Title: Exploring Disparities in PrEP Prescriptions for High-Risk HIV Patients Using Real-world Data

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Abstract (300/300 Words)

Objectives: Pre-exposure Prophylaxis (PrEP) for HIV is a safe and effective preventative measure, but it is under-prescribed for at-risk individuals. This study seeks to assess the demographics of adults receiving PrEP prescriptions versus those who could benefit, and assess the characteristics of hospitals prescribing PrEP.

Methods: This study used a nationwide chargemaster dataset (Premier Healthcare Database) to assess PrEP prescribing practices from June 2012–June 2019. ICD-9/10-CM codes were used to assess patients ≥18 years old for PrEP eligibility (HIV-negative with normal kidney function), who were at increased risk of HIV due to sexual practices. Patients treated with post-exposure prophylaxis for HIV were excluded. Rates of PrEP prescriptions and patient and hospital demographics were assessed for those prescribed PrEP (PrEP group) and those without (no PrEP group). Chi-square tests were used to assess between-cohort differences.

Results: Out of 611,749 patients that met eligibility criteria (mean age = 45.9 ± 25.8; 45.6% female, 54.4% male, <1% transgender or gender diverse; 24.9% white, 60.7% black, 13% other, 1.4% unknown), 418 (0.07%) were prescribed PrEP. The top risk factors flagged were hepatitis C and contact/exposure to HIV. Chi-squared analysis to assess differences in prescribing practices across patient demographics (age, race, gender, sexual orientation, and medical insurance payer type) and hospital characteristics (geographical region, teaching status, urban vs. rural classification, and bed size) yielded no significant differences between groups ($p \geq 0.32$).

Conclusions:
Our data suggest low PrEP prescription rates for eligible hospital inpatients. The lack of statistical significance between demographic groups for those with and without PrEP prescriptions is likely due to low prescription rates. Future research could investigate enhancing PrEP access in the inpatient setting. Despite immediate patient concerns, inpatient facilities could serve as a resource for providing preventive HIV medication to at-risk individuals.