Submission Type	Breakout/Quick/Lightning/Poster
ID	8049
Abstract Type	Breakout
Abstract Title	Characteristics of Persons with Repeat Syphilis Infection — Idaho, 2011–2015

Abstract

BACKGROUND: During 2011–2015, Idaho's syphilis incidence rate increased from 2.65/100,000 persons to 6.16/100,000 persons. Since January 2015, southwestern Idaho has been experiencing a syphilis outbreak, with 3 persons having repeat infections during 2015. We sought to characterize persons with repeat syphilis infection in Idaho.

METHODS: We analyzed sexually transmitted disease (STD) surveillance data maintained by the Idaho Division of Public Health. We defined repeat cases as having ≥2 early syphilis infections (primary, secondary, or early latent stages), and nonrepeat cases as having 1 early syphilis infection reported during 2011–2015. To reduce misclassification, we excluded one person who had early syphilis infection during 2006–2011 from persons with nonrepeat cases. We reviewed demographic, clinical, and epidemiologic information collected during syphilis investigations. We used Median and Fisher's exact tests to describe and compare characteristics of persons with repeat and nonrepeat cases.

RESULTS: During 2011–2015, early syphilis infections were reported in 193 Idaho residents, including 14 (7%) repeat cases. Among persons with repeat cases, 100% were male, 93% were white, 85% [11/13] were non-Hispanic, and 91% [10/11] had male sex partners. Compared with nonrepeat cases, persons with repeat cases more likely had secondary or early latent syphilis (93% [13/14] versus 64% [114/179]; P = 0.037), were HIV-positive (85% [11/13] versus 30% [39/129]; P <0.001), and had a history of STD (82% [9/11] versus 39% [51/132]; P = 0.009). No persons with repeat cases were incarcerated or exchanged sex for drugs or money.

CONCLUSIONS: Repeat syphilis infection in Idaho was associated with HIV infection and history of STD. These characteristics could be used to enhance STD/HIV testing, interview, and partner services to prevent syphilis reinfection.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Sexually Transmitted Diseases; Surveillance; Epidemiology
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8183
Abstract Type	Breakout
Abstract Title	Evaluation of an Electronic Database to Manage Syphilis Field Investigations, Cook County, 2014-2016

Abstract

BACKGROUND: Overall, syphilis cases in suburban Cook County, comprised primarily of the suburbs around Chicago, increased 49.3% from 2014 to 2015. Early syphilis cases (primary, secondary, and early latent) doubled from 177 in 2014 to 356 in 2015. As part of ongoing quality improvement initiatives at the Cook County Department of Public Health (CCDPH), we evaluated an electronic field tracking database for syphilis field cases in use since 2014. The field tracking database was developed to register cases, assign them to field staff, and to monitor timeliness and disposition of cases.
METHODS: Syphilis cases reported to CCDPH from July 2014 to September 2016 and investigated by field staff were analyzed for timeliness and investigation outcomes. We examined timeliness through two calculated variables: median days from case assignment to acknowledgement by the disease intervention specialists (DIS) and median days from acknowledgement to case closure. We also examined the proportion of cases closed during the study period with a disposition code indicating appropriate treatment of the case.
RESULTS: We identified 1,179 syphilis cases entered into the field tracking database. After eliminating inappropriate duplicates and cases with missing information, 1,151 remained. Of these 917 (79.7%) were assigned. Of these, 65.5% had disposition outcomes indicating treatment; 22.7% were unable to be located. Of the 917 cases 88.2% had diagnosis codes, 45.9% were early syphilis cases. The median time from assignment to acknowledgement of a case in 2014 was 3 days. This number decreased to 1 day in 2015 and rose again to 4 days in 2016. The median time from acknowledgement to closure decreased over time from 50 days in 2014, to 47 days in 2015, to a low of 31 days in 2016.
CONCLUSIONS: Since the implementation of the electronic database system in 2014 there has been an improvement in the overall time taken to close syphilis cases. However, though improvements have been made additional quality improvement initiatives should aim at reducing the amount of discordant information in the field record database and the final case reports and developing a more streamlined system and structure for managing syphilis cases in the field such as the creation of standardized procedures for field staff.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Evaluation; Surveillance; Sexually Transmitted Diseases
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8435
Abstract Type	Breakout
Abstract Title	Improving the HIV Care Continuum: Think about the Denominator Too

Abstract

BACKGROUND: The HIV Continuum of Care is a framework for examining progress on the National HIV/AIDS Strategy and measuring health outcomes for persons living with HIV (PLWH). Data for the continuum has traditionally come from HIV Surveillance systems which rely on reporting of laboratory results to measure retention in HIV care and viral suppression and contain inaccurate and outdated information on PLWH. Improvements in measuring the number of PLWH in a jurisdiction, as well as in measuring care received by PLWH, will increase progress towards the National goals of 90% of PLWH being virally suppressed.
METHODS: The Virginia Department of Health undertook a number of initiatives to more accurately measure PLWH in the state and to increase the availability of care marker data. These included the development of the care marker database, which matched together a number of data systems that contained information on care received by PLWH, including Ryan White care, the AIDS Drug Assistance Program, Medicaid, HIV Surveillance data, and the Medical Monitoring Project. To increase the accuracy of the number of PLWH residing in Virginia, matches were done with people search software, as well as surveillance data in surrounding jurisdictions to determine the current residence of PLWH. Vital status information for PLWH was also updated through a number of processes.
RESULTS: As a result of matches across jurisdictions, Virginia reduced the denonimator of PLWH in 2015 by 760 persons. The addition of care markers, including CD4 counts, viral loads, antiretroviral prescriptions and HIV medical visits, increased retention rates by 8% and viral suppression rates by 9% in 2015.
CONCLUSIONS: Improvements to the HIV Care Continuum must include innovations to data systems that allow for the utilization of multiple data sources and timely use of data for public health action. Surveillance systems that were designed to produce static reports must be updated to utilize new technologies and to meet the needs of current public health issues.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Surveillance; Information Technology; HIV/AIDS
Consider for Different Presentation?	Yes

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Submission Type Breakout/Quick/Lightning/Poster

ID 8369

Abstract Type Lightning

Abstract Title Contributions of the Care Markers Database: An Assessment of HIV Viral Suppression Using Multiple Data Sources

Abstract

BACKGROUND: The enhanced HIV/AIDS Reporting System (eHARS), the primary HIV surveillance database, is used to monitor health outcomes for persons living with HIV (PLWH). It contains information on HIV diagnosis and patient demographics, as well as CD4 and viral load test results, which are used to assess health outcomes (e.g. viral suppression). However, not all indicators of care receipt are captured in eHARS. In response, Virginia created the Care Markers database (CMDB), which compiles multiple data sources, including eHARS, into a single, integrated system. We aim to quantify the impact of data integration via CMDB on viral suppression estimates.
METHODS: CMDB compiles routine HIV surveillance data (eHARS) and other care marker data, including CD4 cell count, viral load test, HIV-related medical visit, and receipt of antiretroviral prescription. Data sources include Ryan White, the Medical Monitoring Project, Medicaid, and HIV surveillance data from other jurisdictions. Vital status data come from the Department of Health's Division of Vital Statistics, the National Death Index, the Social Security Death Master File, routine updates from other jurisdictions, and matching with LexisNexis ® Accurint ®. Our population of interest was PLWH in Virginia as of December 31, 2014 according to eHARS. Viral suppression was assessed with 2 different data sources among our study population: 1) eHARS alone; 2) CMDB. We tabulated and compared frequency and percentage of 2014 viral suppression for the two data sources.
RESULTS: We identified 23,043 PLWH in Virginia as of December 31, 2014 according to eHARS. With eHARS data alone, the percentage of PLWH virally suppressed was estimated at 29.9% (n=6,880), while 38.9% (n=8,695) of PLWH were estimated to be virally suppressed using the full CMDB.
CONCLUSIONS: Incorporation of multiple data sources via CMDB resulted in increased viral suppression estimates for PLWH in Virginia, demonstrating the importance of data integration for monitoring health outcomes among PLWH. CMDB has the potential to increase patient history completeness and health outcome accuracy. Future analyses will estimate the contribution of each data source in CMDB.

Submission Complete? Yes

Committee Infectious Disease

Topic HIV & STD

Keywords Surveillance; HIV/AIDS

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster

ID 8189

Abstract Type Lightning

Abstract Title Surveillance for Hepatitis C Virus and HIV Co-Infection to Monitor and Prevent Transmission of HIV By Injection Drug Use

Abstract

BACKGROUND: Substantial evidence supports the link between equipment used to inject drugs and transmission of the hepatitis C (HCV) and human immunodeficiency viruses (HIV). In 2015, HIV spread rapidly within a network of people who injected drugs in rural Indiana, over 90% of whom were co-infected with HCV. Active surveillance for: 1) acute or recent HCV infection, 2) HIV care status, and 3) HIV viral load among people living with HIV may help identify individuals at risk for HIV transmission by injection drug use (IDU).
METHODS: During May 1, 2015 – June 30, 2016, Wisconsin HIV and HCV registries were linked monthly by a SAS deterministic program. A monthly report included the number of HIV cases with a transmission category of IDU and the number of new co-infections, defined as a prevalent HCV or HIV case with a new report of HCV or HIV infection. A monthly person-level report included dates of infection, demographics and behavioral risks at time of report. An algorithm was used by surveillance staff to review HCV and HIV registries and HIV laboratory reports, and work with HIV Partner Services to prioritize follow-up of individuals at risk for transmitting HIV via IDU.
RESULTS: During the surveillance period, 272 HIV and 4,407 HCV cases were newly reported. HIV infections with a transmission category of IDU were elevated (above a 5-year average) in May, 2015, only, and HIV-HCV co-infections were elevated from May to August, 2015. The monthly match identified a total of 63 new HIV-HCV co-infections. The most recent identified infection was HCV in 51 (81.0%), HIV in six (9.5%) and six (9.5%) were diagnosed simultaneously. Risk was complete for 21 (33.3%), of which six (28.6%) indicated recent (within 12 months) IDU. Of the six with recent IDU, three were HIV virally suppressed and thus unlikely to transmit HIV and three were found to be out of HIV care or HIV virally unsuppressed and were recommended for reassignment to HIV Partner Services.
CONCLUSIONS: Routine linkage of state HIV and HCV registries allowed the Wisconsin AIDS/HIV and HCV Programs to monitor for an increase in HIV transmission associated with reported IDU as well as for recent HIV among people with HCV infection. Incomplete risk data at time of HCV report was a barrier to assessing IDU risk. This activity provides an opportunity for individuals at risk for HIV transmission or poor health outcomes to be identified and linked to care.

Submission Complete? Yes

Committee Infectious Disease

Topic HIV & STD

Keywords Disease Prevention; Hepatitis; HIV/AIDS

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster

ID 7834

Abstract Type Poster

Abstract Title An Integrated Cost-Effective Approach to Eliminating Mother to Child Transmission of HIV in New York State

Abstract

BACKGROUND: The elimination of mother-to-child-transmission (MTCT) of HIV is defined by the Center for Disease Control and Prevention as a transmission rate of less than 1% of exposed infants and less than 1 case per 100,000 live births. New York State (NYS) achieved the elimination of MTCT in 2013 (2 infected infants) and 2015 (0 infected infants). In NYS, the majority of HIV-exposed/infected infants have Medicaid health insurance coverage, and each prevented infection saves Medicaid an estimated $357,498 (2013 dollars) in averted lifetime treatment costs.

METHODS: New York State Department of Health (NYSDOH) monitors and comprehensively evaluates HIV exposed births. In addition to universal voluntary prenatal HIV testing of pregnant women, all newborns are screened for HIV at birth by the Newborn Screening Program (NBS) and exposed infants undergo follow-up testing to determine final infection status. Using data from the NBS, diagnostic testing of exposed infants, and maternal and infant medical record review, NYSDOH assesses: 1) prenatal HIV testing of women giving birth; 2) HIV prevalence in women giving birth; 3) MTCT; 4) quality of care in pregnant/delivering HIV-positive women and their infants; and, 5) identification of missed opportunities to prevent MTCT.

RESULTS: Between 2004 and 2014, 5,836 HIV- positive mothers gave birth to 5,951 live-born infants. Of these infants, 81 were confirmed infected. Most infected infants (75/81; 93%) were born to mothers who seroconverted during pregnancy or whose diagnosis was missed. A majority (57/75; 76%) of infected infants were identified solely through NBS, whereas most non-infected infants' exposure status is known prenatally. Half of the NBS identified HIV infected infants (27/57) were breastfed. Six (11%) infants whose exposure was identified by NBS were infected compared to 40% (8/20) of infants whose HIV exposure status was identified after NBS.

CONCLUSIONS: NYS' comprehensive MTCT prevention initiatives fueled the decline in MTCT in NYS; despite this, missed opportunities occur. NBS plays a key safety-net role in those situations. Additionally, with greater emphasis on breastfeeding and the likelihood of transmission via breastfeeding (14%-30%), early identification by the NBS program of HIV-exposed infants whose exposure was not known prior to NBS is critical in preventing infection. Prevention of MTCT, inclusive of NBS, is cost effective in reducing the financial burden on NYS as well eliminating the burden of HIV-related care on infected infants.

Submission Complete? Yes

Committee Infectious Disease

Topic HIV & STD

Keywords Maternal and Child Health; Screening; HIV/AIDS

Consider for Different Presentation? Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8355
Abstract Type	Poster
Abstract Title	Characteristics of Gonorrhea Cases Offered Expedited Partner Therapy, Washington State, July 2014-June 2016

Abstract

BACKGROUND: As the number of reported sexually transmitted diseases (STD) continue to increase in Washington State (WA), low intensity interventions for local health jurisdictions (LHJs) are vital to control the disease. Expedited Partner Therapy (EPT), the practice of providing medication or prescription to the original patient to give to their partners without medical evaluation, is an effective intervention requiring little time of the LHJ. EPT is recommended for heterosexual chlamydia and gonorrhea (GC) cases. The purpose of this analysis was to identify and describe GC cases being offered EPT for their sexual partners in WA.
METHODS: Using enhanced interview data from the STD Surveillance Network (SSuN), we identified GC cases eligible for and offered EPT from July 2014-June 2016. A case eligible for EPT was defined as provider or self-report of heterosexual behavior. Characteristics of those eligible for and offered EPT, including sex, age, race/ethnicity and county of residence, were compared to those were not offered EPT. Statistical significance was calculated using chi-square tests and odds ratios.
RESULTS: From July 2014-June 2016, 1,144 WA GC cases with an enhanced SSuN interview. Of these GC cases, 64.8% (n=741) were identified as heterosexual and therefore eligible for EPT. Approximately 27% of eligible cases were offered EPT by their provider and 13.8% not eligible for EPT were offered it. Those eligible for and offered EPT were more likely to be female (72.0% offered verses 50.1% not offered, $p<0.001$), live in Eastern Washington of the state (80.5% offered verses 70.0% not offered, $p=0.0019$) and less likely to be black, non-Hispanic (15.5% offered verses 27.2% not offered, $p=0.0065$) compared to those not offered EPT. Approximately half (n=103) of those offered accepted EPT. Reasons for not accepting EPT included partner(s) already treated (11.5%) and wanting partner(s) to see a medical provider (10.0%).
CONCLUSIONS: We found only a quarter of those eligible for EPT were offered it by their provider. LHJs should work with their local providers to identify barriers to offering EPT to eligible, especially to non-Hispanic blacks and providers in Western Washington. Increasing the uptake of EPT may assist with controlling the spread of GC among heterosexuals and allow LHJs to focus more directly on cases with higher risk.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Disease Prevention; Sexually Transmitted Diseases; Surveillance
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	7561
Abstract Type	Poster
Abstract Title	Comparison of Initial Viral Load Values Between Transmission Categories and Age Groups in HIV Patients Reported in HIV Surveillance System of Puerto Rico 2010 – 2015

Abstract

BACKGROUND: The objective of this study is to test for differences in initial viral load values between transmission categories by age group, of HIV patients reported in the Puerto Rico Health Department (PRHD) HIV Surveillance System, between January 1st 2010 and December 31st 2015. Due to HIV's disease progression, a longer time lapse between acute infection and initial diagnosis could lead to a greater initial viral load count. A viral load greater than 200 copies/ml is categorized as detectable, which increases HIV transmission. Detecting a difference in transmission categories' initial viral load is fundamental in focusing prevention strategies and addressing disparities between groups, to achieve an earlier diagnosis, referral and engagement to care for people living with HIV, and to decrease transmission rates in our jurisdiction.

METHODS: Using longitudinal data from the PRHD HIV Surveillance System, a comparison of transmission categories was performed using nonparametric test Kruskal Wallis and post-hoc multiple comparison analysis Dwass-Steel-Chritchlow-Fligner test. The statistical analysis software used was SAS 9.3. Descriptive statistics were performed on appropriate variables to ensure comparability between groups. Bonferroni correction for significance was applied to the multiple comparison tests.

RESULTS: Transmission categories were compared by age group. Our results suggest that there is a significant difference between transmission categories in the age groups 13 – 24 years ($p<0.0001$), 25-34 years ($p=0.0004$), and 55-64 years ($p=0.006$). Multiple comparison analysis consistently shows a significantly greater initial viral load median in the men who have sex with men (MSM) transmission category compared to any other group, in significantly different categories within age groups. When age groups were compared by transmission categories, the results suggest a significant difference within the MSM and heterosexual women (HET W) categories. In both MSM and HET W categories, the 65+ age group had a higher initial viral load mean compared to the other age groups.

CONCLUSIONS: The data suggests that the MSM transmission category has a greater initial viral load median, compared to the other categories, in the statistically significant age groups. Subjective comparisons between the findings suggest that the age group influences the initial viral load, and that MSM transmission category had a greater viral load at younger age groups, when compared to other transmission categories. Within transmission categories comparison also shows significantly higher initial viral load in 65+ age groups in MSM and HET W.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Epidemiology; Health Disparities
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8038
Abstract Type	Poster
Abstract Title	Disparities in the Progression from Recent to Sustained Viral Suppression in HIV-Infected People in Care: Georgia Medical Monitoring Project, 2009-2014

Abstract

BACKGROUND: The achievement of sustained viral suppression is the goal of HIV treatment. Viral suppression is associated with lower morbidity, mortality and decreased risk of HIV transmission. Barriers to achieving viral suppression are higher for certain demographic groups, resulting in disparities in viral suppression. The objective of this analysis was to compare the magnitude of the disparities seen among those with recent viral suppression (RVS), and among those with sustained viral suppression (SVS).
METHODS: Data were collected from 2009 to 2014 from 988 Georgia Medical Monitoring Project (MMP) respondents. MMP is a surveillance system that produces nationally representative estimates of behavioral and clinical characteristics of HIV-infected adults receiving medical care in the United States. Rao-Scott chi-square tests were performed to identify significant bivariate differences in factors associated with RVS (<200 copies/ml at last test within past 12 months) and SVS (<200 copies/ml at all tests within past 12 months). Relative disparity (RD), or percent difference, was calculated to evaluate changes in disparities within the group for RVS and SVS.
RESULTS: RVS was achieved in 772 participants (77.6%, 95% CI: 74.2-80.9). SVS was achieved in 626 participants (62.7%, 95% CI: 57.8-67.6). Disparities were larger for SVS than RVS by race (White (ref) vs. Black: SVS-RD=14.9%, RVS-RD=11.1%), age (≥40 years (ref) vs.<40 years: SVS-RD= 19.9%, RVS-RD=16.3%), poverty level (above (ref) vs. below: SVS-RD=6.0%, RVS-RD=3.1%), years since HIV diagnosis (≥10 years (ref) vs.< 5 years: SVS-RD=18.5%, RVS-RD=3.4% to), and HIV care facility type (non-Ryan White (ref) vs. Ryan White: SVS-RD=18.0%, RVS-RD=11.7%). The disparity by depression status was less for SVS than for RVS (major depression (ref) vs. no depression: SVS RD=0%, RVS-RD=5.4%).
CONCLUSIONS: Viral suppression disparities are generally larger for the achievement of sustained viral suppression than for recent viral suppression, the measure commonly used for the HIV care continuum. It is essential that these differences are highlighted and addressed. Targeted intervention efforts are needed to improve adherence, retention in care, and ultimately sustained viral suppression. These improvements will contribute to reducing disparities in morbidity, mortality, and HIV incidence.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Prevention; HIV/AIDS; Epidemiology
Consider for Different Presentation?	No

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Submission Type	Breakout/Quick/Lightning/Poster
ID	7800
Abstract Type	Poster
Abstract Title	Examining the Associations Between Internalized HIV-Related Stigma and Depression Among HIV-Infected Patients

Abstract

BACKGROUND:
Despite the fact that human immunodeficiency virus (HIV) infection has become a manageable condition owing to care and treatment advances, HIV-related stigmatization is still prevalent and remains a potent stressor for HIV-positive people and may negatively impact their mental health. We therefore conducted this study to examine the association of HIV-related stigma with depression among HIV-infected persons receiving care in Mississippi.
METHODS:
We used Mississippi Medical Monitoring Project (MMP) data from 2011 to 2014 (n=793).MMP is an ongoing, nationally representative, cross-sectional surveillance system designed to assess and monitor the behavioral and clinical characteristics of HIV-infected adults at least 18 years of age receiving outpatient medical care in the United States and Puerto Rico.Dependent variable was depression measured using eight-item Patient Health Questionnaire in MMP. A PHQ severity score of ≥10 was considered the cut off point for depression. Main independent variable was stigma measured by a modified 6-item internalized HIV-related stigma scale from MMP survey. Descriptive analysis and multivariate logistic regression models were conducted to assess relationships between depression with HIV-related stigma, adjusting for covariates (age, gender, sexual orientation, race,education, poverty level, and smoking). Variables were included in the multivariable logistic regression model if their p-value was less than 0.20 on bivariate analysis. All analyses accounted for the complex sample design and unequal selection probabilities.
RESULTS: The overall total weighted percentage of HIV-infected persons receiving care with major depression was 16.4%. Females (22%), those who had less than high school education (23.8%), current smokers (22.1%) had significantly greater prevalence of depression. Similarly, those who reported at least one stigma experience had significantly higher prevalence of depression (20.8%) compared to those who did not (5.5%). Approximately 75% of HIV-infected persons receiving care had at least one HIV-related stigma experience. The proportion of HIV-infected persons receiving care who reported stigma ranged from 21.9% for feeling worthless because of HIV to 63.6% for having difficulty to tell people about HIV status. Multiple logistic regression analysis showed that HIV-infected persons receiving care who reported at least one stigma experience were significantly more likely to have depression compared to those who never had HIV-related stigma experience after controlling for the covariates (aOR=5.4, 95% CI=2.5-11.5).
CONCLUSIONS: HIV-related stigma among HIV-infected persons receiving care in Mississippi is common and predicts depression in this population. These findings indicate a need for community-based interventions to reduce stigma in the general public.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Epidemiology; Depression
Consider for Different Presentation?	Yes

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Submission Type Breakout/Quick/Lightning/Poster

ID 8020

Abstract Type Poster

Abstract Title Factors Associated with HIV Testing Among Adults in Texas: Findings from 2015 Behavioral Risk Factor Surveillance System (BRFSS) Data

Abstract

BACKGROUND: Human immunodeficiency virus (HIV) testing contributes to both HIV prevention and care efforts. Early diagnosis decreases the risk of HIV transmission, morbidity and mortality. Texas ranked sixth among the 50 states in the number of HIV diagnoses in 2013. About 17.3 % of persons living with HIV (≥13 years old) were unaware of their HIV status. The present study evaluated risk factors for association with HIV testing among adults (18 years and older) in Texas by analyzing 2015 Behavioral Risk Factor Surveillance System (BRFSS) data.

METHODS:

National 2015 BRFSS data was downloaded from the Center for Disease Control and Prevention (CDC) website and Texas data was selected by using SAS 9.4. Twenty-two socio-demographic and behavioral risk factors potentially related to HIV testing were selected. Any data with missing values for these 22 variables were removed. Test for proportions was used to confirm there is no significant difference between the selected sample set and original dataset. Multiple logistic regression analysis was conducted to identify associations between the risk factors and HIV testing, using Stata 13. Odds ratios (OR) and related 95% confidence intervals (CI) were derived from the regression analysis.

RESULTS: Among 12,155 respondents in Texas, 32.0% adults had been tested for HIV. Factors with a significant increased likelihood of HIV testing were being female (OR 1.41 vs. male; 95%CI, 1.24-1.60, p <0.001), Black (OR 2.84 vs. non-Hispanic White; 95%CI 2.06-3.92, p <0.001), Hispanic (OR=1.22 vs. non-Hispanic White; 95%CI 1.01-1.48, p =0.036), lesbian or gay (OR=14.15 vs. straight sexual orientation; 95%CI 6.72-29.78, p <0.001), home renter (vs. home owner), divorced (vs. married), with college or higher education (vs. those did not graduate from high school), current daily smoker (vs. never smoker) and veteran (vs. non-veteran). Having depression, physical, mental or emotional disability, or students (vs. employed for wages) were less likely to take the test. Compared to age group of 18-24 years, age groups of 25-34, 35-44 or 45-54 years were more likely to take HIV test, while age groups of 55-64, 65 years or older were less likely.

CONCLUSIONS:

In this study, we identified several risk factors associated with HIV testing. The results may help local health departments in Texas to focus HIV prevention efforts, locate the communities with a low rate of HIV testing, and promote access to and utilization of HIV testing in those needed communities.

Submission Complete? Yes

Committee Infectious Disease

Topic HIV & STD

Keywords Risk Factors; HIV/AIDS

Consider for Different Presentation? Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8423
Abstract Type	Poster
Abstract Title	Factors Associated with Internalized HIV-Related Stigma for HIV-Positive Patients in Virginia, MMP 2011-2014

Abstract

BACKGROUND: For people living with HIV (PLWH), perceived stigma can become internalized, leading to the adoption of negative beliefs about themselves due to their HIV status. Internalized HIV-related stigma can affect retention in HIV medical care; thus increasing the chance of poor health outcomes. The purpose of this analysis was to determine if there is a relationship between sociodemographic variables and the likelihood of PLWH self-reporting HIV-related stigma.
METHODS: Data for this analysis included Medical Monitoring Project (MMP) participants in Virginia from 2011-2014 (N=875) who attended at least one medical care visit between January 1-April 30 of their respective MMP participation year. Demographic characteristics were summarized; and binary logistic regression models were performed for each independent variable to determine inclusion in the multivariate logistic regression model (where $p < .10$). The outcome variable for the multivariate regression model was whether someone self-reported HIV-related stigma. Results for the multivariate regression model are reported where $p < .05$.
RESULTS: The following sociodemographic characteristics met the $p < 0.10$ significance criterion for inclusion in the final multivariate regression model: age, race, education level, years since HIV diagnosis, household poverty level, binge drinking in past 30 days, and recent symptoms of depression. For the multivariate regression model, Hispanics were less likely to report HIV-related stigma than Black PLWH [adjusted odds ratio (AOR), 0.6; 95% confidence interval (CI), 0.4-0.9]. No differences were found between Hispanic and White PLWH or between Black and White PLWH. In addition, PLWH who reported recent symptoms of depression were more likely to report HIV-related stigma than those who did not report recent depression symptoms [AOR, 1.5; 95% CI, 0.8-2.0].
CONCLUSIONS: Findings suggest a relationship between race and internalized HIV-related stigma. In addition, persons reporting HIV-related stigma were also likely to report recent symptoms of depression. It is unclear the direction of the relationship between depression and HIV-related stigma. Screening for depression and asking PLWH about their feelings regarding HIV and stigma could contribute to determining therapeutic means of addressing both issues.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Mental Health; Infectious Diseases
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8316
Abstract Type	Poster
Abstract Title	HIV Viral Suppression Among HIV and Hepatitis C Co-Infected Persons in Care in Washington State from 2009 through 2014

Abstract

BACKGROUND: The Medical Monitoring Project (MMP) is a federal surveillance project designed to produce nationally representative data on people living with HIV/AIDS (PLWH). MMP has two components: an interview and medical record abstraction. This analysis describes demographic characteristics, risk behaviors, need for supportive care and HIV viral suppression among PLWH who are co-infected with hepatitis C and in care using Washington State MMP interview and medical record data.
METHODS: MMP data from years 2009-2014 were used for this analysis. Patient interviews were used to describe patient demographics, use of medical and social services and risk behaviors and medical records were used to describe HIV viral suppression. For the analysis, an individual was considered to be co-infected with HIV and hepatitis C if he/she had evidence of ever having a positive hepatitis C test in the medical chart, and did not have a subsequent documented negative test result.
RESULTS: In 2009-2014, 15% of HIV-positive persons in care in Washington were co-infected with hepatitis C, and this proportion did not differ significantly by year. Relative to the HIV mono-infected group, HIV/hepatitis C co-infected persons were significantly older ($p=0.010$), less educated ($p<0.0001$), had less income ($p<0.0001$), more likely to be heterosexual ($p<0.0001$), had higher percentages of individuals incarcerated in the prior 12 months ($p<0.0001$) and homeless in the prior 12 months ($p<0.0001$). Approximately 21% of this group reported injection drug use in the past year and 59% were current smokers at time of interview. Co-infected persons had significantly higher unmet needs for supportive care services ($p=0.0005$), with 65% of individuals reporting at least one unmet need. The services for which there was the most unmet need among co-infected persons included dental (32%), vision (27%), nutrition (14%), peer group support (12%), transportation (11%), legal (11%), mental health (10%), and drug and alcohol services (8.5%). Co-infected persons had comparable and high rates of HIV antiretroviral (ARV) drug use and HIV viral suppression. 91% of the co-infected persons were on ARVs and 83% were virally suppressed (<=200 copies per ml).
CONCLUSIONS: HIV-positive persons in care in Washington from 2009 through 2014 who were co-infected with hepatitis C experienced significantly more socioeconomic challenges and unmet care needs than persons who were only infected with HIV. Despite these obstacles, co-infected persons had comparable rates of ARV use and HIV viral suppression. Care providers should not wait for situational factors to be addressed before treating HIV viral load.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Social Inequalities; HIV/AIDS; Sexually Transmitted Diseases
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8418
Abstract Type	Poster
Abstract Title	Internalized Stigma in a Population-Based Sample of Washington State HIV Positive Adults in Care

Abstract

BACKGROUND: Reducing stigma is part of the National HIV/AIDS Strategy and is a primary goal of the End AIDS Washington Initiative. Internalized stigma is when individuals believe negative views of people living with HIV are true of themselves. There were three primary objectives of this analysis: (1) Measure the prevalence of stigma among HIV positive persons in Washington State, (2) Explore the relationships between stigma and various behavioral and clinical outcomes and (3) Assess the association between stigma and durable viral load suppression, which was defined as having all viral loads in a 12-month period being <=200 copies per ml.
METHODS: The Medical Monitoring Project (MMP) is a national surveillance system used to learn about people living with HIV. Clinical and behavioral information is gathered from a locally and nationally representative annual interview and medical record abstraction. Patient demographics, stigma scores, risk information and behavioral and clinical outcomes were obtained for all individuals that answered at least one stigma question in the Washington State MMP in 2011 through 2014 (n=921). Six questions were used to measure stigma and responses were coded to disagree=0 and agree=1. A stigma score was calculated by summating the six questions, with a range of 0 (low) to 6 (high). Mean stigma scores were analyzed by demographic, behavior and clinical outcomes using one-way ANOVA. Multivariate analyses were conducted to predict durable viral load suppression accounting for stigma, time since diagnosis and ART adherence.
RESULTS: 76% of HIV-infected adults living in Washington agreed with one or more of the internalized stigma questions, with over 50% reporting they had difficulty telling people about their HIV status and hid their status. About a quarter of people reported feeling dirty, guilty, ashamed or worthless. People that did not engage in discussion of HIV status with sexual partners, had depression and had been diagnosed with HIV for less than 5 years had significantly higher mean stigma scores. ART adherence and time since diagnoses were significant predictors of durable viral load suppression in a multivariate model, while stigma was not a significant predictor.
CONCLUSIONS: Internalized stigma due to HIV-positive status was high among persons living with in HIV in Washington State. While stigma was not a statistically significant predictor of durable viral load suppression, the association may be mediated by time since diagnosis and ART adherence. Efforts to address stigma could help reduce negative behavioral and clinical outcomes.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8163
Abstract Type	Poster
Abstract Title	Neisseria Gonorrhoeae Infections Among African Americans in Indiana, 2015

Abstract

BACKGROUND: Neisseria gonorrhoeae (gonorrhea) is the second most commonly reported communicable disease in Indiana. Gonorrhea infections increase the risk of acquiring or transmitting HIV infection. In the United States, African Americans bear a disproportionate burden of infection, increasing the potential burden of HIV. We investigated the disparity in gonorrhea infection using Indiana data.

METHODS: Surveillance for gonorrhea is performed by the Indiana State Department of Health HIV and STD Division. Data from the Statewide Investigating and Monitoring Surveillance System (SWIMSS) on gonorrhea by race and age were assessed from January 1 through December 31, 2015. Co-infection with gonorrhea and HIV was also examined.

RESULTS: In 2015, 7,843 cases of gonorrhea were reported in Indiana. Of these, 4,127 (52.6%) were among African Americans. By comparison, the African American population makes up 9.6% of Indiana's 6.5 million people. Individuals aged 15-29 years old accounted for 3,293 (79.8%) of the 4,127 cases. Co-infection with gonorrhea and HIV, where HIV status was new or previously positive, was reported in 242 (3.1%) gonorrhea cases, of which 151 (62.4%) were among African Americans.

CONCLUSIONS: African Americans in Indiana face a higher burden of gonorrhea infection in Indiana, similar to the pattern seen for the nation. Increased outreach and testing of African Americans might decrease the burden of gonorrhea by enabling quicker identification and treatment. Clinicians serving HIV-positive individuals should be informed of current gonorrhea screening recommendations.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Health Disparities; Sexually Transmitted Diseases
Consider for Different Presentation?	No

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8067
Abstract Type	Poster
Abstract Title	Repeat HIV Testing Among Individuals Diagnosed with HIV in Wisconsin, 2012-2016

Abstract

BACKGROUND: HIV testing is necessary for identifying and linking individuals with undiagnosed HIV infection to HIV care and prevention services to increase survival and reduce HIV transmission. However, some individuals choose to retest at a publicly-funded Counseling, Testing, and Referral (CTR) facility after their initial HIV diagnosis. We aimed to characterize these repeat testers to better understand their reasons behind receiving additional HIV testing.

METHODS: A dataset of positive HIV tests with a date of contact (i.e. date specimen was collected) from 2012-2016 was generated from EvaluationWeb for linkage with the enhanced HIV/AIDS Reporting System (eHARS). Tests were categorized as repeat tests if the date of contact was ≥ 1 day after the earliest diagnosis date in eHARS. We compared demographics and behavioral risk categories of repeat tests and those representing new diagnoses. We also examined self-reported previous HIV test result at the time of repeat testing. Statistical significance was calculated using chi-square and Fisher's exact tests. We further evaluated HIV care status and viral suppression (<200 copies/mL) at the time of and after the first repeat test using laboratory data in eHARS.

RESULTS: Of 318 positive results, 216 (68%) represented new diagnoses and 102 (32%) represented individuals who had been diagnosed previously. While 101 individuals had 1 repeat test, one person had 2 repeat tests. Race was the only significant factor associated with repeat testing: non-Hispanic Blacks made up 68% of the previously diagnosed but only 49% of the newly diagnosed (p=0.02). Approximately 30% of repeat testers reported that their previous HIV test result was negative at the time of receiving additional CTR tests. Almost half (48%) of repeat testers had evidence of HIV care within the 12 months prior to their first repeat test. Of those with recent care, 53% were virally suppressed at their last viral load test, 29% were unsuppressed, and 18% had no documented viral load. Of those with no evidence of prior or recent care, 79% were linked to care within 3 months of their repeat test, and another 6% were linked within 12 months.

CONCLUSIONS: Having repeat positive HIV tests may be an approach to validating HIV diagnosis or (re)engaging in HIV care, particularly among non-Hispanic Black men in Wisconsin. To avoid potentially unnecessary repeat HIV testing, it is important for CTR and clinical providers to effectively communicate about previous test results, linkage and retention in HIV care, and viral suppression with individuals who are HIV-positive.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Epidemiology
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	7874
Abstract Type	Quick
Abstract Title	A Case-Control Study of Risk Factors Contributing to the High Incidence Rate of Sexually Transmitted Infections in Alaska, with a Focus on Gonorrhea and Chlamydia

Abstract

BACKGROUND: The aim of this study is to address a gap in the literature by analyzing behavioral risk factors of gonorrhea (GC) and chlamydia (CT) for local importance. This is needed to inform interventions targeting the consistently high incidence rates in Alaska. Several factors are thought to contribute to the high rates, including that American Indians and Alaska Natives have a higher risk for GC and CT, Alaska has the third lowest median age in the nation, there are rural health challenges, and there is a high prevalence of alcohol use. However, there is a lack of studies that have been conducted to determine the relative influence of these factors locally.
METHODS: This was a case-control study of persons ages 15 to 34. Twenty cases, who tested positive for GC/CT between January 1, 2014 and March 20, 2015, were aggregated and matched on five variables to controls who did not have any record of positive GC/CT tests. Seven variables related to risk factors were analyzed through descriptive statistics, frequencies, risk ratios, and simple logistic regression. Modeling was then done with multiple logistic regression.
RESULTS: Only 5% of cases always used condoms, compared to 45% of controls (p=0.046). Fifteen percent of cases had one or no partners in the last year, compared to 45% of controls (p=0.33). Those without social supports were 12% more likely to have GC/CT than those with supports. Other factors of interest included: all Hispanic or Latino/a subjects were cases, all students were controls, and no cases had private insurance. Multiple logistic regression was done with the variables condom use and number of partners in the last year, but the model was not statistically significant.
CONCLUSIONS: The study reaffirmed that condom use and decreasing the number of partners are important to reducing STI rates. Based on this initial study, condom education and availability should be prioritized for prevention efforts locally. Education should include the increased risk of infection from having multiple partners. Further research is needed to explore possible ethnic disparities, social support and self-efficacy, and insurance status and access to care. Interventions must be based on relevant local information to be successful, particularly in unique areas like Alaska. Prevention will increase in importance as antibiotic-resistance rises. *A follow-up study is being completed where only three variables were matched in order to obtain a case-control pair for all fifty cases from the study period; analysis of these data is ongoing.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Risk Factors; Sexually Transmitted Diseases; Local Epidemiology
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8512
Abstract Type	Quick
Abstract Title	At the Crossroads: The Intersection of HIV and Neisseria Gonorrhoeae; Characteristics of HIV Co-Infection and Antiretroviral Use for Care or Prevention in the STD Surveillance Network, 2016

Abstract

BACKGROUND: Changes in the landscape of HIV/STD prevention are occurring as interventions such as pre-and post-exposure prophylaxis (PrEP/PEP) and population-level viral suppression to prevent HIV transmission are brought to scale. STD diagnoses identify persons potentially at risk for HIV, or in need of re-engagement with HIV care. We estimated HIV co-infection status among persons diagnosed with *Neisseria gonorrhoeae* (NG) in 10 cities/states in the US and number and characteristics of (1) those living with diagnosed HIV not reporting HIV care and/or viral suppression therapy and, (2) those not known to be living with HIV who may be candidates for PrEP.

METHODS: A sample of reported NG cases were randomly selected and interviewed in 10 SSuN sites between January and September 2016. Information on HIV status, most recent HIV primary care visit and antiretroviral (ART) use, gender of sex partners, and self-reported receipt of a prescription for PrEP was elicited. Data were weighted for analysis and adjusted for non-response to represent diagnosed and reported NG cases in participating SSuN sites. We estimated the number/proportion of cases that are HIV co-infected, in HIV care, and reporting current ART use. The number and proportion of HIV-negative cases, the proportion reporting receipt of a PrEP prescription, and those reporting exposure through discordant partnerships was also estimated.

RESULTS: Of 102,518 NG cases reported in participating sites Jan-Sept 2016, 3,889 (3.8%) were randomly selected and interviewed. Among all reported cases, 14,091 (13.7%) were estimated to be HIV co-infected. Co-infection was highest for MSM exclusively reporting male partners (28.6%) and for MSM who also report female partners (MSMW, 24.0%). Estimated co-infection rates among heterosexual men and women were 2.5% and 1.6%, respectively. Among all patients living with HIV, 49.1% reported a recent HIV-care visit and 56% reported current ART use. Among HIV uninfected patients, 35.7% reported MSM or MSMW exposure. Among HIV uninfected MSM, 41% reported being prescribed PrEP (Range 0 - 66.6%); of those not on PrEP, 27.8% reported that their most recent sex partner was HIV-positive or of unknown HIV status.

CONCLUSIONS: A significant proportion of persons diagnosed with NG are co-infected with HIV, and many are not taking viral suppressive therapy; diagnoses of NG present opportunities for care linkage and referral. Many HIV uninfected patients also report that they either know their most recent sex partner to be HIV-positive, or of unknown HIV status, presenting evidence of opportunities for referral for initiation of PrEP.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Infectious Diseases; Sexually Transmitted Diseases
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8375
Abstract Type	Quick
Abstract Title	Data to Action: Prioritizing Follow-up of HIV Coinfected Patients By Viral Load

Abstract

BACKGROUND: The Houston Health Department (HHD) is responsible for the public health follow-up of HIV-positive individuals who have become infected with either Chlamydia or Gonorrhea (co-infected patients). Compared to other HIV patients, coinfected patients are associated with a higher risk of HIV transmission. The number of coinfected patients has been increasing, but HHD's limited resources are unable to meet the growth. The purpose of this study was to identify a prioritization method that reduces the number of coinfected patients needing follow-up. The literature shows that the strongest predictor of HIV transmission is plasma viral load (VL). A low VL is 20x less likely to transmit as shown in the HPTN 052 Study, which evaluated 1,800 couples, mostly heterosexual. The PARTNER Study is currently evaluating 1,110 couples, 40% MSM, and has thus far showed no cases of HIV transmission by a VL less than 200.
METHODS: For the exclusion of follow-up of patients with low VLs to effectively reduce HHD's workload, a substantial number of these patients was needed. To predict the number of these patients in the upcoming years, data from previous years was examined. A single dataset was created by matching a dataset of coinfected patients and their coinfection diagnosis date, ranging from 2011-2015, to a dataset of HIV/AIDS patients and their plasma VLs collected during 2006-2015. Of this single dataset, patients that had a VL within 3 months of coinfection diagnosis were used. For each year during 2011-2015, patients with a suppressed VL (<200) and an undetectable VL (≤50) were counted. Because most patients had more than one VL within the 3 month period, the evaluation was conducted in two ways, the most recent and greatest VL.
RESULTS: The results showed a substantial number of patients with an undetectable VL in the years 2013-2015, using greatest or most recent VL. Based on 2014 data, excluding those with an undetectable VL results in 9 less cases per month that require follow-up.
CONCLUSIONS: With this insight, HHD formally proposed exclusion of patients with an undetectable VL from follow-up. In addition, this exclusion policy is to be reevaluated after the PARTNER Study is complete, to inform us of expanding exclusion to those with a suppressed VL (<200). Though, this proposal was not accepted by HHD leadership, it can be an effective strategy for other public health agencies that face resource limitations and must continue to prevent the transmission of HIV.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Policy / Policy Development; Epidemiology Capacity; HIV/AIDS
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8638
Abstract Type	Quick
Abstract Title	Epidemiology of Sexually Transmitted Diseases in Clark County, Washington: Outbreak Response and Evaluation of Trends, Risk Factors, and Public Health Resources

Abstract

BACKGROUND: It is estimated that more than half of Americans will contract an STD in their lifetime, and while some are treatable and can be prevented from recurrence in the future, others have long lasting, adverse effects. Further, the transmission of STDs varies from population to population, and, without proper information on these disparities, infections may go undiagnosed until after proliferation or complications have already occurred. Since 2014, Clark County has experienced a significant rise in STD diagnoses, including an ongoing gonorrhea outbreak and the state's 's highest rate of congenital syphilis in 2016. Many factors may contribute to these and other concerning statistics on STDs in the region, including the presence of high risk populations, limited provider education, or a lack of accessible STD prevention and treatment services. In order to better understand and respond to this growing issue, a more complete analysis of surveillance data was developed.

METHODS: Current and retrospective data was obtained from the Washington State Public Health Information Management System (PHIMS) and analyzed using SAS 9.4, ArcGIS, and Microsoft Excel. Investigators completed descriptive analyses on demographic, geographic, and social risk factors, as well as subpopulation analyses among gonorrhea outbreak cases and men who have sex with men (MSM). Provider profiles, outlining medical provision and access to care in the region, were also developed.

RESULTS: This analysis identified trends and transitions in 14 factors among Clark County STD cases, including the shifting gonorrhea burden to younger individuals and the growing prevalence of infection in women. Additionally, risk factors such as drug abuse, prior STD diagnosis, and internet use to meet partners were all reported at increasing rates over the study period. A secondary analysis among MSM STD cases identified a notable decrease in the burden of gonorrhea and syphilis on this subgroup, which may be indicative of improved efforts targeting the population, but also the need for increased attention to individuals in other sexual orientation cohorts, where diagnoses have increased.

CONCLUSIONS: Population based analyses on the burden of STDs within a community are vital to informing the design of effective public health interventions including outreach, provider education, and response. The results of this study have been used to guide such activities, determine resource allocation, and develop further areas of study, in order to gain a better understanding of and response to the persistent public health issues at hand.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Sexually Transmitted Diseases; Surveillance; Epidemiology
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	8175
Abstract Type	Quick
Abstract Title	Examining Associations Between Neighborhood Condom Availability and Rates of Sexually Transmitted Diseases in San Mateo County, California

Abstract

BACKGROUND: Condoms remain one of the best ways to protect against sexually transmitted infections (STIs), such as chlamydia (CT) and gonorrhea (GC). Our study aims were to examine the condom retail environment and other area level characteristics in neighborhoods with low/high STI rates, to evaluate associations between condom availability and STI rates in San Mateo County.
METHODS: Condom retail data was compiled from the 2016 Healthy Stores for a Healthy Community survey of county retail establishments licensed to sell tobacco, and from the locations of major retail stores where condoms, but not tobacco, are sold. Condom retail store counts for neighborhoods, defined using census tracts, were classified into three categories (0, 1-2 , 2+ stores). Neighborhood condom retail density was calculated based on counts per 1,000 population and per square mile by census tract. Chlamydia cases reported in 2015 (n=2,376) and gonorrhea cases reported from 2011- 2015 (n=1,725) were mapped and census tract STI rates were calculated. STI rates were dichotomized to a low or high STI rate at the median. We examined associations between condom stores, neighborhood sociodemographic characteristics, and low/high STI rates using descriptive statistics.
RESULTS: Neighborhoods with higher CT and GC rates, compared to neighborhoods with lower CT and GC rates, were more likely to have a larger population, a larger non-White population (68% vs. 43% for both CT and GC) as well as a lower income level (CT: 10% vs. 5%; GC: 9% vs 6%) and lower education than in neighborhoods with lower STI rates. Neighborhoods with higher numbers of condom retail stores also had larger populations, and a higher percentage of residents living below the poverty line (neighborhoods with 0 stores: 5%; 1-2 stores: 7%; 2+stores: 9%). Overall, there was a positive association between number of condom retail stores and STI rates. The mean number of condom retail stores for neighborhoods with a high CT rate was 2.8 (SD: 2.6) compared to 1.1 (SD: 1.2) stores in neighborhoods with a low CT rate ($p<0.001$). Similarly, the mean number of condom retail stores for neighborhoods with a high GC rate was 2.4 (SD: 2.5) compared to 1.4 (SD: 1.7) stores in neighborhoods with a low GC rate ($p=0.006$).
CONCLUSIONS: Higher neighborhood disadvantage was associated with higher CT and GC rates. While condom availability was higher in neighborhoods with higher rates of STIs, other factors including financial barriers to purchasing condoms, may impact STI rates.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	Epidemiology; Built Environment ; Sexually Transmitted Diseases
Consider for Different Presentation?	Yes

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Submission Type	Breakout/Quick/Lightning/Poster
ID	7629
Abstract Type	Quick
Abstract Title	High Prevalence of HIV Infection Among Reported Primary and Secondary Syphilis Cases in the United States, 2015

Abstract

BACKGROUND: Recent increases syphilis are especially concerning, given the biologic and epidemiologic associations between syphilis and HIV infection. The Centers for Disease Control and Prevention (CDC) has previously reported national data on primary and secondary (P&S) syphilis and HIV co-infection among men who have sex with men (MSM), men who have sex with women only (MSW), and women. However, national data on P&S syphilis and HIV co-infection among demographic groups such as race/ethnicity groups and age groups have not previously been described.
METHODS: P&S syphilis case report data from 2015, including available risk factor information such as sex of sex partner and HIV status, were extracted from the National Electronic Telecommunications System for Surveillance, the system through which CDC receives notifiable STD data from all 50 states and the District of Columbia. The proportion of P&S syphilis cases with HIV co-infection was calculated using cases with known HIV status (either known to be living with HIV or known to be HIV-negative) as the denominator and were examined by demographic group and by reported sex/sex of sex partner (MSM, MSW, and women).
RESULTS: In 2015, there were 23,872 reported cases of P&S syphilis in the United States. Of the 15,742 (65.9%) cases reported with known HIV status, 6,453 (41.0%) were co-infected with HIV. The proportion of cases with HIV co-infection was higher among male cases (44.9%) compared with female cases (3.5%). Among male cases with known sex of sex partner, the prevalence of HIV co-infection was higher among MSM (49.3%) than MSW (10.3%). Among MSM, the proportion of P&S syphilis cases with HIV co-infection was highest among non-Hispanic blacks (62.7%) compared with non-Hispanic whites (43.4%) and Hispanics (43.0%). The proportion with co-infection increased with increasing age from 18.2% among MSM cases aged 15–19 years to 65.1% among MSM cases aged 40–44 years, but declined to 63.7% among MSM cases aged 45–49 years and 56.3% among MSM cases aged ≥50 years.
CONCLUSIONS: These data underscore the epidemiologic linkages between syphilis and HIV, particularly among MSM. Because P&S syphilis may be an indication of condomless sexual contact within sexual networks at high risk of HIV transmission, a diagnosis of P&S syphilis may represent a public health and clinical opportunity to (1) prevent HIV infection among those who are HIV-negative and (2) identify and link to care those who are living with HIV infection but not currently engaged in care.

Submission Complete?	Yes
Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Sexually Transmitted Diseases; Surveillance
Consider for Different Presentation?	Yes

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Submission Type Breakout/Quick/Lightning/Poster

ID 7797

Abstract Type Quick

Abstract Title Internalized HIV-Related Stigma and Associated Factors Among HIV-Infected Adults in Care in Mississippi

Abstract

BACKGROUND: Internalization of HIV-related stigma may affect a person's disease management and his\her accessibility to services. However, little is known about HIV-related stigma in HIV-infected patients. We aimed to estimate the internalized HIV-related stigma in Mississippi and its associated factors.

METHODS:

In this study, we used Mississippi Medical Monitoring Project (MMP) data from 2011 to 2014 (n=793). MMP is an ongoing, nationally representative, cross-sectional surveillance system designed to assess and monitor the behavioral and clinical characteristics of HIV-infected adults at least 18 years of age receiving outpatient medical care in the United States. Dependent variable was internalized HIV-related stigma (score range from 0-6, with higher scores indicating greater stigma). Our independent variables were gender (male, female), sexual orientation (heterosexual, homosexual, other), race (black, white), age (18-24, 25-44, 45-64, ≥65), education (<high school education, ≥high school education), poverty level (above, below, at), current smoking (yes, no), binge drinking (yes, no), drug abuse (yes, no), length of time diagnosed with HIV (<5 years ago, 5-9 years ago, ≥10 years ago), and insurance (private, public, uninsured). Descriptive analysis, t-tests, one-way ANOVA and multiple linear regression were conducted using complex sampling procedures ($p<0.05$).

RESULTS: Overall, 75% of respondents reported at least one internalized HIV-related stigma experience. The most common internalized stigma included having difficulty to tell people about HIV status (63.6%), followed by hiding HIV status from others (55%) and feeling ashamed because of HIV (34.2%).The average internalized HIV-related stigma score was 2.3 (out of 6), with a standard error of 0.07. Our findings showed that internalized HIV-related stigma was significantly higher among females (M=2.6, t=2.9, p=0.003), patients aged 18-24 (M=2.9, F=4.6, p=0.003),those with less than high school education (M=2.7, t=2.4, p=0.02), binge drinker (M=2.8, t=2.3, p=0.02), drug abuser (M=2.7, t=2.3, p=0.02), those who have been diagnosed with HIV since <5 years ago (M=2.6, F=6.6, p=0.001), and those who had private insurance (M=2.8, F=5.5, p=0.004). Differences in internalized HIV-related stigma mean were not significant by sexual orientation, current smoking, and poverty level. Multiple linear regression analysis showed that being female (β=0.52), having less than high school education (β=0.55), drug abusing (β=0.66), and having private insurance (β=0.77) contribute positively to predict experiencing internalized HIV-related stigma after entering all variables together.

CONCLUSIONS: The findings indicate that HIV-related stigma is very common in Mississippi, and is significantly associated with gender, education, drug abuse and insurance status, highlighting a need for stigma reduction interventions, with a focus on population at risk.

Submission Complete? Yes

Committee Infectious Disease

Topic HIV & STD

Keywords Epidemiology; HIV/AIDS; Health Risks

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster

ID 8014

Abstract Type Quick

Abstract Title Missed Opportunities for HIV Diagnosis – Understanding Concurrent HIV and AIDS Diagnosis in New York State

Abstract

BACKGROUND: In 2014, New York State (NYS) announced a three point plan to end the AIDS epidemic. One key point is to identify individuals with undiagnosed HIV infection and link them to medical care. Identifying individuals with a concurrent diagnosis -- initial diagnosis of HIV-infection followed within 30 days by a subsequent AIDS diagnosis (stage 3 HIV) -- is important to identify missed earlier diagnostic opportunities. The aim of this study includes: 1) identifying the concurrently HIV/AIDS diagnosed; and 2) describing the characteristics of the concurrently HIV/AIDS diagnosed.

METHODS: NYS surveillance data were used to identify and describe individuals with a concurrent diagnosis in 2014. Crude and adjusted logistic regression models were used to investigate the relationship between concurrent diagnosis and sex at birth, age, race/ethnicity, and HIV transmission risk group. Models were further stratified by three sex at birth-transmission groups: 1) men who have sex with men (MSM); 2) males without documented MSM risk; and 3) females of any transmission risk.

RESULTS: In 2014, 3,434 NYS residents were diagnosed with HIV infection; 680 (19.8%) were concurrently diagnosed with AIDS. Most new diagnoses were attributed to MSM or MSM/IDU transmission risk (58.5%). Males without documented MSM risk (n=690) and females (n=735) each represented about 20%. Mirroring new diagnoses, the concurrently diagnosed were predominately male (77.8%) and non-Hispanic black or Hispanic (40.7% and 30.0% respectively), though the average age at diagnosis was higher for the concurrent group (42 vs 37 years for all new diagnoses). Compared to the non-concurrent, the proportion MSM was substantially lower, with more males lacking documented MSM risk (MSM 46.3%; male non-MSM 31.5%; females 22.2%). Adjusted logistic regression models with collapsed transmission categories consistently identified increased odds of concurrency in older individuals (>30 years) compared to younger individuals (30-39 adjusted OR[aOR]=2.5: 95% CI 2.0-3.3; 40-49 aOR=3.6: 2.7-4.7; 50-59 aOR=4.6: 3.4-6.1; 60+ aOR=4.4: 3.0-6.5). Multi-racial individuals had an increased odds of concurrent diagnosis (aOR=1.9: 1.2-2.8) compared to non-Hispanic white individuals. Stratified analyses by transmission group yielded similar results.

CONCLUSIONS: Age was the most significant predictor of concurrent diagnosis indicating years of missed opportunities for HIV testing. Testing initiatives should be directed at all age groups, though specific efforts to encourage older populations to test for HIV are needed. Testing throughout the life course should be framed in terms of the opportunity to diagnose HIV infection sooner, before the disease progresses to AIDS and the concomitant poorer outcomes.

Submission Complete? Yes

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Abstract Title	Risk Factors for Gonorrhea in the Wastach Front: Matched Case-Control Study

Abstract

BACKGROUND: Utah's gonorrhea rates have increased statewide from 9.8 cases per 100,000 persons in 2011 to 52.1 cases per 100,000 in 2015. Analysis of surveillance data suggested a shift in the affected populations from primarily men who have sex with men (MSM) to the heterosexual population; from 2011 to 2015, infections among males increased 369%, while infections among females increased 623%. The vast majority of cases, 94.4%, resided in the Wasatch front. In order to improve public health's response to the rapid increase in gonorrhea cases, the Utah Department of Health conducted a study to identify the risk factors associated with gonorrhea infection.
METHODS: Cases >18 years of age with a gonorrhea infection within the past 90 days were enrolled from within the Wasatch front (counties include Davis, Morgan, Salt Lake, Utah, and Weber). Controls were recruited using Utah Behavioral Risk Factor Surveillance System (BRFSS) and were matched on sex, age group, and county. After verbal consent, cases and controls were interviewed with a 39-question survey assessing demographic information and risk factors. Only cases with 2:1 match were analyzed. Data was analyzed using SAS.
RESULTS: One hundred ninety-one adult gonorrhea case (34% female, 66% male) and 382 adult controls (34% female, 66% male) were enrolled in the study. Cases were more likely to claim drug use (OR=3.7) than controls, 95% CI [2.4, 5.6]. Among those who claimed drug use in the past 90 days, cases were more likely to claim methamphetamine use, OR=20.5, 95% CI [2.6, 159.3]. Females cases were more likely to claim methamphetamine use than male cases, OR=5.3, 95% CI [1.7, 5.3]. Both males and female cases were more likely to claim the use of an app or website to meet a sex partner, OR=17.4, 95% CI [8.6, 35.3], OR=6.8, 95% CI [2.3, 20.0], respectively. All the female cases claiming the use of an app or website to meet partners were heterosexual. Among male cases claiming the use of apps or websites to meet sex partners 76.7% were MSM, 6.7% claimed to be MSMW, 16.7% claimed to be MSW.
CONCLUSIONS: Results showed cases were more likely to claim drug use and the use of websites and apps to meet sex partners than controls. These findings provide valuable insight into the risk factors which will assist in implementing targeted and effective interventions.

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