Associations between loneliness and mental health in women living with HIV pre- and post-COVID

Healthy relationships, or social connections, are fundamental aspects of well-being. Loneliness, which focuses on perceptions of inadequate social connection, has been associated with substance misuse and depression. Stronger social connections have been linked to better quality of life and lower mortality among persons living with HIV (PLWHIV). In turn, PLHIV may be at increased risk for loneliness. Using data from the WIHS Cohort (N=1567), a prospective study designed to answer basic, clinical, and epidemiologic questions related to HIV and chronic health conditions among women living with HIV (WLHIV), a latent class growth analysis was implemented to determine the number of classes that best represented the trajectory for loneliness (UCLA-3 loneliness scale) across six assessments. Next, we determined predictors of these classes. Finally, we investigated whether the loneliness classes were associated with depression and substance use post-COVID. We determined that the 4-class solution (never lonely, occasionally lonely, frequently lonely, increasingly lonely) was the model of best fit. Employment status, depression, and recreational drug use were associated with the occasional lonely group (p <0.05); depression and recreational drug use were associated with the frequently lonely group (p <0.001); and race/ethnicity and depression were associated with the increasingly lonely group (p <0.05). Further, the frequently lonely group was the only group that predicted depression post-COVID (p <0.001). These findings provide the first steps to advance a mechanistic model of relationships between social connections and mental health outcomes in PLWHIV, which will help inform early intervention strategies aimed at preventing poor mental health outcomes.