

## **Non-Neoplastic cutaneous manifestations of HIV infection in a community-based clinic in San Juan, Puerto Rico**

Itzamar Pastrana-Echevarría, BS; Alicia Báez-Cruz, BA; Alexandra Conde-Toro, DrPH, MS, MBA; Mollient Oganga-Cooper, BSN; Mileidy Hernandez-Nieves, BS; Alejandro Pinilla-Baquero, MS.

**BACKGROUND:** Skin conditions are among the first clinical signs of HIV and affect a significant proportion of people living with HIV (PLWH). However there is limited data in Puerto Rico regarding the prevalence of these conditions in PLWH. As many as 75% of symptomatic patients develop skin lesions during the earliest stage of the infection, and approximately 90% of PLWH are affected by dermatological conditions.

**METHODS:** A secondary analysis will be conducted with data collected from HIV-infected patients from the PR Community Network for Clinical Research on AIDS, Inc. (PRCONCRA), an urban community-based clinic and Ryan White HIV/AIDS Program grantee located in San Juan, PR. Data was analyzed using frequency, percentage and chi-square.

**RESULTS:** A total of 1,033 HIV patients were evaluated for cutaneous manifestations. The most prevalent manifestations were herpes simplex (15%), followed by dermatophytosis (8.5%) and warts(6.1%). Less common but notable conditions included dermatitis (5%), candidiasis (2.9%), and skin infections (5.2%). The distribution of selected cutaneous conditions did not show significant differences between sexes. On the other hand, the prevalence of cutaneous manifestations varied significantly across age groups ( $\chi^2 = 109.59$ , df = 4,  $p < 0.001$ ). The 21-34 age group had a significantly higher number of cases and a lower number of non-cases. This suggests that younger adults (21-34) are disproportionately affected by the disease.

**CONCLUSION:** Cutaneous manifestations are a common occurrence among HIV patients, with herpes simplex, dermatophytosis, and warts being the most frequently observed. No significant sex-based differences were identified in the prevalence of common or rare conditions. The absence of significant sex-based disparities suggests that routine dermatologic evaluations should be prioritized for all HIV patients. There was a significant association observed with age. Younger patients (21–34 years) and older patients (65+) exhibited the highest and lowest prevalence rates, respectively, suggesting age-dependent variability in the presentation of skin conditions. These findings underscore the importance of tailored dermatologic evaluations across different age groups to address specific needs. Future research should explore the mechanisms driving age-related differences in cutaneous manifestations among HIV patients.