

PRACTICE OF STANDARD PRECAUTIONS AMONG HEALTH CARE WORKERS IN A LARGE TEACHING HOSPITAL

Sir,

Although Iran has expanded the preventive services through the primary health care network over the last two decades, it is facing a double burden, viz., communicable and noncommunicable diseases.[1] Iran is an endemic country for hepatitis B.[1] On the other hand, the prevalence of hepatitis C in Iran is about 1%, which is lower than that in other regional countries of the world.[2] In addition, HIV infection is currently on the rise in Iran.[1] In this context, the implementation of standard precautions (Ups) must be widely promoted for health care workers (HCWs) who are frequently exposed to blood-borne infections.

In order to investigate the professionals' adherence to measures of standard precautions, we conducted a study at the 550-bed Imam Reza Teaching Hospital, Kermanshah, in September 2007. A total of 120 health care workers (nurses and paramedical staff) from different departments were surveyed using a standardized questionnaire. Data were analyzed using the EpiInfo version 6 statistical package.

Within the area of assessing the use of protective devices, although the figure (94.5%) for correct transport of safe containers was acceptable, for some others, the figures were disappointing. Use of disposable face masks whenever there was a possibility of splash or splatter was 0.0%. Wearing eye shields to prevent exposure to splashing of body discharge was 6.7%, with the recap of needles after injections at only 8.3%. As for the use of gloves, the practice was not found to be promising; only 57.5% wore fresh gloves for the next patient, and 65.6% wore gloves when they were exposed to deep body fluid or blood product. The respondents' practice regarding the other measures were far from ideal, with the disposal of sharps coming at 74.3% and the safe method for breaking the vials accounting for 73.2%. Only in 78.4% of the cases, the heavily bloodstained materials were packed in plastic bags irrespective of patients' infectious status. Covering one's own wounds or lesions in waterproof dressing before providing care to patients was at 85.5%. The figures for use of standard measures after needling, washing hands after providing care to patients, and washing hands after removing the gloves were 85.6%, 58.2%, and 31.5% respectively. Among the last figures were for decontamination of

surfaces and devices at 86.3%, cleaning up of blood spills immediately by using disinfectant at 74.7%, and wearing a gown/apron when soiling with blood or deep fluid at a likely 67.1%.

In line with some other reports from Iran and other developing countries,^[3-5] the compliance of HCWs with regard to the standard precautions was less than optimal. The partial practice of such measures in the Iranian health system contributes to the exposure of HCWs to the risk of blood-borne infections. Although we did not investigate the reasons for the prevalence of the observed figures, it might be due to different factors ranging from lack of information to lack of necessary facilities available in different wards. In developing countries where there is insufficient funding for health care resources, practicing standard precautions is much more cost-effective as compared to laboratory tests for diagnosis of patients infected with blood-borne diseases. Future studies are needed to investigate the training of personnel with regard to such measures and to see if the protective barriers are readily available.

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