

Psychological Distress and Substance Abuse in Jamaican Youths Living with HIV/AIDS

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ABSTRACT

Objective: Current epidemiological research indicates that HIV/AIDS endures and continues to be a significant vulnerability among adolescents and youths despite the increased access to antiretroviral drugs and the reduction in the global progression of the disease. This study examined the association between substance use and psychological distress within the Jamaican population of youths coping with the illness.

Method: This is a cross-sectional survey that utilized a correlational design. The sample population consisted of 62 youths, age range 15–25 years, living with HIV/AIDS. Sociodemographic information was gathered through interviews and self-report scales were used to measure depression, anxiety, stress and substance use. Chi-square was used to assess the relationship between the variables under study: psychological distress and substance use.

Results: More than half the sample were heterosexuals who contracted the virus through consensual intercourse. The average age of respondents was 21.29 years and slightly more than half were female (56.5%). The majority of respondents were single (54.8%), unemployed (73%), heterosexual (69.4%) youths with a secondary level education (63%). There was a statistically significant relationship between psychological distress and substance use ($\chi^2 = 7.3959$, $df = 3$, $p = 0.047$).

Conclusion: The emotional needs of youths living with HIV/AIDS are just as important as their medical needs.

Keywords: HIV/AIDS, Jamaica, medication adherence, psychological distress, substance use, unprotected sex, youths

Distrés Psicológico y Abuso de Sustancias en los Jóvenes Jamaicanos con VIH/SIDA

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RESUMEN

Objetivo: La investigación epidemiológica actual indica que el VIH/SIDA perdura y sigue siendo un aspecto de vulnerabilidad significativa entre los adolescentes y jóvenes, a pesar del aumento del acceso a medicamentos antirretrovirales y la reducción de la progresión global de la enfermedad. Este estudio examinó la asociación entre el uso de sustancias y el distrés psicológico dentro de la población jamaicana de jóvenes que luchan con la enfermedad.

Método: Este es un estudio transversal que utilizó un diseño correlacional. La muestra poblacional consistió de 62 jóvenes, años rango 15–25 años viven con el VIH/SIDA. Se recogió información sociodemográfica a través de entrevistas y se usaron escalas de autoreporte para medir la depresión, la ansiedad, el estrés, y el uso de sustancias. El chi-cuadrado fue utilizado para evaluar la relación entre las variables objeto de estudio: el distrés psicológico y el uso de sustancias.

Resultados: Más de la mitad de la muestra estuvo formada por heterosexuales que contrajeron el virus a través de relaciones sexuales consensuales. La edad promedio de los encuestados fue 21.29 años, y poco más de la mitad eran mujeres (56.5%). La mayoría de los encuestados eran solteros (54.8%), desempleados (73%), jóvenes heterosexuales (69.4%) con una educación de nivel secundario (63%). Hubo una relación estadísticamente significativa entre el distrés psicológico y el uso de sustancias ($\chi^2 = 7.3959$, $df = 3$, $p = 0.047$).

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Conclusión: *Las necesidades emocionales de los jóvenes que viven con el VIH/SIDA son tan importantes como sus necesidades médicas.*

Palabras claves: VIH/SIDA, Jamaica, cumplimiento con la medicación, distrés psicológico, uso de sustancias, relaciones sexuales, jóvenes

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INTRODUCTION

Research shows that substance abuse is nearly five times greater among HIV seropositive youths when compared with the general population (1–3). A study of risk behaviours in Thai youths diagnosed with HIV revealed a 70% rate of alcohol use (4). Similar findings were reported in a study which focussed on psychosocial factors and substance use among youths infected with HIV. That study reported that 47%, 37% and 9% of respondents used alcohol, cannabis and other illicit drugs, respectively over the previous month (5).

There is a dearth of research that focussed on substance use among this population of HIV-infected persons in Jamaica. However, there was one study by Duncan *et al* that examined the prevalence of HIV and related behaviours among 450 Jamaican commercial sex-workers, of which 9% were infected with HIV (6). The study focussed on female sex-workers with a mean age of 26.8 years. In addition, sex-workers are only a subset of the population of youth infected with HIV; therefore, the findings of that study should be interpreted with caution due to its limited generalizability. With that said, the findings of the study are consistent with the findings on substance use among infected youths in other populations (1–5, 7). Furthermore, Duncan *et al* demonstrated that sex-workers who used drugs were eight times more likely to be HIV-positive (6). Also, a report on the reproductive and sexual health of Jamaican youths indicated that substance use was among the main factors driving the AIDS epidemic among Jamaican youths (8).

Despite the lack of literature on substance use among the Jamaican population of HIV-infected youths, what is certain is that substance use is a risk factor to general well-being (9). The literature indicates that substance use is detrimental to the overall health of the infected individual as it results in low adherence to the antiretroviral therapy (10), high-risk sexual behaviours (2), increased acquisition of opportunistic infections (2) and mortality (11).

The mental health needs of youths living with HIV/AIDS also warrant in-depth examination as emotional distress may impact health-related behaviours (12). However, the mental health needs of children and youths living with HIV/AIDS have been largely overlooked in the research on psychiatric illnesses among this population (13). Among HIV-infected individuals, mental illness has been associated with unsafe sexual practices, drug use and poor adherence to

antiretroviral medication. Research suggests that the prevalence of depression and anxiety is higher in people living with HIV or AIDS than in their non-infected counterparts (14). Another analysis specifies that the prevalence rate of major psychiatric disorders in persons living with HIV or AIDS ranges from 30% to 60% and is partnered with substance use (15), poor adherence, progression of the disease and high-risk sexual behaviours (16). This is in line with the statistics concerning psychological distress in youths living with HIV/AIDS.

Data suggest that adolescents with HIV infection are more likely to report limitations that are behavioural and emotional rather than physical (17). A qualitative analysis of the psychiatric outcomes of Jamaican adolescents infected with HIV/AIDS concluded that these youths were likely to experience psychological distress characterized by intense feelings of sadness and suicidal ideation due to their seropositive status (18). The study further highlighted mode of transmission, particularly sexual abuse, as a major determinant in the development of psychological distress. The findings of this study cannot be generalized to the Jamaican population of infected youths because of methodological limitations such as small sample size and a nonrandom sampling design; however, it provides an insight into the psychological well-being of this population.

Research conducted on the psychosocial correlates of risky health behaviours reported that discrimination from family, friends and community (19) and psychological distress resulting from HIV/AIDS diagnosis (20) are few of the reasons cited for poor health-related behaviours among youths living with HIV/AIDS (21). The relationship between psychological distress and risky health behaviours in youths infected with HIV/AIDS was also examined in a study conducted by Murphy *et al*. The findings indicated that youths who had high levels of anxiety and depression were more likely to engage in substance use (22). These findings were replicated in later studies (5, 23).

In Jamaica, there is also a dearth of research on the interaction between substance use and emotional distress among the HIV-infected youth population. However, the preponderance of literature indicates a positive relationship among these variables in other societies (22–24). Therefore, the authors will investigate whether similar associations exist among Jamaican youths infected with HIV/AIDS.

Hypothesis

Youth living with HIV/AIDS who experience psychological distress are more likely to engage in substance use than youth who are not experiencing distress.

SUBJECTS AND METHODS

This is a cross-sectional study. The sample consisted of 62 youths living with HIV/AIDS and receiving outpatient treatment and support at three medical institutions that specialize in the treatment and care of persons infected with HIV/AIDS. The inclusion criteria included a positive diagnosis of HIV/AIDS, and males and females within the age range of 15–25 years.

Measures

Demographics Sheet: Demographic information such as gender, age, marital status, educational status, employment status, sexual orientation, mode of HIV transmission and age at HIV diagnosis was gathered using a brief ten-item questionnaire created by the researcher.

Depression Anxiety Stress Scale (DASS-21): Psychological distress was measured using the DASS-21 and the Centre for Epidemiologic Studies Depression Scale. The DASS-21 is an abbreviated version of the Depression Anxiety Stress Scale which was developed by Lovibond and Lovibond in 1995 (25). The DASS-21 is a self-report questionnaire consisting of 21 items which assess the severity of symptoms associated with stress, anxiety and depression in patients.

Reliability was assessed using Cronbach Alpha which indicated a score of 0.88 (95% CI = 0.87, 0.89) for the depression scale, 0.82 (95% CI = 0.80, 0.83) for the anxiety subscale and 0.90 (95% CI = 0.89, 0.91) for stress. Total scale reliability was 0.93 (95% CI = 0.93, 0.94). Validity of the DASS-21 was also established by calculating the correlation between two independent measures of anxiety and depression. The findings indicated that the DASS-21, like its original version, was highly correlated with the Hospital Anxiety and Depression Scale and the Personal Disturbance Scale (25).

Adolescent Drug Involvement Scale (ADIS): Substance use was measured using ADIS which is a brief 13-item instrument designed to assess the severity of drug use among adolescents. It was adapted from the Mayer and Filstead's Adolescent Alcohol Involvement Scale. Drug use is assessed on a range of no use to severe dependence. The higher the overall score, the more severe the level of drug use. The ADIS possesses adequate internal consistency ($\alpha = 0.85$) and has also been found to correlate highly with other self-reported measures of substance use among youths.

Procedure

Participants were recruited purposively from each treatment site. Interviews were conducted when respondents visited

the clinic for their routine medical appointments. On the day of each interview, participants were briefed by their respective Adherence Counsellors and verbal consent sought. Interviews were conducted by the clinician. Informed consent was obtained from all participants after the nature and purpose of the study was fully explained.

Ethical considerations

The study was approved by the University Hospital of the West Indies/University of the West Indies/Faculty of Medical Sciences Ethical Review Board. Approval was also gained from the Institutional Review Board at each treatment site.

Data analysis

Data were collected over a four-month period from July 2011 to October 2011. Data were analysed using the Statistical Package for the Social Sciences (SPSS) version 17.0. Socio-demographic characteristics of the sample were computed using frequency distributions. Chi-square was also used to further assess the relationship between the variables under study: psychological distress and substance use. A p -value equal to or less than 0.05 was regarded as statistically significant.

RESULTS

The sample comprised 62 participants, 43.5% males and 56.5% females; 54.8% of respondents reported that they were single, while 29% reported that they were involved in a visiting relationship and 14.5% indicated they were cohabitating with their partner. Married respondents were 1.6%. In terms of age, 45.2% of respondents were between the ages of 19 and 22 years, 35.5% were between the ages of 23 and 25 years and 19.4% were between the ages of 15 and 18 years. The majority of respondents, 62.9%, completed secondary level education, 14.5% completed tertiary or technical level education, 19.4% completed primary level education and 3.2% completed basic school. In addition, 72.6% of respondents were unemployed and 27.4% employed. More than half of the sample considered themselves to be heterosexual (74.1%) while 17.2% and 8.6% described their sexual orientation as homosexual and bisexual, respectively.

In terms of the clinical characteristics of the sample, 8.2% were diagnosed during childhood, 63.9% of respondents were diagnosed during adolescence and 27.9% were diagnosed during young adulthood. The majority of respondents reported that they contracted the virus through consensual intercourse (63.9%) compared to 16.1% who reported sexual abuse. Ten per cent of respondents reported that they contracted the virus perinatally and 8.3% reported that they were infected through blood transfusion.

The majority of participants reported that they have never used illicit drugs (68%), compared to 17% who reported using such drugs daily or a few times per week and 16% who reported using drugs a few times per year. Sub-

stance use was more prevalent among older youths (19–25 years) and a slightly higher proportion of females (18.2%) reported frequent substance use than males (15.3%). The use of cocaine and heroin was not reported, however, marijuana (8%), alcohol (11.4%) and cigarette smoking (16.1%) were the main substances reported among this sample.

There were high rates of depression (63%), anxiety (71%) and stress (64%) among respondents. The findings indicated that there was a statistically significant association between psychological distress and substance use ($p \leq 0.05$).

DISCUSSION

This research paper sought to examine the likelihood that higher levels of psychological distress will be correlated with increased substance use among a cohort of Jamaican youths living with HIV/AIDS. In the present study, depression, anxiety and stress were found to be highly prevalent among Jamaican youths living with HIV/AIDS. Also, this study demonstrated that there was a statistically significant association between psychological distress and substance use. Among this cohort of youths living with HIV/AIDS, substance use is a coping mechanism for psychological difficulties as 30% of the sample reported that they used drugs to alleviate feelings of loneliness and worry. These findings are in keeping with the literature which indicates that youths living with HIV/AIDS often resort to using drugs as a way of coping with the inherent stressors of living with a chronic and inevitably fatal disease (21, 22, 25).

There is also a growing body of research which indicates that psychological distress among persons living with HIV/AIDS is associated with poor prognosis and high rates of morbidity and mortality. The findings of this study must therefore be viewed within this context as research also shows that substance use is a mediating factor as it leads to poor compliance with antiretroviral medication (15), risky sexual practices (16), secondary illness such as liver dysfunction (26), immune system dysfunction (27) and impairs the metabolism of antiretroviral medications (27). Therefore, an important extrapolation from the study's findings is that psychological distress is a significant risk factor for the progression of the disease and poor outcomes because it leads to substance use and other behavioural issues.

A strong point of this study is that it focussed on youths which the literature identified as an age group that has been neglected in the research on HIV (20). The study was correlational in nature, and hence limited conclusions can be drawn about the directionality of any observed associations. Also, only self-report measurements were used to assess risk behaviours, thoughts and feelings. There are a number of limitations associated with self-reported measures that may influence the validity of the data. For example, participants might have under- or over-reported their experience, behaviours and feelings in an effort to promote social desirability. Lastly, a clinical convenience sample was used and this may not be representative of the seropositive youth population.

However, this study provides insight into the mental health needs of the Jamaican population of youths living with HIV/AIDS and this has been largely overlooked in research.

HIV/AIDS is becoming increasingly prevalent among youths. The mental health needs of youths living with HIV/AIDS are just as important as their medical needs. Therefore, it is necessary to understand more about the psychosocial factors affecting youth living with HIV. This knowledge is important in order to stem the epidemic and it will assist in developing strategies geared at helping youths to manage the virus and deal effectively with the psychosocial burdens of the illness.

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