## **Abstract**

The main purpose of this 2nd-year study is to provide anonymous HIV antibody and syphilis tests and counseling to female sex workers and men having sex with men (MSM) from gay sauna. We collected data on the sexual behaviors and risk factors associated HIV-1 infection from MSM in gay saunas. From Jan. to November, 2001. 268 MSM from 4 different saunas participated in this study, 97 of them (response rate 36.2%) with effective questionnaires. The results showed that 39 (14.56%) of them were infected with either HIV-1 or syphilis that included 15 (5.6%) HIV-1 infections, 26(9.7%) syphilis infections and 2 (0.7%) dual infections.

In general, 59% (46/78) MSM will have one sex encounter in gay sauna, 25.6% (20/78) will have two sex encounters. Among those who engaged in anal sex, 11.49% of them have sex without condom. In terms of risk factor associated with HIV-1 or syphilis infections, 75% (6/8)infected subjects are willing to have sex with people if their counter partners ask not to use condom, while those of uninfected 47.2%(34/72). Those who are infected with either HIV-1 or syphilis also have fewer regular sex partners, compared with those of uninfected.

The overall seroprevalence rates of either HIV-1 or syphilis in MSM sauna during the last 12 months are lower than those of the first year. However, it should be cautious to interpret the data. It is unlikely that the seroprevalence rate is declining among MSM in gay sauna since the number of overall CDC reported new cases is still increasing. Possible reasons included screening effect, unskilled new personnel persuading the sauna customers to participate in this study, etc.

In terms of commercial sex workers, none of the total 1054 subjects get HIV-1 infection; however, 20.7% of them have syphilis infections.

This is the second year report on the seroprevalence rates of HIV-1 and syphilis in the MSM from gay sauna in the northern region of Taiwan. The rates of either HIV-1 or syphilis among the subjects were declining compared with the first year study, which probably could be the results of screening effect and other artificial and /or environmental factors. The study results showed that MSM are still the high risk group in terms of HIV-1 or syphilis infections. Continuing study is needed to monitor the seroprevalence rates and investigate the associated risk factors among MSM and commercial sex workers.

Key Word: Male homosexuals HIV-1 Sexually transmitted diseases Risk factors