

Abstract Supplement

4th HIV Research for Prevention
conference (HIVR4P // Virtual)
27 & 28 January | 3 & 4 February 2021



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Abstract PE01.59-Table 1.

Table 1: Count of sticker choices by direction of influence and type of influencer (n=33)*

Direction of influence	Mother	Clinic Counselor	Sex Partner	Best Friend	Friend Group	Other Family Members	Father	Clinic Staff	Religious Leader	Doctor/ Pharmacist	TOTALS
Total Positive	25	24	6	20	2	8	10	19	4	14	132
Total Negative	0	0	12	6	14	19	6	0	10	0	67
Total Both	4	4	14	6	12	9	5	1	5	4	64
TOTAL	29	28	32	32	28	36	21	20	19	18	263

*Grey cells indicate that >50% of those influencer stickers were placed in the inner circle
 †This group includes >100% mentions because 3 participants chose this sticker category and wrote-in additional family members (i.e. sister, uncle, and cousin)

to stay HIV-free. We explored AGYW's views on social influencers of PrEP use and AGYW's perception of those influencers' PrEP knowledge and support.

Methods: Focus group discussions (FGD) were conducted with a purposive sample of AGYW during the POWER PrEP demonstration project (South Africa and Kenya). Participants completed a social mapping exercise by placing pre-labeled stickers of PrEP influencers (e.g. mother, sex partner, clinic counselor) on an egocentric circle map, representing their level of influence (from inner/most influential circle to outer/least influential circle). Participants color marked the influence as positive (e.g. encouragement and reminders to use PrEP; advice and guidance), negative (e.g. discouragement/disapproval, judgement), or both. AGYW then discussed their map with the group.

Results: Six FGDs occurred with 33 AGYW. Mothers and counselors were labeled mostly as positive influencers and placed in the inner circle by >50% of participants; sex partners were also placed in the inner circle by a majority but were either labeled negative influencers or both (Table 1). Regarding peers, best friends (41% inner circle) were mostly positive influencers whereas "friend groups" (25% inner circle) were negative or both. For the inner circle, AGYW mentioned both direct (e.g. criticism or praise) and indirect influence (e.g. partner's behavior or knowing a person living with HIV). Participants labeled some outer circle influencers as uninterested or unwilling to learn about PrEP. Participants wanted all levels and types of influencers to be better educated about PrEP and ultimately to accept and support their PrEP use.

Conclusions: Through social mapping, AGYW described key supporters and detractors, with mothers, counselors, and best friends emerging as important supporters of AGYW's PrEP use. To improve PrEP outcomes, community- and peer-based PrEP sensitization and delivery programs should be evaluated.

PE01.60LB

What do HIV clinic administrators think about PrEP implementation in Colombia? A qualitative CFIR guided study

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Background: PrEP implementation needs to be informed by the perceptions of health service administrators. This study uses the Consolidated Framework for Implementation Research (CFIR) to gain insight into the perspectives of managers of health care services of HIV clinics in Colombia given eventual attempts to implement PrEP nationally.

Methods: This qualitative study conducted semi-structured interviews in a purposive sample of HIV clinic administrators. The CFIR was used to guide data collection and analysis. Content Analysis was used to determine the relevance of one of the CFIR constructs, namely characteristics of the intervention on PrEP implementation in HIV clinics in Colombia.

Results: Twenty interviews were conducted representing eight HIV organizations (IPS) at eight Colombian cities. Two major themes emerged: PrEP acceptability and PrEP Complexity. Regarding acceptability, PrEP was perceived as an effective intervention, having a relative advantage when compared to other prevention strategies, amenable to pilot implementation in a setting with capacity for this. Notable barriers were uncertainty about how the intervention would be covered by the health care system, the misinformation in health care providers, and issues of compatibility e.g. moral values. Regarding complexity, managers expressed barriers related to the lack of guidelines, sociocultural diversity that may require adaptations (e.g. rural vs. urban; trans vs. gay men), and the need to adjust existing institutional resources (e.g. space allocation, training of personnel). Administrators worried about medication adherence and misuse, stigma, and risk compensation.

Conclusions: Structuring this situational analysis around the CFIR was instrumental in identifying multi-level factors that will affect the large-scale adoption of PrEP. Future research is encouraged to identify among all the barriers the one to target and propose some implementation strategies.

PE01.61LB

MRSI evaluation in the whole brain of HIV-1 clade C infected treatment naïve individuals

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Background: HIV can enter into the central nervous system in the initial stages and over time can cause HIV-Associated Neurocognitive Disorders (HAND). HIV viral density and infection status vary across brain anatomical regions. Also, there is an ambiguity in the association of different type of HIV clades with HAND. A single centre blinded study was conducted to evaluate the HIV-1 clade C infection in the whole brain of treatment naïve people living with HIV through MRSI.

Methods: Treatment naïve HIV+ (age between 18 to 45 years) were recruited from the HIV clinic of a teaching research institute in North India (2017 to 2020). Age and sex matched healthy controls were also recruited. Subjects with history of cerebral vascular diseases, brain injury, neurological or psychiatric illness, or any other CNS disease were excluded. Demographic details and clinical characteristics were recorded. CD4, viral load and clade subtype were investigated. Routine and whole brain MRI and MRSI evaluation were performed. Average metabolite values (NAA and Cho) and ratios (NAA/Cre, Cho/Cre, and Cho/NAA) over each lobar region were evaluated.

Results: 147 subjects were enrolled (HIV+: n=79; HIV-: n=68). The median age was 30 years with 67% male in HIV+ and 61% male in HIV- group. Average number of years of education was similar in the two groups (10.35 years in HIV+ vs. 11.15 years in HIV- group). Most of the HIV+ individuals were recently diagnosed and asymptomatic. Median CD4 count and viral load were 346 (range 14 to 938) and 20300 copies/mL (441-6120561), respectively (Table 1). MRSI data showed altered metabolite levels throughout the brain of the subjects in the HIV+ group. There was a significant decrease of NAA and NAA/CR ($p < 0.05$) and a significant increase of Cho/NAA ($p < 0.05$), within all lobes of the HIV+ as compared to HIV- individual. Also, the levels of MI increased but NAA decreased significantly in HIV+ group ($p < 0.05$).

Conclusions: The altered metabolites indicate neuronal dysfunction or loss (NAA) and inflammation (MI and Cho) in HIV+ treatment naïve individuals as compared to HIV- cohort. Since, the findings were