

ISID Small Grants Program Final Report

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A pilot study of HIV counseling to increase willingness to receive premarital HIV testing among marriage license applicants in a rural area of China

The HIV epidemic in China is growing rapidly. A unique feature of the HIV epidemic in China is that the majority (80%) of HIV-infected persons are rural residents. The origin of the epidemic among drug users and plasma/blood donors in rural areas probably explains the unusual epidemiology of HIV in China. With the support of ISID, we conducted a study among marriage license applicants in a rural area of China, where HIV spread among former commercial plasma donors. The objectives of the study were (1) to examine the risks of HIV transmission between husbands and wives and from parents to children; (2) to document relationships among HIV-related public and felt stigma, worry of HIV infection, HIV/AIDS knowledge and disclosure of HIV testing results; (3) to assess the impact of HIV counseling on willingness to receive HIV tests and reducing the stigma associated with HIV. A one-group pretest-posttest study with one session of HIV counseling was conducted among 605 (302 couples) marriage license applicants in 2003.

HIV-related risks exist among the study population, and there is the potential that HIV could be transmitted to both spouses and children

More males (64.6%) than females (52.1%) reported having had premarital sex and multiple sex partners (12.6% and 6.9%, respectively). Among those having had multiple sex partners, 8.5% reported often or always using condoms. Couples had a low level of HIV knowledge and perception of vulnerability to HIV infection. Thirty-nine percent of the couples (119/302) knew that HIV could be transmitted within HIV-discordant couples, and 41% knew that HIV could be vertically transmitted from a mother to a child. Only 36.8% of the couples agreed that they would not plan to have a baby after knowing they were HIV-infected. About 43% of the couples agreed that they would use condoms consistently if one of them were HIV-positive. Multivariate analysis indicated that subjects were more likely to accept condom use if they (1) received a high-school education or above, (2) felt that they knew their spouse very well, (3) had greater HIV knowledge, (4) did not plan to have a baby if a spouse was infected, or (5) had had premarital sex. The finding of risk of HIV transmission among the marriage license applicants underscores the need for national programs to prevent HIV infection within couples, especially in rural areas.

Concern about HIV-related stigma is prevalent, and public stigma and felt stigma co-exist among rural marriage license applicants

Stigma can be conceptualized as either external (public stigma) or personal (felt stigma). Public stigma consists of the attitudes or reactions of the general population towards persons with HIV and their family members. Felt stigma, on the other hand, refers to an individual's fear of societal attitudes and potential discrimination if they were to have HIV infection. This study demonstrates that concern over HIV-related stigma was prevalent among the study population. The following relationships showed statistical significance: (1) HIV/AIDS knowledge \square perceived worry about HIV infection ($\square = -0.39$); (2) perceived worry \square public stigma ($\square = 0.27$); (3) public stigma \square felt stigma ($\square = 0.22$); and (4) felt stigma \square willingness to disclose HIV positive result ($\square = -0.20$). HIV-related public stigma and felt stigma co-existed, which makes efforts to reduce HIV-related stigma more difficult, because intervention programs need to target both public stigma and felt stigma at both the individual and community levels.

Impact of HIV counseling on willingness to receive HIV test and HIV-related stigma reduction

After the single session of HIV counseling, the level of HIV/AIDS knowledge increased (from a mean value of 6.77 to 11.46 out of a total score of 13), and the level of worry about HIV infection was decreased (from 13.66 to 8.87, total score: 24). The vast majority of individuals (80%) reported willingness to voluntarily receive an HIV test. It is feasible that voluntary counseling and testing programs for HIV (HIV-VCTs) can be implemented among this population in rural areas. However, the changes in perceived public stigma, felt stigma, and the willingness to disclose HIV-positive status were of marginal significance. Therefore, HIV counseling reduced perceived worry but exerted little impact on HIV-related stigma and disclosure. This lack of effect may be because the single-session counseling intervention was effective largely at the individual level, while HIV-related stigma and willingness to disclose are determined at both the individual and the community level.

Another finding from the study is that both temporary rural-to-urban migrants and non-migrants were at elevated risk of contracting and transmitting HIV, via different mechanisms. It is more practical to establish HIV intervention programs targeting rural residents before they leave for cities for a temporary job. \diamond



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Dr. Hongjie Liu completed a doctoral degree in Epidemiology at the School of Public Health, University of California, Los Angeles (UCLA). Before coming to UCLA, he worked as an epidemiologist at Anhui Provincial Center for Diseases Control and Prevention (CDC) for 12 years. He has published 38 peer-reviewed papers. Dr. Liu was elected a member of the U.S. National Public Health Honorary Society and is currently an assistant professor at Wayne State University School of Medicine.