Session: P-46. HIV: Prevention

Background. Methods to identify and address barriers to human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP) persistence are needed to improve low PrEP persistence rates beyond 6 months. We evaluated PrEP adherence and persistence in a multidisciplinary clinic model with an integrated specialty pharmacist.

Methods. We conducted a single-center, retrospective, cohort study of patients initiating PrEP in the multidisciplinary Vanderbilt PrEP Clinic with prescriptions filled by Vanderbilt Specialty Pharmacy between 9/1/2016 and 3/31/2019. In this model, integrated clinical pharmacists manage PrEP access, affordability, and therapy monitoring. Clinical data were collected from the electronic health records and pharmacy claims data. Adherence was calculated from fill data using proportion of days covered (PDC). Persistence at 6, 12 and 18 months was measured using patient-reported discontinuation date or the date of the last fill plus the fill’s supply for patients lost to follow-up. The Kaplan-Meier estimation method was used to estimate persistence probabilities.

Results. Most of the 63 patients included were male (97%), white (84%), commercially insured (94%) with a median age of 38 years, and men who have sex with men at high risk for acquiring HIV (97%); Table 1. The majority of patients with at least one follow-up visit (n=58) reported no adverse effects (78%), no missed doses (71%), and had a median PDC of 99% (QR 97% – 100%). Persistence at 6, 12 and 18 months was 0.87 (95% confidence interval, CI, 0.80 – 0.96), 0.83 (95% CI 0.72 – 0.91), and 0.74 (95% CI 0.64 – 0.86), respectively; Figure 1. Of the 18 patients who discontinued PrEP 9 discontinued due to perceived lack of risk for acquiring HIV, 6 were lost to follow up, 1 was transferring PrEP care to a new provider, 1 had worsening depression, and 1 had renal function decline.

Table 1 Patient Characteristics

| Age at PrEP start (years) | Median [IQR] | N=63 | Gender, male (%) | 61 [96.8] | Race | White (%) | 53 [84.1] | Black (%) | 5 [7.9] |
|--------------------------|--------------|------|------------------|----------|------|-----------|----------|----------|--------|
| Insurance Type | Commercial (%) | 30 [47.6] | Medicaid (%) | 9 [14.3] | Tricare (%) | 14 [22] |
| Indication for PrEP | MIA* at high risk (%) | 61 [96.8] | Serodiscordant heterosexual contact (%) | 2 [3.2] |
| Number of sexual partners in last 6 months | 1 | 15 (23) | 2-5 | 21 (33) | 6-10 | 7 (11) | >10 | 8 (13) |
| Not reported | 14 (22) |
| Report of condom use | Inconsistent (%) | 28 [40] | Consistent (%) | 14 [22] | No condom use | 5 [7.9] |
| Not reported | 12 (19) |
| Not sexually active at initial appointment | 1 (2) | eGFR < 60 mL/min | 63 (100) |
| Hepatitis B status | Susceptible at baseline | 33 (52.4) | Immune due to vaccine | 27 (42.2) | Immune due to natural infection | 2 (3.2) |
| Previous HAV/HEV | 1 (1.6) |
| SI Side Effects, Yes** | 13 (22) | Patient-Reported Minor Doses, Yes** | 17 (27) |
| Overall Side Effects, Yes*** | 17 (27) |

Figure 1 Persistence on HIV PrEP

Conclusions. Patients receiving PrEP treatment in a multidisciplinary clinic with an integrated clinical pharmacist had high rates of adherence and persistence up to 18 months. Patients reported few side effects and reasons for therapy discontinuation were appropriate. Efforts to incorporate pharmacy support in managing PrEP patients could be beneficial in increasing patient adherence and persistence.

Disclosures. All Authors: No reported disclosures

References.

982. Formal Education Improves Southeastern United States Primary Care Residents’ Understanding and Attitudes Towards HIV Pre-Exposure Prophylaxis: Results of a Regional Survey

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Methods. Retrospective evaluation of education on WHO 5 moments of HH implementation. Other data collected CLABSI, CAUTI, MDR Acinetobacter, MRSA, Clostridium difficile LaMD. Education occurred between October and December 2018. Data was collected from January 2018 to December 2019. Baseline 5 Moments of HH implementation.

Conclusion. Background. Hand hygiene (HH) is a paradigm of infection prevention. Often emphasis has been placed on appropriate motion of hand hygiene. The implementation of the 5 moments of HH in clinical practice hindered by the perceived enormous lift of educating healthcare providers.

Hand Hygiene Moments Opportunities

Methods. Retrospective evaluation of education on WHO 5 moments of HH implementation. Other data collected CLABSI, CAUTI, MDR Acinetobacter, MRSA, Clostridium difficile LaMD. Education occurred between October and December 2018. Data was collected from January 2018 to December 2019. Baseline 5 Moments of HH implementation.

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was obtained for 3 weeks prior to education as this was newly introduced. Statistical analyses using control charts with testing for special cause variations included all data point before and after 5 moments of HH. We used Pearson correlation to assess relation between HAI and HH. All data point before and after education of 5 moments of HH. We used Pearson correlation to assess relation between HAI and HH.

Results. Education increased HH compliance over the 12 months period post intervention. The number of observations per moment per month ranged between 96 and 351 observations most observation opportunities during moment 1 (M1) and 5 (M5).

M1 correlated positively significantly with moment 2 (M2) (P=0.001) moment 3 (M3) (p < 0.001) moment 4 (M4) (p=0.001) but not moment 5 (M5).

M2 correlated positively with M3 (p < 0.001), M4 (p=0.001) Not M5. M3 correlated positively with M4 (p < 0.001), M5 (p < 0.001) but not M2. M4 correlated positively with M1 (p < 0.001), M2 (p < 0.001), M3 (p < 0.001) and M5 (p < 0.001).

No Correlations between CLABSI, CAUTI, CDI, MRSA and M1-M5 or Hand Hygiene.

There is a correlation between the decrease in MDR Acinetobacter incidence and point prevalence and compliance with M1 (p <0.04), M2 (p <0.001), M3 (p <0.002) and M4 (p <0.028).

Conclusion. Education of 5 moments of HH in a combined effort between infection prevention and front-line staff to identify patient and hospital zone showed an increased adherence to Hand hygiene overtime. Compliance with M 1 was associated with increased compliance with M2, M3 and M4.

Disclosures. Raquel Nahra, MD, Medline sponsored the study (Other Financial or Material Support, Supported financially and provided material)

984. HIV Pre-Exposure Prophylaxis (PrEP) Prescription Rates Among Adolescents and Young adults (AYAs) at an Urban Academic Medical Center in Newark, NJ from 2017-2019: A Quality Assessment of HIV Prevention for High Risk Youth within the Epicenter of the NJ HIV Epidemic

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Background. In 2017, 21% of new HIV diagnoses occurred in AYAs (ages 13-24), disproportionately among black and Hispanic men who have sex with men (MSM). However, only 0.1-1.5% and 9.5-15.4% of national PrEP prescriptions have been provided to AYAs under 18 and 24, respectively, with a white male majority. In 2018, PrEP was approved for use in adolescents weighing more than 35kg. However, limited studies on attitudes of AYA providers suggest lack of familiarity of PrEP and concerns about adherence, safety, confidentiality, and cost have led to a slow uptake among AYAs. Here we describe the AYA PrEP prescription rates at Rutgers New Jersey Medical School (NJMS) in two unique practices, the Infectious Disease Practice (IDP) and Division of Adolescent and Young Adult Medicine (DAYAM).

Methods. Medical records were queried for patients prescribed Truvada for PrEP at NJMS from 2017-2019 to assess the specialty-specific prescription rates and demographics of AYAs on PrEP.

Results. Of the 273 patients who were prescribed PrEP from 2017-2019, 2.2% (n=6) and 20.5% (n=56) were under 18 and 24, respectively. IDP and DAYAM respectively prescribed PrEP to 62.5% (n=35) and 33.9% (n=19) of AYAs. Among all AYAs on PrEP, 71.4% were black, 21.4% Hispanic, 19.6% transgender women (TGW), and 85.7% MSM or TGW who have sex with men. Most (73.7%) AYAs at DAYAM received PrEP from their primary care providers (PCP) compared to only 5.7% at IDP.

Table 1. Department-specific characteristics of (A) patients of all ages and (B) AYAs prescribed PrEP at NJMS between 2017-2019, n (%).

| Characteristics | EP | DAYAM | P-Value |
|-----------------|----|-------|---------|
| Age (years)     |    |       |         |
| <18             |    |       |         |
| 18-24           |    |       |         |
| Gender          |    |       |         |
| Male            |    |       |         |
| Female          |    |       |         |
| Ethnicity       |    |       |         |
| White           |    |       |         |
| Black           |    |       |         |
| Hispanic        |    |       |         |
| transgender     |    |       |         |
| MSM             |    |       |         |
| TGW             |    |       |         |
| Site            |    |       |         |
| Infectious      |    |       |         |
| Adult           |    |       |         |
| Pediatric       |    |       |         |
| Specialty       |    |       |         |
| IDP             |    |       |         |
| DAYAM           |    |       |         |
| Numbers         |    |       |         |
| All AYAs        | 273|       |         |
| AYA <18         | 6  |       |         |
| AYA 18-24       | 56 |       |         |
| IDP             | 35 |       |         |
| DAYAM           | 19 |       |         |

Fig. 1-3. Annual percentage of (1) patients receiving PrEP at NJMS by age group and (2) AYAs receiving PrEP by department, and (3) percentage of AYAs prescribed PrEP by their PCP, 2017-2019.