

## Need of Dental Occupational Injury Department in the Dental Outpatient Department of Government Hospitals of Karachi

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Dear Madam,

Through your esteemed journal, we would like to draw attention for the establishment of dental occupational injury department for health care workers (HCW) in the dental outpatient departments (OPDs) of Karachi. Aim being to aid dentists and dental personnel to report the frequency of occupational exposures to sharp instruments and get the appropriate prophylaxis or treatment. Department established would also help to create awareness among these HCW regarding the knowledge of such injuries, their prevention and immediate management. The professionals who are at high risk of occupational exposure, particularly needle stick injuries, include dentists, dental hygienists, dental staff assistants and dental students working at the OPD.

This department is needed because several times HCW, dental personnel and dental students do not report injuries due to lack of knowledge and awareness and afterwards become sufferers of serious infections<sup>1</sup>. In many hospitals, HCWs also suffer needle stick injury/sharp instrument injury (NSI/SII) but they do not have any reporting department to report their injury and get appropriate treatment. If any HCW, dental personnel and dental students suffers from occupational exposure, they become afraid of it because it may affect their social and professional activities. Inappropriate use of post ex-

posure procedures and lack of knowledge increases the risk of catching life-threatening infections<sup>2</sup>.

The basic objective of this department is to provide dental occupational injury evaluation along with basic medical evaluation, vaccines and post-exposure treatment at a reasonable cost and within suitable time. Proper prophylaxis procedures or treatment can decrease or completely prevent the transmission of some lethal viruses, for example hepatitis B, C and HIV<sup>3</sup>. In addition, the dental occupational injury department should conduct educational sessions and workshops on NSI/SII, which remarkably decreases the rate of these injuries, and also prevents nosocomial transmission of blood-borne pathogens by providing proper treatment<sup>4</sup>. Dental occupational injury department is responsible for proper counselling of HCWs suffering an incident of occupational exposure and also for proper respective screening and prophylaxis<sup>5</sup>.

Many studies done in Pakistan have shown that dental occupational injury department is needed in every hospital to prevent these injuries and it plays a major role in the augmentation of knowledge and safe behaviour of HCWs. One of the studies was conducted at infection control office, Aga Khan University Hospital (AKUH) Karachi, Pakistan<sup>6</sup>. The study investigated the impact of infection control activities on the rate of needlestick injuries. According to the study, a total of 1382 incidents of NSI were reported by HCWs from January 2002 to December 2007, in which increased number of incidents were noticed between 2002 to 2005, followed by a decline ( $p=0.03$ ) in the year 2006 to 2007, after the implication of infection control edu-

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cational and counselling sessions regarding post-exposure prophylactic measures against NSI/SII.

It is also the duty of the department to develop policies for protocols to be followed after NSI/SII<sup>7</sup>. There should be trained and experienced personnel in dental occupational injury department who can manage the emergencies<sup>8</sup>. The department should have a proper record sheet, equipment and facilities to give an estimated idea of risk and guidance for management. Health and safety advisors can assist in identifying areas where employees may be at risk and monitor appropriate infection control measures and follow-ups<sup>9</sup>. The department should support and assist in the investigation process that seeks to find the cause of the incident and if appropriate, should review the relevant risk assessment and eliminate the cause. In addition, the department should also ensure that HCWs, dental personnel and dental students are following appropriate safety procedures and protocols for cross infection control. It is also the obligation of the department to maintain proper records of the victims about their vaccinations and incidents of occupational exposure and their management. It will also help in keeping the record for future correspondence<sup>10</sup>.

Therefore, it is highly recommended that dental occupational injury department should be established and functional in dental hospitals of Karachi to prevent lethal life threatening infections among dental community.

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