

Correlates of problematic alcohol use in people living with HIV/AIDS in Ho Chi Minh city, Vietnam: Findings from a cross-sectional study

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BACKGROUND

Problematic alcohol use (PAU) is common among people living with HIV/AIDS (PLHIV) but under researched in Vietnam

Ho Chi Minh City is the largest city in Vietnam with about 25, 000 PLHIV at 30 outpatient clinics

There is largely an absence of psychiatric services to conduct screening and assessment for psychiatric disorders at HIV outpatient clinics in Ho Chi Minh city

PAU is associated with

- Impaired judgement resulting in unsafe sexual practices and HIV transmission
- A negative impact on HIV/AIDS care and treatment
- Accelerated HIV disease progression
- Delayed initiation of health care services
- Lower level of treatment adherence
- Poorer effectiveness of antiretroviral therapy

This study is the first studies to investigate the prevalence and correlates of PAU in PLHIV at outpatient clinics in Ho Chi Minh city

METHODS

- **Study design:** Cross-sectional study
- **Sample size:** 400 HIV positive outpatients
- **Sampling technique:** One in every five outpatients recruited at regular monthly visit at two HIV outpatient clinics in Ho Chi Minh City, Vietnam over a four-week period
- **Procedure:** Participants completed a self-report questionnaire with demographic, HIV-related information, type of support received during the last 3 months and stressful life experiences during the last 30 days, Clinical information regarding HIV care and treatment was also extracted from medical files.
- **Measure:** PAU was evaluated using the World Health Organization Alcohol Use Disorders Identification Test (WHO-AUDIT):
 - 10 self-reported items using a Likert scale from 0 to 4
 - Overall score is the total score of 10 items, ranges from 0 to 40
 - Measures alcohol consumption, alcohol dependence and alcohol-related health problems during the last 3 months
 - A total score ≥ 8 was used as an indicator of alcohol use in the risky to hazardous range or above
 - The scale has been used worldwide not only in general population but also in HIV positive patients
- **Statistics:** Mean, standard deviation, percentage for descriptive statistics and Chi-squared test, t test, logistic regression for further analysis
- **Ethics:** Ethics approval for the study was granted by the Human Ethics Committee at Ho Chi Minh City Provincial AIDS Committee, Vietnam and the University of Sydney, Australia

RESULTS

- PAU identified by WHO-AUDIT score ≥ 8 was reported in 53 PLHIV (13.3%), 51 males and 2 females. Association between PAU and demographic characteristics, HIV-related characteristics, support received and stressful life experiences are presented in Tables 1 – 4.

Table 1: Association between PAU and demographic characteristics

| Demographic characteristics | Problematic Alcohol Use | | | p |
|-------------------------------------|-------------------------|-------------------|-------------------|--------|
| | All, (N = 400) n % | Yes, (N = 53) n % | No, (N = 347) n % | |
| Gender | | | | |
| Female | 146 (36.5) | 2 (1.4) | 144 (98.6) | <0.001 |
| Male | 254 (63.5) | 51 (20.1) | 203 (79.9) | |
| Age (M, SD) yrs | 34.8 (6.8) | 36.7 (5.4) | 34.6 (7.0) | 0.010 |
| Age category | | | | |
| 20-30 | 100 (25.0) | 4 (4.0) | 96 (96.0) | 0.005 |
| 31-40 | 237 (59.3) | 40 (16.9) | 197 (83.1) | |
| 41-50 | 49 (12.3) | 8 (16.3) | 41 (83.7) | |
| ≥ 51 | 14 (3.5) | 1 (7.1) | 13 (92.9) | |
| Work status | | | | |
| Unemployed/Casual | 152 (38.0) | 18 (11.8) | 134 (88.2) | 0.548 |
| Part-time | 69 (17.3) | 7 (10.1) | 62 (89.9) | |
| Full-time | 126 (31.5) | 21 (16.7) | 105 (83.3) | |
| Housewife, Other | 53 (13.2) | 7 (13.2) | 46 (86.8) | |
| Highest level of education | | | | |
| \leq Primary school | 139 (34.8) | 21 (15.1) | 118 (84.9) | 0.713 |
| Secondary school | 151 (37.8) | 18 (11.9) | 133 (88.1) | |
| \geq High school | 110 (27.4) | 14 (12.7) | 96 (87.3) | |
| Marital status | | | | |
| Single | 124 (31.0) | 15 (12.1) | 109 (87.9) | 0.793 |
| Married/Live as a couple | 219 (54.8) | 29 (13.2) | 190 (86.8) | |
| Divorced/Separated/Widowed | 57 (14.3) | 9 (15.8) | 48 (84.2) | |
| Parental status | | | | |
| Yes | 219 (54.8) | 30 (13.7) | 189 (86.3) | 0.771 |
| No | 181 (45.3) | 23 (12.7) | 158 (87.3) | |
| Religion | | | | |
| Yes | 104 (26.0) | 17 (16.3) | 87 (83.7) | 0.279 |
| No | 296 (74.0) | 36 (12.2) | 260 (87.8) | |
| Economic status | | | | |
| Very poor/Poor | 174 (43.5) | 24 (13.8) | 150 (86.2) | 0.779 |
| Average/Rich | 226 (56.5) | 29 (12.8) | 197 (87.2) | |
| Living most of the time with | | | | |
| With family | 345 (86.3) | 45 (13.0) | 300 (87.0) | 0.760 |
| Not with family | 55 (13.8) | 8 (14.5) | 47 (85.5) | |

RESULTS (Cont)

Table 2: Association between PAU and HIV-related characteristics

| HIV-related characteristics | Problematic Alcohol Use | | | p |
|---|-------------------------|-------------------|-------------------|-------|
| | All, (N = 400) n % | Yes, (N = 53) n % | No, (N = 347) n % | |
| General health status | | | | |
| Poor/Fair | 227 (56.8) | 26 (11.5) | 201 (88.5) | 0.225 |
| Very good/Good | 173 (43.2) | 27 (15.6) | 146 (84.4) | |
| Body Mass Index | | | | |
| Under-weight | 121 (30.2) | 11 (9.1) | 110 (90.9) | 0.259 |
| Normal | 243 (60.8) | 36 (14.8) | 207 (85.2) | |
| Overweight | 36 (9.0) | 6 (16.7) | 30 (83.3) | |
| Source of HIV infection | | | | |
| Sexual transmission | 224 (56.0) | 21 (9.4) | 203 (90.6) | 0.019 |
| Injected drug use | 119 (29.8) | 24 (20.2) | 95 (79.8) | |
| Others | 57 (14.3) | 8 (14.0) | 49 (86.0) | |
| Time since HIV diagnosis, (M, SD) yrs | 5.2 (2.5) | 5.9 (2.9) | 5.1 (2.5) | 0.031 |
| Time since HIV diagnosis category, yrs | | | | |
| <1 yr | 22 (5.5) | 1 (4.5) | 21 (95.5) | 0.037 |
| 1-5 yrs | 135 (33.8) | 20 (14.8) | 115 (85.2) | |
| 5-10 yrs | 234 (58.5) | 28 (12) | 206 (88) | |
| ≥ 10 yrs | 9 (2.3) | 4 (44.4) | 5 (55.6) | |
| HIV status disclosure | | | | |
| Yes | 364 (91.0) | 52 (14.3) | 312 (85.7) | 0.067 |
| No | 36 (9.0) | 1 (2.8) | 35 (97.2) | |
| Most recent CD4 cell count, (M, SD) | 452.3 (255.3) | 452.5 (216.6) | 452.2 (261) | 0.995 |
| Time since ARV initiation, (M, SD) yrs | 3.9 (2.3) | 4.4 (2.2) | 3.9 (2.3) | 0.093 |
| Adherence level for HIV medications | | | | |
| Good | 368 (92.0) | 50 (13.6) | 318 (86.4) | 0.917 |
| Average | 18 (4.5) | 2 (11.1) | 16 (88.9) | |
| Poor | 14 (3.5) | 1 (7.1) | 13 (92.9) | |

Table 3: Association between PAU and different types of support received

| Support received, last 3 months | Problematic Alcohol Use | | | p |
|--|-------------------------|-------------------|-------------------|-------|
| | All, (N = 400) n % | Yes, (N = 53) n % | No, (N = 347) n % | |
| Receive practical support from family or supporting network | | | | |
| Yes | 310 (77.5) | 44 (14.2) | 266 (85.8) | 0.302 |
| No | 90 (22.5) | 9 (10.0) | 81 (90.0) | |
| Receive emotional support from family or supporting network | | | | |
| Yes | 330 (82.5) | 46 (13.9) | 284 (86.1) | 0.377 |
| No | 70 (17.5) | 7 (10.0) | 63 (90.0) | |
| Receive spiritual support from family or supporting network | | | | |
| Yes | 346 (86.5) | 47 (13.6) | 299 (86.4) | 0.618 |
| No | 54 (13.5) | 6 (11.1) | 48 (88.9) | |
| Receive financial support from family or supporting network | | | | |
| Yes | 257 (64.3) | 37 (14.4) | 220 (85.6) | 0.364 |
| No | 143 (35.7) | 16 (11.2) | 127 (88.8) | |

Table 4: Association between PAU and stressful life experiences

| Stressful life experiences, last 30 days | Problematic Alcohol Use | | | p |
|---|-------------------------|-------------------|-------------------|-------|
| | All, (N = 400) n % | Yes, (N = 53) n % | No, (N = 347) n % | |
| Had problems with or concerns about family | | | | |
| Yes | 219 (54.8) | 26 (11.9) | 193 (88.1) | 0.371 |
| No | 181 (45.2) | 27 (14.9) | 154 (85.1) | |
| Had serious financial problems/no income | | | | |
| Yes | 243 (60.8) | 31 (12.8) | 212 (87.2) | 0.718 |
| No | 157 (39.2) | 22 (14) | 135 (86) | |
| Been unable to find work | | | | |
| Yes | 91 (22.7) | 12 (13.2) | 79 (86.8) | 0.984 |
| No | 309 (77.3) | 41 (13.3) | 268 (86.7) | |
| Felt ashamed about HIV status | | | | |
| Yes | 169 (42.2) | 23 (13.6) | 146 (86.4) | 0.856 |
| No | 231 (57.8) | 30 (13) | 201 (87) | |
| Had trouble accessing medical care | | | | |
| Yes | 58 (14.5) | 6 (10.3) | 52 (89.7) | 0.480 |
| No | 342 (85.5) | 47 (13.7) | 295 (86.3) | |
| Had problems with health care providers | | | | |
| Yes | 31 (7.7) | 4 (12.9) | 27 (87.1) | 0.999 |
| No | 369 (92.3) | 49 (13.3) | 320 (86.7) | |
| Been discriminated against because of HIV status | | | | |
| Yes | 73 (18.2) | 12 (16.4) | 61 (83.6) | 0.374 |
| No | 327 (81.8) | 41 (12.5) | 286 (87.5) | |
| Felt rejected by family or friends | | | | |
| Yes | 22 (5.5) | 7 (31.8) | 15 (68.2) | 0.017 |
| No | 378 (94.5) | 46 (12.2) | 332 (87.8) | |
| Had problems or serious conflict with partner or family member | | | | |
| Yes | 55 (13.7) | 3 (5.5) | 52 (94.5) | 0.085 |
| No | 345 (86.3) | 50 (14.5) | 295 (85.5) | |
| Know someone who is HIV positive experience serious illness or death | | | | |
| Yes | 133 (33.2) | 27 (20.3) | 106 (79.7) | 0.003 |
| No | 267 (66.8) | 26 (9.7) | 241 (90.3) | |
| Experienced a change in marital status | | | | |
| Yes | 10 (2.5) | 1 (10) | 9 (90) | 0.999 |
| No | 390 (97.5) | 52 (13.3) | 338 (86.7) | |
| Experienced a change in accommodation | | | | |
| Yes | 39 (9.7) | 5 (12.8) | 34 (87.2) | 0.934 |
| No | 361 (90.3) | 48 (13.3) | 313 (86.7) | |

CONCLUSION

- PAU was identified in approximately 20.1% of male PLHIV and 1.4% of female PLHIV
- PAU was associated with
 - Older age
 - HIV transmission through injecting drug use
 - Longer time since HIV diagnosis
 - Feeling rejected by family or friends
 - Knowing someone HIV positive experienced serious illness or death
- Regular screening for PAU in this vulnerable group has the potential to improve quality of life through the provision of appropriate treatment for PAU
- Strategies such as education programs to prevent PAU should be considered