

Assessment of training needs in occupational exposure to HIV in 8 Medical Universities in Vietnam

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Background

- HIV pandemic spreads rapidly over the world and becomes a burden of the health care system.
- Health care providers (HCPs) have high risks of occupational exposure to HBV, HCV as well as HIV from patients.
- By the end of 2003, there were 389 HCPs had occupational exposure to HIV in Vietnam.
- Training on occupational exposure to HIV/AIDS for HCPs, Medical University students and faculties is very important and urgent issue.
- An assessment has been conducted at 8 Medical Universities in Vietnam before training to evaluate the training needs on occupational exposure to HIV



Objectives

1. To describe current HIV/AIDS training situation of medical students and faculties in 8 Medical Universities in Vietnam.
2. To evaluate knowledge and practice of medical students and faculties on prevention of occupational exposure to HIV
3. To evaluate the risk of occupational exposure to HIV and PEP.



Method

- **Objects:** 803 medical students year 6 and 238 faculties in 8 Medical Universities
- **Time line:** March – July, 2005
- **Sites:** Ha Noi, Hai Phong, Thai Binh, Thai Nguyen, Hue, Tay Nguyen, Can Tho, and Ho Chi Minh City (Ha Noi Medical University is coordinate from design, conduct and supervise)
- **Method:** qualitative and quantitative
- **Data analysis:** Epi Data 3.1 and SPSS 12.0



Results

1. Current HIV/AIDS training situation of medical students and faculties



Table 1: HIV/AIDS contents that are provided to students in medical universities

Contains	No of student (N=795)	%
HIV /AIDS epidemiology	760	95.6
HIV virology	696	87.6
HIV immunology	681	85.7
HIV/AIDS diagnostic	751	94.5
Clinical course of HIV infection	738	92.8
HIV/AIDS prevention and control	764	96.1
Care and treatment for HIV/AIDS	621	78.1
Universal precaution	492	61.9
Post exposure prevention and PEP	316	39.8

Timeline 4-16 class hours depend on university
(outcome of in deep interview)



Table 2: The rate of faculties had been trained on HIV/AIDS after graduated from University

Get trained in HIV/AIDS	Number	%
after graduated from University	115	48.3
in last year	29	12.2



2. Knowledge and practice of medical students and faculties on prevention of occupational exposure to HIV



Table 3: The rate of students and faculties have the correct answers on knowledge and risk of HIV transmission

Knowledge of HIV transmission risk	Students (N=803)	Non clinical staffs (N=67)	Clinical staffs (N=171)
	%	%	%
The HIV prevalence among IDUs in Vietnam had been reported about 50-70%	30.2	44.8	39.8
HIV infected risk of 1 time transfusion with HIV-infected blood is > 90%	57.3	68.7	52.1
HIV infected risk of 1 time heterosexual contact without condom < 0.5%	8.4	7.5	9.9
HIV infected risk by sharing syringes and needles with HIV infected persons is < 1%	6.4	9.0	7.0
HIV infected risk of the child born to HIV infected mother without PMTCT prophylaxis is 25-40%	28.0	49.3	46.8



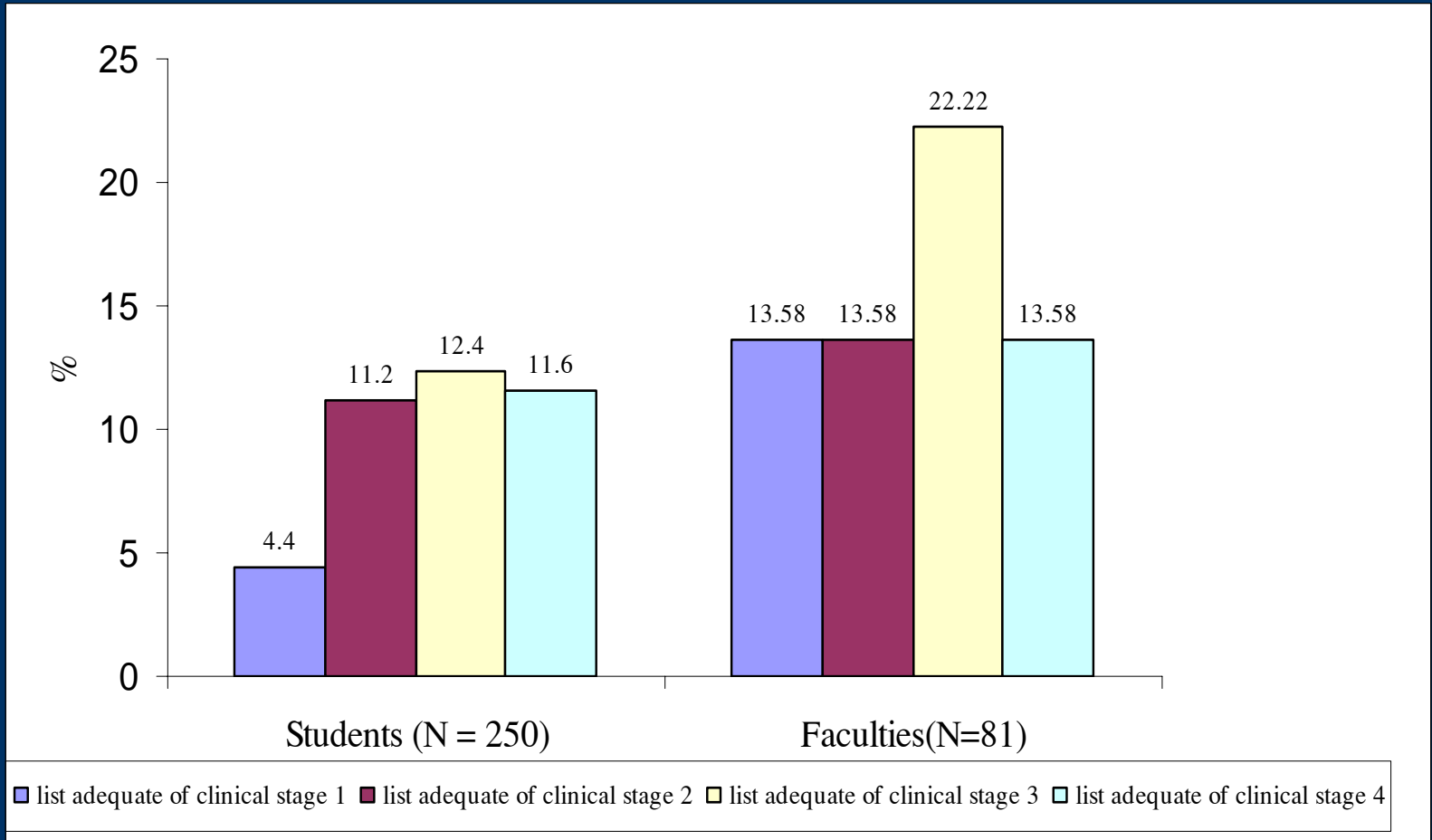


Chart 1: The rate of faculties and students list adequate of 4 HIV/AIDS clinical stages of WHO



Table 4: The rate of faculties and student have correct answers in opportunistic infection prophylaxis and treatment issues

Knowledge on opportunistic infections (OI)	Students (N=592)	Non clinical staffs (N=56)	Clinical staffs (N=138)
	%	%	%
<ul style="list-style-type: none"> List all of 4 above contents (personal hygiene, adequate nutrition, using cotrimoxazole and Flucanazole for prophylaxis) 	18.8	12.5	22.5
OI drugs for treatment			
<ul style="list-style-type: none"> PCP treatment by Cotrimoxazol 	58.6	76.8	73.9
<ul style="list-style-type: none"> Cryptococcal meningitis treatment by Amphotericin B 	42.6	62.5	68.8
<ul style="list-style-type: none"> Herpes simplex treatment by Acyclovir 	84.1	83.9	81.2



Table 5: The rate of faculties and students who had correct answer on risk situation of HIV occupational exposure

Risk situation of HIV occupational exposure	Students (N=803)	Non clinical staffs (N=67)	Clinical staffs (N=171)
	%	%	%
Be stick by needles/sharp instruments when taking care HIV patients	94.3	92.5	98.8
Be splashed by blood or bloody fluid into the eyes	89.3	83.6	88.9
Directly contact with blood or body fluid of HIV patient through non-intact skin	96.0	92.5	96.5



Table 6: Safety practice when taking care HIV patients

Practices	Students (N=736)	Non clinical staffs (N=45)	Clinical staffs (N=160)
	%	%	%
Never recapped used-syringes and needles by hand	29.9	57.8	50.0
Never reused non-sterilization syringes and needles	95.8	93.3	95.0
Always wear gloves when contacting to blood samples	67.1	80.0	77.5
Always clean hands after contacting with blood	70.1	73.3	76.3



Table 7: Methods should have done right after be stick by needles or sharp instruments when taking care of HIV patients

Methods	Students (N=464)	Non-clinical staffs (N=18)	Clinical staffs (N=88)
	%	%	%
Clean the wound by soap and clean water	71.8	88.9	80.7
Using antiseptic on the wound	90.7	88.9	86.4
Squeeze blood out from the wound	51.9	44.4	53.4
Test for HIV	28.5	11.1	37.5
Report to the manager	17.7	16.7	18.2
Doing nothing	11.2	0.0	1.1



3. Risk of occupational exposure to HIV of the medical students and faculties



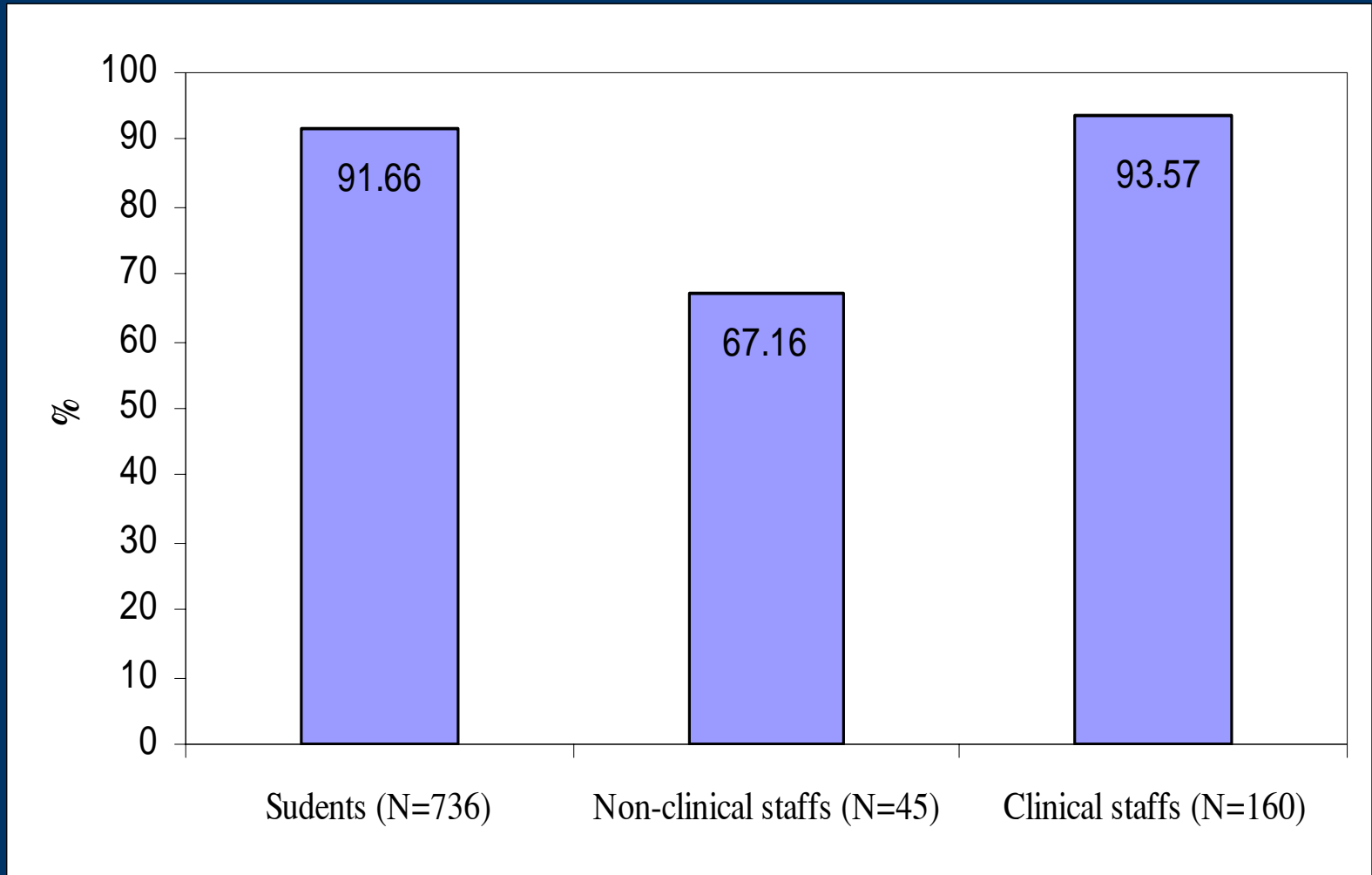


Chart 2: The rate of students and faculties had contacted to blood, bloody fluid or blood products



Table 8: The rate of medical faculties and students had been exposed to HIV at work

Exposure to HIV at work	Students (N=803)	Non-clinical staffs (N=67)	Clinical staffs (N=171)
	%	%	%
Had been stick by needles or sharp instruments when taking care patients	57.8	26.9	51.5
Had been exposed directly with blood or body fluid that concern to be HIV infected	59.5	20.9	43.3



Conclusions

1. Training on occupational exposure to HIV for Medical University students and faculties are great needed (4-16 hours/course, 39.8% - 61.9% students to be trained on universal precaution and PEP).
2. Student and faculty's knowledge of prevention of occupational exposure to HIV are limited (29.9% students and 50-70% lecturers)
3. The risk of exposure to HIV of health care providers, faculties and students is very high but the rate of them doing correctly practice to avoid it is low. (11.2% students doing nothing after exposure).



Recommendations

1. Need to develop the training materials on prevention occupational exposure to HIV.
2. Apply the training materials on prevention occupational exposure to HIV for all medical universities nationwide.
3. Assess and continue to study



Thank you!

