An analysis of global HIV prevalence among refugees, asylum seekers, and migrants, using the US Bureau of the Census databank

W. Shandera
Baylor College of Medicine, Houston, TX, USA

**Background:** As a risk-factor population for HIV infection, unsettled populations, in particular, refugees and migrants are understudied.

**Methods & Materials:** Using the US Bureau of the Census database, all studies listed of high quality with keywords “refugee,” “asylum,” “immigrant,” or “migrant” were collated. From this cohort, inapplicable and studies were deleted (eg, those listed as “non-migrants”). The data were analyzed using STATA 11, with respect to HIV prevalence, median year of collection, sample size, and age.

**Results:** There were 645 eligible studies from 40 countries carried out between 1987 and 2015 deemed adequate for analysis. Most studies were from Asia (70%) or Africa (24%). The overall HIV prevalence among unsettled populations was 6.5% (SD 9.8, median, 2.5%). Over the last 5 years, among 446 studies, the mean prevalence was 6.5%. The 151 studies among only females showed a higher prevalence than those among only males (8.4% vs 6.4%, P = 0.43).

The sample size of 95 studies with data ranged from 5 to 930 persons, mean 359 (the mean HIV prevalence for this subset, 11.5%). Studies with a smaller sample size tended to show higher HIV prevalence (correlation coefficient, -0.52). There was a small increase in prevalence through time (correlation coefficient, 0.05).

Studies before 2001 had a median prevalence of 7.7% while those after 2001 showed a median prevalence of 6.3% (P = 0.0001, Kruskal Wallis). Age values were available for only 72 studies, with a mean prevalence of 10.5%, and slightly increased with age, correlation coefficient of 0.28. A regression analysis of age, sample size, and time of study against prevalence had only 24 studies but showed that only time of study as significant (P = 0.009, adjusted R square, 0.57).

**Conclusion:** These data on globally unsettled populations show that while studies with small sample size, of females, and of older age populations show a higher HIV prevalence, the key factor remains time of study, with a slow increase in HIV prevalence through the interval analyzed, 1987-2015. With a mean recent prevalence of 6.5%, it is important that HIV prevention activities be directed toward unsettled populations, regardless of other risk factors.

http://dx.doi.org/10.1016/j.ijid.2016.02.600
content in PBMC alone may not be sufficient enough to predict or monitor changes in NRTI associated mitochondrial toxicity.

http://dx.doi.org/10.1016/j.ijid.2016.02.601

Type: Poster Presentation

Final Abstract Number: 42.136
Session: Poster Session II
Date: Friday, March 4, 2016
Time: 12:45-14:15
Room: Hall 3 (Posters & Exhibition)

Pre-exposure Prophylaxis (PrEP): Attitudes, preferences and risk compensation behavior among men who have sex with other men (MSM) in India

C.K. Uthappa 1,∗, S. Pal 2, R. Panth 3, R. Allam 4, V. Yeldandi 5

1 SHARE-India, Hyderabad, Telangana, India
2 Prantakatha, Delhi, India
3 GDGWI-Lancaster University, Delhi, India
4 SHARE-India, Hyderabad, India
5 University of Illinois, Chicago, USA

Background: The HIV epidemic in India is concentrated among High Risk Groups and continues to be high among MSM population. Pre-exposure prophylaxis (PrEP) has shown promising results in recent trials. The potential of PrEP as an effective HIV preventive strategy among MSM remains to be studied in India.

Methods & Materials: A structured questionnaire was administered to MSM selected by snowball sampling technique. Individual risk behaviours and demographics were categorised as high, moderate and low risk for HIV and a composite risk score was calculated. To assess the agreement between calculated and self-perceived risk, kappa statistic was used. Bivariate logistic regression was used to ascertain determinants of willingness to use PrEP and to study the anticipated drift in risk compensation behavior with PrEP use.

Results: Data from the initial 55 respondents of this multi-city study are analyzed. The average respondents were predominantly Kothi (31%), found their partners online (83%), had three or more sexual partners in the previous three months (44%), had anal sex less than once a month (45%), used condoms all the time while having anal sex (55%), and considered HIV a risk for them (67%). There was no agreement between self-perceived risk for HIV and calculated composite risk (Kappa = 0.2182, p-value > 0.05). Majority (87%) reported willingness to use PrEP which was strongly associated with self-perceived risk of HIV (OR = 5.70, p = 0.009). Willingness to use PrEP remained high even after learning about the need for concurrent condom use (OR = 10.83, p = 0.009), regular HIV tests (OR = 30, p = 0.003) and a daily dosing schedule (OR = 12.19, p = 0.007). Individuals with low calculated composite risk did not show an increase in anticipated risk compensation behavior with PrEP use (OR = 0.23, p = 0.047).

Conclusion: MSM in India show high willingness to use PrEP, even if they have to use condoms in combination with PrEP, or be regularly tested for HIV, or have to adhere to a daily dosing schedule. Contrary to major concerns, risk compensation behavior would not increase with the advent of PrEP. Our findings show that PrEP uptake could be considerable whilst not increasing compensatory risk behavior among MSM.

http://dx.doi.org/10.1016/j.ijid.2016.02.602