reported to the Staff Medical Services Department. The doctor who reported was neither tested for hepatitis B virus or human immunodeficiency virus nor was he properly treated. Only 5 (4.6%) of the contaminating patients were evaluated serologically for their status of these viruses.

These data emphasize the need for increased efforts toward improved early and continuing education, prevention and correct management of accidental exposures to blood or body fluids of patients by resident doctors in Nigeria. No recent study exists that exclusively addresses this problem in doctors in tropical Africa.

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Sharps Injury and Body Fluid Exposure Among Health Care Workers in an Australian Tertiary Hospital

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To examine sharps injury and body fluid exposure among health care workers, a descriptive epidemiological study was conducted in a 1000-bed tertiary hospital between 2000 and 2003 using surveillance data of all reported sharps injuries and body fluid exposures. A total of 640 sharps injuries and body fluid exposures were reported from hospital and nonhospital staff, although no seroconversions to HIV, hepatitis B virus, or hepatitis C virus were observed during the study period. Nurses reported 47% of sharps injuries and 68% of body fluid exposures, medical staff reported 38% and 16%, and other nonmedical staff notified 5% and 4%, respectively, while nonhospital staff reported the rest. Hollow-bore needles accounted for 56% of sharps injuries, while 11% of the incidents were sustained during recapping and inappropriate disposal. Further research into Australian work practices, disposal systems, education strategies, and the use of safety sharps should be emphasized to implement strategies to reduce work-related injuries among health care workers.

Key Words: sharps injury • body fluid exposure • health care workers • Australia

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Insulin Self-Administration Instruction: Use of Engineered Sharps Injury Protection Devices to Meet OSHA Regulations

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...Centers for Disease Control and **Prevention**. Guidelines for **prevention** of transmission of human immunodeficiency...Exposure to Bloodborne Pathogens, **Needlestick** and Other **Sharps** Injuries: Final...Insulin administration & dosage | **Needlestick** Injuries etiology **prevention** & control | Nurse's Role | Occupational...

Universal precautions

A review of knowledge, compliance and strategies to improve practice

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The purpose of this literature review is to consider key themes from empirical research relating to the knowledge and compliance of universal precautions amongst healthcare practitioners. Utilising international studies, strategies to improve universal precautions are analysed. The review identifies areas of limited knowledge, synthesises existing research and suggests aspects of universal precautions that need to be studied further.

A literature search of studies listed in the Cumulative Index of Nursing and Allied Health Literature (CINAHL) database was conducted from 1990–2003, using a number of key words. Review, analysis and synthesis of selected studies were performed.

The findings of this review showed that universal precautions are considered an effective means of protecting patients and staff and controlling infection. The consensus from this body of evidence is that, globally, knowledge of universal precautions is inadequate and compliance low. Studies from many countries have shown that specific intervention strategies, such as education, are influential in improving knowledge and compliance.

This review concludes that it is imperative that future research examines how the attitudes and beliefs of practitioners can be influenced and changed to reinforce adherence to universal precautions within the clinical practice setting. There remains a lack of evidence on the long-term benefits of practice interventions to improve compliance, and what specific barriers are influential in affecting how healthcare practitioners adopt universal precautions more effectively in their practice.

Key Words: universal precautions • compliance • knowledge • infection control • intervention studies • standard precautions • education • handwashing • literature review

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Nurses' Risk Taking Regarding HIV Transmission in the Workplace

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