

SHORT COMMUNICATION

OCCUPATIONAL EXPOSURE & TREATMENT SEEKING BEHAVIOUR OF HCWs FOR POST EXPOSURE PROPHYLAXIS AT TERTIARY LEVEL HOSPITAL OF WESTERN RAJASTHAN, INDIA

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INTRODUCTION

Health Care Workers are at risk of getting blood born infections like HIV, HBV & HCV¹. This study was done in ICTC (Microbiology Department) and ART centre of Dr. S.N. Medical College, Jodhpur (Raj.) since April 2006. In ART centre more than 8500 HIV sero-positive patients are being cared for. HCWs are at occupational exposure. Therefore there is frequent reporting of occupational exposure to HCWs.

METHOD

Analysis of 60 subjects, who came for PEP to this centre, was done. All were evaluated clinically as per NACO guidelines and subjected to HIV, HBV, HCV & CBC testing at zero day, 28th days, 3 months and 6 months intervals are done and given PEP according to NACO guidelines.

RESULT

Total 60 subjects were given PEP in 5 years. Male to Female ratio was 2:1 [40:20]. 20% were Doctors and 80% Paramedical staff. 60% had Exposure by Hollow Needle. Only 41.67% reported & started PEP Within <2 hours. All exposed were HIV, HBV and HCV negative on zero day testing but for follow up testing after 6 months only 50% turned up & reported Negative.

Table 1: Regular Training on HWM & on Infection Control in HCW should be part of JOB (n=60)

Mode of Exposure	Cases (%)
Hollow Needle Injury	36 (60)
Blunt [suturing] Needle Injury	6 (10)
While Recapping Used Needle	2 (3.33)
With M P QBC Capillary In Microbiology Lab.	2 (3.33)
Contact with blood or body fluid	12 (20)
Human Bite	2 (3.33)

Table 2: Time When Pep Was Started After Exposure (n=60)

Time Duration (In Hours)	Cases (%)
< 2 hours	25 (41.67)
2 - 24	8 (13.33)
24 - 48	10 (16.66)
48 - 72	8 (13.33)
>72	9 (15.00)

Complications of PEP were seen in form of Gastritis, Vomiting, Skin rash but all Subjects had 100% adherence for treatment. When no one questioned was having proper knowledge of 'How To Manage Accidental Spillage Of Sero-positive Blood or Fluid (About Disinfection Process).

OBSERVATIONS AND DISCUSSION

60 cases for PEP were registered in 5 years of duration. There was gradual increase in number with time. Males 40 outnumbered the females 20 (2:1ratio). There were 75% paramedical staffs; 20% Doctors and 5% others. 20% were from peripheral hospitals, 80% from Jodhpur Medical College. 60% had injury with hollow needle; 20% by contact with blood and body fluid while conducting delivery; 13.33% had accidental injury in laboratory while performing laboratory tests with HIV positive blood, 3.33% with suturing needle and 3.33% had human bite from HIV positive patients. In 41.67% HCWs, PEP with basic regime as NACO guidelines started within 2 hours, while in 45% HCWs, they reported in ART centre after 24 to 72 hours of duration.

Table 3: Type of Occupation (n=60)

Occupation	Cases (%)
Doctor (MS, MD & residents)	12 (20)
Nurses	39 (64.01)
Laboratory technicians	6 (10)
Research scholar	1 (1.66)
Ward boys in art center	2 (3.33)

In laboratory investigations, all HCWs were HIV, HBV and HCV negative. In 50% HCWs even after 6 months follow up, these tests were negative. Remaining subjects did not turn up for follow up. No one know management of spillage of blood or first aid treatment of accidental exposure of HIV positive blood. No one was having knowledge about management of blood and bloody fluid spillage.

CONCLUSION:

It is evident that most of affected HCWs were paramedical staffs. There was delay in reporting and even among them, 50% did not turn up for follow up. It indicates: lack of understanding and motivation amongst clinicians and paramedical staffs regarding PEP. A study involving areas other than medical college is still a need of time to find exact number of exposed

persons and need of training to impart preventing knowledge among HCWs.

RECOMMENDATION

All HCW should be vaccinated for HBV. All health care workers should be trained regarding management & handling of HIV positive patients, their all body secretions e.g. blood; blood products; infected or used syringes / needles / blades / all sharp objects or instruments. Any accidental exposure should be reported to Infection Control Committee or Officers In-charge. PEP should be started within 2 hours of exposure. At least 5 doses of PEP should be Available in all ICU; OT; Wards; Emergency; so that in case of emergencies in odd hours; PEP can be delivered to expose HCW without any panic. Management of exposed site; should be by washing with soap, water & disinfectants immediately [not by injecting in wound site]. If HIV Status of patient is not confirmed in ICTC or single test report is available; still PEP should be started without waiting for confirmatory test report from ICTC which generally takes 2 to 3 days. Do not test used or exposed needle or testing of p24 antigen is not at all recommended for PEP. Adherence to treatment is must for 28 days ignoring side effect of ART Drugs & follow up testing should be advised. Management of any Blood spillage should be known to all HCW by 10% hypochlorite solution. Protocols of "Hospital Waste Management Policy & Proper Disposal of used Needle & Syringe" should be followed meticulously. Needle Cutter & disinfectants (10% Hypochlorite or Gluteraldehyde) should be available in Laboratories/Wards / OT / ICU / Emergencies for use in emergency.

REFERENCE

1. National AIDS Control Organization. Operational Guideline for Integrated Counseling & Testing Centre. New Delhi: NACO, Health & Family Welfare, Govt. of India; 2007.p 25-6.