EFFECT OF ENVIRONMENTAL FACTORS ON PERSONS LIVING WITH HIV/AIDS

Lucersia Nichols¹, Leandro Mena², Daniel Sarpong³ and Paul B. Tchounwou¹

¹NIH-RCMI Center for Environmental Health, Jackson State University, Jackson, Mississippi, USA
²University of Mississippi Medical Center, Jackson, Mississippi, USA
³Jackson Heart Study, Jackson State University, Jackson, Mississippi, USA

Abstract: In recent years, environmental awareness has received a great deal of public attention. However, little emphasis has been put the influence of environmental factors (weather, personal attitudes, policies, physical structures, transportation, etc.) on the quality of life of persons infected with HIV/AIDS. Although the use of highly active antiretroviral therapies (HAAT) has increased the life expectancy of HIV/AIDS patients, there is a need for research on issues that affect their lives. The objectives of this study were threefold: to identify the relationship between environmental factors and those infected with HIV/AIDS, to determine which environmental factors serve as barriers, and to determine if there exists a causal relationship between environmental barriers and specified descriptive characteristics of those infected with HIV/AIDS. Patients were selected from a STD/HIV clinic in Jackson, MS. Clients were chosen based on previously diagnosed HIV/AIDS status and age (16-95). Written consents, demographics sheets and self-administered questionnaires were obtained. Data was analyzed using Excel and SPSS software. Interviews started in July 2007 and ended in August, 2007. One hundred and thirteen patients responded. Participants were 72.6% (82) male, 26.5% (30) female and 0.9% (1) transgender. The median age of participants was 38.8 (high 63, low 18). Respondents were 84% (95) African American, single 62% (71) individuals. Over 50% (65) had some college or higher education, but 35.4% reported incomes less than $10K yearly. Multivariate analysis showed marginal significance between disease diagnosis and gender (p value <0.10), statistical significance between disease diagnosis (p value = 0.02) and income (p value=0.03), and revealed that age (p value = 0.01) and education (p value = 0.03) were significant predictors in one of the subscales. In the CHIEF Subscales, those with AIDS were disproportionately affected in all but one of the five subscales observed. The subscale that shows the greatest significance among AIDS respondents was the Attitudes and Support with a mean score of 1.32. Polices subscale also appeared to cause a substantial degree of difficulty for AIDS respondents; mean score of 1.28. The element shown to have the least effect on those with AIDS was the Work/School subscale having a mean score of 0.56. Conversely HIV respondents were more affected in the Work/School subscale with a mean score of 1.25. This proved to be the only subscale responsible for causing the greatest degree of perceived barriers for the HIV population. It can also be noted that the subscale that showed the least negative impact on those with HIV was the Physical/Structural subscale with a mean score of 0.59. It is therefore recommended that the environmental barriers identified in this study be addressed in order to eliminate/minimize their negative effect and improve the quality of life of HIV/AIDS patients.