

Hepatitis and HIV in Tattooed and Pierced Blood Donors: The First Report from Tondo Medical Center and Its Public Health Implications

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Abstract

Background: Blood transfusion is a vital component of patient care. However, tattoos and body piercings, if performed under non-sterile conditions, can be potential sources of bloodborne infections such as hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). In the Philippines, individuals with tattoos are deferred from blood donation for one year after their last session. National prevalence rates are estimated at 1.1% for HBV, 0.2% for HCV, and 0.1% for HIV, underscoring the importance of targeted donor screening.

Aim: This study provides the first report from the Philippines on the screening and confirmatory results for anti-HBsAg, anti-HCV, and anti-HIV among voluntary blood donors (VBD) with tattoos and/or body piercings.

Methods: A retrospective cohort study was conducted at Tondo Medical Center, Manila, using VBD data from 2014 to 2018. Variables included donor age, sex, tattoo and/or piercing status, and screening and confirmatory results for anti-HBsAg, anti-HCV, and anti-HIV.

Results: Out of 11,711 donor records, 22% had tattoos and/or piercings. Among them, 13.3% had body piercings, 79.5% were male, and 58.5% were aged 18–30. Overall reactivity rates were 3.1% for anti-HBsAg, 0.2% for anti-HCV, and 0.1% for anti-HIV. Donors with both tattoos and piercings showed the highest HBV reactivity, while HCV and HIV reactivity occurred only among those with piercings. Confirmed positivity rates were 1.5% (HBV), 0.04% (HCV), and 0.1% (HIV), although only 48% of initially reactive samples underwent confirmatory testing.

Conclusion: While inked and/or pierced donors without one-year deferral exhibited low rates of infection, the confirmed HIV rate exceeded the national average. Data retrieval challenges and limited capacity for confirmatory testing remain barriers. These findings highlight the need for strengthened policies and infrastructure to ensure safe blood donation practices.

Keywords

Tattoo, piercing, AIDS, HBsAg, Anti-HCV, Anti-HIV.