

PRACTICE FORUM

Knowledge, attitude and perceived adherence with universal precautions among health care workers in the obstetrics and gynaecology department of an Indonesian teaching hospital

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Abstract

Health care workers (HCWs) are at a high risk of occupational blood-borne infections, which may be increased in low and middle income countries by low adherence to Universal Precautions (UP). A baseline survey of Knowledge, Attitudes and Perceived adherence (KAP) was executed to design evidence-based tailor made interventions. A cross-sectional, descriptive study using self-administered questionnaires was conducted among HCWs in the obstetrics and gynecology department of an Indonesian teaching hospital from September-October 2007. The survey included 524 HCWs with a response rate of 72% (n=377). The results indicated that the level of knowledge regarding hand washing, personal protective equipment,

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medical waste disposal and post exposure prophylaxis was high, over mean score of 71.8. However, level of knowledge regarding instrument processing and medical sharps disposal was low. Perceived adherence was low as reported by majority of respondents (95%). There was significant association between knowledge and attitude (r=0.235; P<0.001); knowledge and perceived adherence (r=0.314; P<0,001); attitude and perceived adherence (r=0.233; P<0.001). This study-suggest tailor made interventions were needed to improve adherence to UP.

Key words

Universal Precaution, Blood-borne Infection, Health Care Worker, Knowledge, Attitude, Perceived adherence.

Introduction

Health care workers are at risk for blood-borne infections through sharps injuries. One factor which might increase the risk in low and middle income countries is low adherence to universal precautions. Much research has been conducted concerning this topic globally, but little in Indonesia. This paper reports knowledge, attitude and perceived adherence to universal precautions among health care workers in an Indonesian setting.

Background

Exposure to blood-borne infections (BBI) poses a serious risk to health care workers (HCWs). WHO estimates that 40%-65% of hepatitis B virus (HBV) and hepatitis C virus (HCV) and 2.5% of HIV infections in HCWs are occupationally acquired, and 90% of occupational exposures occur in developing countries.¹

The risk of occupational BBI for HCWs in low and middle income countries like Indonesia is high due to crowded hospitals, high patient load per HCW, limited knowledge of risks, inadequate personal protective equipment (PPE), lack of sharps containers, limited knowledge and utilization of Post Exposure Prophylaxis (PEP), low adherence to Universal Precautions (UP), high prevalence of patients with BBI and low hepatitis B vaccination coverage among HCWs.²⁻⁴ As 2 million cases of HCV and 21 million of HBV infections are due to unsafe therapeutic injections,⁵ poor adherence to UP puts both patients and HCWs at risk of BBI.

Several factors associated with HCWs adherence to UP standards have been documented.^{6,7} Bolyard

reported that HCWs often have limited knowledge and training of infection control in their implementation during daily patient care.⁸ Poor knowledge has been associated with poor attitude and poor practices of UP.⁹

Poor practices in medical care contribute to the incidence of needle-stick injuries. In hospital settings, surgery, obstetrics and gynaecology (ob-gyn) and orthopaedics are the most risky departments for needle-stick injury, however most injuries remain unreported. A nation-wide Danish hospital survey revealed that on average 11% of all HCWs sustained a needle-stick injury every month. In a German university hospital 47% of medical staff in surgery and 19% of HCWs in paediatric department reported at least one needle-stick per year.

In Indonesia, UP have been implemented in all major hospitals and health care facilities; however a survey of 400 HCWs in a referral hospital revealed that 55% reported ≥1 needle-stick injury per year.¹³ This survey indicated the need for improving HCWs' adherence to UP. Nonetheless, little is known of the adherence to UP among HCWs throughout the country. This study aims to determine knowledge, attitude and perceived adherence to UP among HCWs in the obgyn department of an Indonesian teaching hospital. The findings may provide baseline data to design evidence-based tailor made interventions to improve HCWs adherence toward UP.

Methods

We conducted a cross-sectional study among HCWs in the Department of Obstetrics-gynaecology (ob-gyn)