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Spatial Heterogeneity in Treatment Interruption and Return in an HIV Program in Uganda

Edward N. Kankaka[1], Alice Kisakye[1], Wasswa Francis[1], Fred Nalugoda[1], Joseph Kabanda[2], Namayanja Grace[2], Anna Awor[2], Steve Reynolds[3,4], Mary Kate Grabowski[4], Maria J Wawer[4], Ron Gray[4], Larry Chang[4], Gertrude Nakigozi[1], Joseph Kagayi[1], David Serwadda[1,5].

[1]Rakai Health Sciences Program, Kalisizo, Uganda, [2]PEPFAR/CDC-Uganda, Kampala, Uganda, [3]NIH/NIAID, Betheseda, MD, USA, [4]Johns Hopkins University, Baltimore, MD, USA, [5]Makerere University, Kampala, Uganda

BACKGROUND

- Highly-mobile populations may be at greater risk of interruptions in treatment (IIT), which can lead to higher rates of HIV-related morbidity and mortality.
- In south-central Uganda, prevention of IIT has mostly focused on highly-mobile groups.
- To understand mobility and IIT, we explored spatial correlation between IIT and client return to care in a PEPFAR-supported treatment program.

METHODS

- **Study population**
  - Clients with IIT during Jan 1, 2020 - March 31, 2021;
  - who received ART at 95 facilities in 12 districts;
  - who had follow-up outcomes (i.e., returned to care at the same facility, self-transferred, died, relocated/migrated, could not be located) by May 1, 2021.
- **Unit of analysis**
  - District (aggregated data)
- **Exposure**
  - Proportion in care with IIT (Denominator was the median number of clients active on treatment throughout this period, which is updated every quarter)
  - IIT was defined as no clinical contact for > 28 days from the day of missed appointment.
  - High IIT was defined as more than district median IIT of 1.2%
- **Outcome**
  - Proportion with IIT who returned to care during the follow up period (not necessarily at the same facility)
  - High return was defined as return to care for ≥50% of those with IIT.
- **Analysis**
  - Using Pearson correlation, we compared rates of IIT and return for the 12 districts.
  - Does location matter? A map relating IIT with subsequent return to care

Interruption in Treatment (IIT) was higher in island fishing communities.

However, IIT did not correlate with return to care (Pearson correlation = 0.11, p = 0.745).

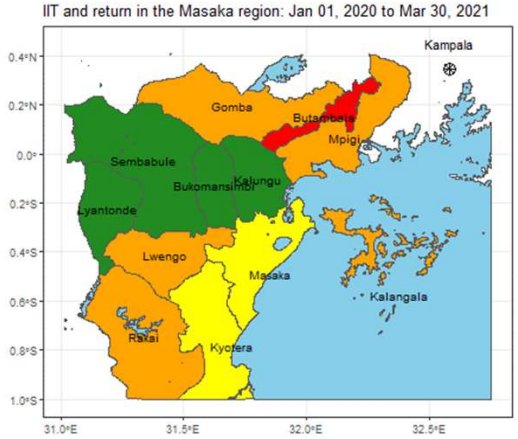
RESULTS

IIT and return in 12 districts of the Masaka region, Uganda

district	N	% IIT	% return	category
Kalangala	6506	12.1	66.7	high IIT with high return
Mpigi	12045	3.2	53.3	high IIT with high return
Gomba	5103	2.7	68.9	high IIT with high return
Butambala	4809	2.2	39.1	high IIT with low return
Rakai	8896	1.7	95.6	high IIT with high return
Lwengo	8512	1.3	62.5	high IIT with high return
Bukomansimbi	4728	1.1	66.7	low IIT with high return
Masaka	29743	1.1	37.0	low IIT with low return
Kalungu	11572	0.6	72.4	low IIT with high return
Kyotera	18177	0.6	24.4	low IIT with low return
Lyantonde	7218	0.5	60.0	low IIT with high return
Sembabule	9392	0.4	74.2	low IIT with high return

RESULTS (CONTINUED)

- About 126,698 clients on treatment in that period, 2,329 (1.8%) had IIT.
- IIT was highest in island fishing communities (Kalangala), followed by 3 districts close to Uganda's capital, Kampala
- Of the 2,329 clients with IIT, 1244 (53%) returned to care; (n = 115, 4.9%) self-transferred; (n = 20, 0.9%) died ; (n=35, 1.5%) relocated/migrated; and 915 (39%) could not be located.



CONCLUSIONS

- IIT was higher in island fishing communities.
- However, rates of IIT did not correlate with return to care.
- **It is important to consider both metrics in developing interventions to reduce discontinuity of care.**

ADDITIONAL KEY INFORMATION

Author Contact Information

Edward N. Kankaka

ekankaka@rhsp.org, ken1edd@gmail.com

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