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Associated factors to attitudes and perceptions toward HIV/AIDS: a study of ethnic minorities in Buon Ma Thuot City, Dak Lak Province, Vietnam

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ABSTRACT

Background: In Central Highland of Vietnam, number of HIV infected people in the Highlands region was 2,869, with 654 cases of AIDS. There are very few researches on HIV/AIDS, especially, research in community. The ethnic minority populations are the source of differences from other regions of in the country. Negative attitude and misperception toward HIV/AIDS are remaining among this group.
Aims: This study aims to illustrate attitude and perception towards HIV/AIDS among ethnic minority in Buon Ma Thuot City and determine factors related to attitude and perception towards HIV/AIDS in this population.
Methods: We performed a cross-sectional survey of collected from 810 ethnic minority aged 15-49 in Buon Ma Thuot city, Vietnam in 2012. Face-to-face interviews were conducted to collect information regarding HIV knowledge, HIV perception and attitude towards people living with HIV/AIDS (PLWHA). The mean score was calculated. Multivariate analysis performed to analyze the influence of socio-demographic, HIV information sources and HIV knowledge on attitudes and perception towards HIV/AIDS.
Results: We identified that the mass media channel has been used as HIV information resource (92.8%); however, the respondents received HIV information through mass media channels had lower perception and attitude towards HIV/AIDS. The multivariate analysis showed that the socioeconomic-demographic characteristic, HIV information, and HIV knowledge significantly associated with perception and attitude towards HIV/AIDS. The findings highligh the HIV information provided by health officers, who are ethnic minorities, had more effectiveness of improving attitude towards People living with HIV/AIDS (PLWHA) in the premise community ($p<0.05$).
Conclusion: Based on these data, we recommend improving quality of HIV message through mass media channel with adequate HIV information combine with social messages. Besides, combination of the role of multichannel mass media and health officers is needed to improve the perception and attitude towards HIV/AIDS among Ethnic minorities.

INTRODUCTION

HIV / AIDS pandemic is one of the major impact to the world. Every year, millions of people died of AIDS. It is a major challenge to public health issue over the world. HIV / AIDS does not only affect human health but also security, economic, social, and development of the human race. Since the

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discovery of HIV in 1981 until 2011, 34 million of population are infected HIV in the world. An estimated 0.8% people from aged 15-49 years were living with HIV. AIDS has killed more than 1.7 million people (a 24% decrease compared to 2005) and 2.5 million people newly infected HIV [13]. According to the report of the Organization on HIV/AIDS of the United Nations in 2006, less than 50% of people infected worldwide understand of HIV/AIDS. General knowledge about the transmission and prevention was not high [5].

Since 2001, after having been relatively stable for several years, the HIV infection in Eastern Europe and Central Asia began increased in the late 2000s. In many countries in Asia, HIV epidemics started with the virus spreading rapidly among people who inject drugs and sex workers [12]. The HIV prevalence spreading in high risk groups but can risk transmission to population. For example, an estimate of 35% of people living with HIV in Asia and the pacific are women. The majority of women living with HIV in the region received infections from their intimate partners.

In Vietnam, the coverage of HIV knowledge improving program runs almost in all provinces through mass media and peer educator. Yet, there are differences in knowledge, attitude and perception toward HIV/AIDS disease in different education groups, region groups, age groups, and ethnic groups. In particular, the discrimination and stigma are still barriers to the HIV prevention programmes in all provinces [7]. After more than 20 year fighting with HIV/AIDS, Vietnam has achieved some effectiveness but still has many challenges in the future. In 2012, the number of HIV cases still alive is 210,703 cases, AIDS patients alive is 61,699 cases and 63,372 deaths due to AIDS [14].

In Central Highland of Vietnam, in 2012, number of HIV infected people in the Highlands region was 2,869, with 654 cases of AIDS. In this region, there are very few researches on HIV/AIDS, especially, research in community [14]. The lack of investment from foreign organizations for HIV/AIDS prevention program remains a challenge. The ethnic minority populations are the source of differences from other regions of in the country. Negative attitude and misperception toward HIV/AIDS among this group are still high.

To improve the perception and attitude towards HIV/AIDS among Ethnic minorities, it is important to reduce the spread of HIV in minority communities. This study aims to illustrate attitude and perception toward HIV/AIDS among ethnic minority in Buon Ma Thuot City and determine factors related to attitude and perception towards HIV/AIDS in this population. Results are expected to provide some recommendations for the future HIV intervention programs.

METHODS

The cross-sectional study was conducted in Buon Ma Thuot City, Dak Lak province, one of provinces in Central highland, Vietnam. This study selected 810 households from 30 clusters includes population of several ethnic minorities (Eđe, M'nong, Tay, Muong, Nung and others) aged 15-49. The respondents were selected one by one, corresponding with 810 households. The questionnaire forms were designed base on national indicators for monitoring and evaluation in HIV/AIDS prevention by Vietnam Authority of HIV/AIDS Control and modify with ethnic minorities. All respondents were interviewed by this questionnaire.

HIV knowledge was measured based on six items including causes of HIV/AIDS disease and knowledge about HIV medication to prolong life of people living with HIV/AIDS. The HIV knowledge score are computed according to these six items range from 0-6. The perception towards PLWHA was measured according to 22 items. These items are mentioned on the perception about the ways to the prevention, recognize the high risk group (female sex workers, man who have sex with man, and people who inject drug), and recognize behavior with high risk of HIV infection and rejecting HIV misperception. The perception toward HIV/AIDS scores are computed by these 22 items range form 0-22. The attitude toward PLWHA was measured according to 16 items that mentioned on the attitude about caring towards PLWHA, who are member of family and neighbors, the attitude stigma and discrimination towards PLWHA. The attitude towards PLWHA scores are computed by these 16 items range from 0-16.

This study used descriptive statistics to investigate the situation regarding attitudes and perceptions toward HIV/AIDS among ethnic minorities. For multivariate analysis, the binary logistic regression has been used to determine the association between each independent variable and the dependent variable. The perception towards HIV/AIDS, attitude toward PLWHA and HIV knowledge were computed as score variables range from low level to high level.

RESULTS

Characteristics of respondents

Among 810 respondents aged 15-49, 39.0% aged 35-49, 35.6% aged 15-24, and 25.4% aged 25-34. There are more females (56.2%) along with Ede ethnics higher than other ethnic minorities (69.6% and 30.4%, respectively). More than half the respondents had secondary school and higher than secondary, 30.0% and 30.2%, respectively. The majority (68.3%) is single. The common occupation is farmer (69.1%), over fifteen percent (15.7%) of respondents did not work. Most of respondents had middle income (89.5%). The large proportion of respondents can read (79.4%) and write (77.2%) Vietnamese language. The common HIV information sources is mass media channels (92.8%) such as: television, newspapers, and posters etc. The mean of HIV knowledge 2.0 (± SD 1.5), ranging from no HIV knowledge (score is 0) to high HIV knowledge (score is 6).

Perception towards HIV/AIDS

As shown in Table 1, the mean of the perception towards HIV/AIDS score is 14.6 (±SD5.4). In additions, the perception towards PLWHA score ranges from the lowest perception with misperception towards HIV/AIDS (score is 0) to high perception with reject perception towards HIV/AIDS (score is 22). The highest score of perception towards HIV/AIDS demonstrate in respondents aged 15-24 (16.4), followed by those aged 25-34 (14.6) and lowest among respondents aged 35-49 (13.0), respectively. The respondents with no educational level demonstrated the lowest mean score of perception toward PLWHA (9.3 and highest mean score in higher than secondary group (18.2). Different occupation also indicates different mean score of perception towards HIV/AIDS. Labors have the lowest mean score of perception towards HIV/AIDS (11.7) and officers demonstrated the highest mean score of perception (18.9). Especially, not working persons also demonstrated high mean score of perception (17.4).

Better economic status corresponds with higher mean score of perception towards HIV/AIDS. The highest mean score of perception is shown in those with highest income group (18.0) and lowest in lowest income group (8.9). The respondents who can read and write Vietnamese language indicates higher mean score of perception towards HIV/AIDS (15.6 and 15.7, respectively) compared with respondents who cannot read nor write (10.7 and 10.9, respectively).

Table 1. Mean score of perception and attitude scores by the socio-demographic characteristics

Variables	Mean score (N=810)	
	Perception	Attitude
Age		
15-24	16.4	11.2
25-34	14.6	10.2
35-49	13.0	9.5
Sex		
Male	14.3	10.4
Female	14.8	10.3
Ethnicity		
Ede	15.6	10.6
Others	12.3	9.6
Education level		
Illiterate	9.3	8.6
Primary school	12.8	8.8
Secondary school	15.0	10.7
Higher than secondary school	18.2	12.1
Marital status		
Single	14.2	10.0
Married	15.5	10.9
Occupation		
Farmer	13.8	9.7
Labor	11.7	10.6
Officer	18.9	12.9
Not working	17.4	11.8
Others	16.4	11.4
Income		
Low income	8.9	9.1
middle income	15.0	10.3
High income	18.0	13.2
Read Vietnamese		
Can read Vietnamese	15.6	10.6
Cannot read Vietnamese	10.7	9.1
Write Vietnamese		
Can read Vietnamese	15.7	10.8
Cannot read Vietnamese	10.9	8.8

Surprisingly, as shown in Table 2, the lowest mean score of perception towards HIV/AIDS is found among respondents who reported received HIV information through mass media (15.6) and highest among respondents receiving HIV information from other sources (17.9) such as family having HIV-positive persons, from friends, etc.

Table 2. Mean score of perception and attitude towards PLWHA by sources of HIV information

Sources	Mean score (N=810)	
	Perception	Attitude
Mass media	15.6	10.5
Health officers	17.2	11.6
Others	17.9	11.7

However, the full model after controlling for socioeconomic-demographic characteristics and source of HIV information, HIV knowledge is significantly and positively associated with perception towards HIV/AIDS. All sources of HIV information have strongly significant association with perception towards HIV/AIDS. As for socioeconomic-demographic characteristics, most are statistically significant, except age, sex, and ability to read and write Vietnamese. The other ethnic minorities had higher negative perception, compared with the Ede ethnic. This model explained only 67% of the variability (data not shown).

Attitude towards HIV/AIDS

The mean of score of attitude towards PLWHA is 10.3 (±SD 4.1). The total of attitude towards PLWHA score range from the lowest attitude with stigma and discrimination towards PLWHA (score is 0) to high attitude with no sigma and discrimination towards HIV/AIDS (score is 16). Follow the same pattern as perception, orchestrated in Table 1, the mean score of attitude is highest among those aged 15-24 (11.2), lowest among those 35-49 (9.5), not different between males and females (10.4 and 10.3 respectively), and slightly higher among Ede ethnic (10.6) than others ethnic (9.6), and among married people (10.9) than the singles (10.0).

The mean score of attitude is higher among the more educated. The mean score of attitude towards PLWHA is highest among those with higher than secondary school (12.1) and lowest among the illiterates (8.6). Similar to perception, mean score of attitude varies across types of occupation. Farmers show the lowest mean score of attitude towards PLWHA (9.7), while officers the highest (12.9). Higher income corresponds with higher attitude towards PLWHA. The highest income group indicates the highest mean score of attitude towards PLWHA (13.2) and lowest in the lowest income group (9.1). In additions, higher mean score of attitude towards PLWHA is also shown among respondents with ability to read and write Vietnamese language (10.6 and 10.8, respectively) compared to their counterparts (9.1 and 8.8, respectively).

Similarly, as shown in Table 2, the respondents who received information through mass media demonstrated the lowest mean score of attitude towards PLWHA (10.5), while those respondents who received HIV information through others sources have the highest mean score of attitude (11.7), though respondents receiving information through health officers have only slightly lower mean of score of attitude (11.6).

The full model, when all socioeconomic-demographic characteristics, source of HIV information, and HIV knowledge are simultaneously included, three variables are significant, HIV knowledge, source of information, education. Higher HIV knowledge is significantly associated with positive attitude towards PLWHA. However, this model explained only 17% of the variability (data not shown).

DISCUSSION

These community-based survey results provide overall picture of perception and attitude towards HIV/AIDS. Findings from this current analysis will be useful for communication programmes and monitoring and Evaluating HIV/AIDS prevention programmes, in ethnic minority communities. This study results found that the socioeconomic-demographic, but age, sex, ability to read and write had relationship with perception towards HIV/AIDS. It is consistent with findings is similar with the finding in Bangladesh [4].

In recent years, the education system provide information towards HIV/AIDS through small section, especially in secondary school. Therefore,

those who had secondary school had higher perception than no education group, the higher secondary and primary school are not significantly associated with perception towards HIV/AIDS. This findings is consistent with the findings of study in Bangladesh, where they also found that respondents with secondary school or above was more likely awareness towards HIV/AIDS [4].

The mass media is a common source on HIV prevention programmes (92.8%). The HIV/AIDS information on prevention and transmission were provided through the TV, newspapers, radio, magazines, poster. This finding is consistent with the finding of the study in Bangladesh, where they found that the mass media like the radio and TV are the primary sources of HIV/AIDS information [10]. This study showed all the HIV information sources had strong relationship with perception towards HIV/AIDS. But the study also found that the respondents who received HIV information though mass media had lower perception in comparison with Health officers and other sources includes family had HIV-positive persons, friends. Most important is that the HIV/AIDS prevention had low effectiveness due to socio-cultural barriers. The HIV information in the mass media only provided some information about HIV prevention without enough details of HIV information for better understanding. Therefore, the local health government think that it is unsuitable to promote HIV knowledge and perception towards HIV/AIDS directly, as the community will not accept it. From that reason, the HIV information was provided through the health officers in the village, meeting and community activities. This finding is consistent with the study in India [1].

The HIV knowledge is also a determinant of perception towards HIV/AIDS. The results show a positive significant relationship between the perception towards HIV/AIDS and HIV knowledge. The Ethnic minorities, those who had high perception will be reject misperception towards HIV/AIDS. The results reflect the effective of HIV knowledge was improved in Minority communities through the HIV communication programmes. The results consistent with previous studies [9, 11].

In generally, the study found that while the most of socioeconomic-demographic characteristics is not significantly relationship with attitude towards PLWHA, education level shows its significant with attitude. The results show that the respondents who had secondary school or higher are significantly related to high attitude towards PLWHA. The difference study showed that the educated Ethnic who had education at higher level, have higher attitude towards PLWHA [2, 15]. The significantly relationship between education and attitude towards PLWHA represent the effectiveness of HIV prevention programmes through the activities providing the HIV information over time. Besides, as the discussion above also indicates that education level at higher level had more perception towards HIV/AIDS, which may be lead to high attitude towards PLWHA among ethnic minorities.

The findings also found that the HIV information sources provided by health officers had significantly positive relationship with attitude towards PLWHA. The findings shows the limitation and socio-culture barriers of HIV intervention to improve attitude towards PLWHA. The HIV message on HIV communication is only providing the ways of HIV prevention, this is not enough details to have better understanding towards HIV/AIDS. On other hand, the health officers are usually ethnic minorities living in community, who had advantage to provide HIV information by the visiting home and village activities. The result is consistent with the other study, where the HIV information sources had significantly relationship with attitude towards HIV-infected persons [6].

The result found that the HIV information had strong positive relationship with attitude towards PLWHA. Those who had higher HIV knowledge related to higher attitude towards HIV-infected persons. This is one of important factors that affects changes to the attitude towards HIV-infected persons and reject the stigma towards HIV/AIDS. To improve the attitude towards PLWHA in ethnic minority communities needs to improve the HIV knowledge and quality of HIV information sources. The finding is consistent with the other studies [1, 3, 8, 11, 15]. These study shows that those who had higher level of HIV knowledge are more significantly related to empathy attitude towards PLWHA.

CONCLUSION

This study concludes that the common HIV information sources is the mass media channel (92.8%). However, respondents who received HIV information through mass media channels had lower perception and attitude towards HIV/AIDS than those received from the local health provider, or even other sources. This shows that the limitations of HIV communication campaign through mass media channels in ethnic minorities.

This study also indicates that the most of socioeconomic-demographic characteristic is a factor related to perception towards HIV/AIDS. The HIV knowledge as well as exposure HIV information sources affects their perception towards HIV/AIDS. Education level is one of socioeconomic-demographic related to attitude towards PLWHA. The HIV information provided by the health officers, who are ethnic minorities had more effectiveness of improving attitude towards PLWHA in community. The HIV knowledge also contributes an important role in improving the attitude towards PLWHA among ethnic minority.

Since the information sources can increase the perception towards HIV/AIDS. The future HIV/AIDS programmes need to improve the quality of HIV messages through mass media channel with adequate HIV information combine with social messages. Besides, the combination roles between multichannel mass media and health officers is needed. The mass media are most effective when it is used in combination with interpersonal interaction. It can be proposes as solution for socio-cultural barriers in HIV prevention among Ethnic minorities.

CONFLICT OF INTERESTS

None declared.

REFERENCES

1. Agrawal, H. R. Knowledge of and attitudes to HIV/AIDS of senior secondary school pupils and trainee teachers in Udupi District, Karnataka, India. Tropical Child Health.1999; 19(2), 143-149.
2. Elsadig, Y. M. Knowledge and Attitudes of Population Towards HIV/Aids in Four States, Sudan. sudan journal of medical sciences. 2011; 6(2), 125-130.
3. Gao, X. W. Effectiveness of School-based Education on HIV/AIDS Knowledge, Attitude, and Behavior among Secondary School Students in Wuhan, China. PLoS ONE. 2012; 9.
4. Hasan, A. H. Influence of socio-demographic factors on awareness of HIV/AIDS among Bangladeshi garment workers. SpringerPlus, 2013; 2, 174.
5. Kraus, S. J. AIDS in 2010 “The global anh regional epidemic anh response” UNAIDS regional support Steam for Asia and Pacific. UNAIDS. 2010.
6. Li L, R.-B. M. Mass media and HIV/AIDS in China. Journal Health Communication. 2009;14(5), 424-438.
7. Ministry of Health Vietnam. Declaration of Commitment on HIV and AIDS adopted at the 26th United Nations General Assembly Special Session in June 2001 HANOI, March 2010: Reporting period: January 2010 – December 2011. Hanoi: Ministry of Health Vietnam. 2012.
8. Naim Nur. Turkish school teachers’ knowledge and attitudes toward HIV/AIDS. Croat Medical. 2012; 53(3), 271-277.
9. Naing, C. M. HIV/AIDS-Related Knowledge, Attitudes And Perceptions: A Cross-Sectional Household Survey. Southeast Asian J Trop Med Public Health. 2010; 952-960.
10. ShafiqurRahman, M., & LutforRahman, M. Media and education play a tremendous role in mounting AIDS awareness among married couples in Bangladesh. AIDS Research and Therapy. 2007; 4(10).
11. Tavoosi, A., & Azadeh Zaferani, A. E. Knowledge and attitude towards HIV/AIDS among Iranian students. BMC Public Health. 2004; 4(17), 1471-2458.
12. UNAIDS. HIV in Asia and the Pacific: Getting to zero. Joint United Nations Program on HIV/AIDS (UNAIDS). 2011.
13. UNAIDS. Global report: 2012 UNAIDS Report on the Global AIDS Epidemic. Joint United Nations Program on HIV/AIDS. 2012
14. VAAC. Vietnam: HIV prevention programme report Vietnam. Vietnam Athority of HIV/AIDS control .2012.
15. Wang, G. K. Association of Knowledge of HIV and Other Factors with Individuals’ Attitudes toward HIV Infection: A National Cross-Sectional Survey among the Japanese Non-Medical Working Population. PLoS One. 2013; 8(7).