

Factors associated with self-reported adherence amongst HIV positive pregnant and breastfeeding women in an HIV peer support program: A multi-country, multi-level analysis

Kathrin Schmitz¹, Tichaona Mhembere², Carole Metekoua², Khumbo Shumba², Chenai Mlandu², Marjorie Mbule¹, Agnes Ronan¹, Fiona Burt¹, Fiona Mpungu¹, Adatia Chivafa², Victor Williams², Eustasius Musenge², Esca Scheepers¹, Jude Igumbor²

1. mothers2mothers, Cape Town, South Africa 2. School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa



Background

- mothers2mothers (m2m) is an African non-profit organisation that unlocks the power of women to eliminate childhood AIDS and create healthy families. m2m trains and employs women living with HIV in sub-Saharan Africa as "Mentor Mothers". Through their training and employment, they become role models who help women and families at health facilities and in their communities access essential services and medical care, start on any treatment they need, and continue with their health journey. From an initial focus on prevention of mother-to-child transmission of HIV, m2m now delivers a range of services for newborns, children, adolescents and families, to ensure the whole community thrives, not just survives.
- Since 2001, m2m has created jobs for over 11,000 women living with HIV in sub-Saharan Africa, and these Mentor Mothers have reached over 11M women and children under two with lifesaving health services. In 2018, we achieved virtual elimination of mother-to-child transmission of HIV for our enrolled clients for the fifth year in a row. For more, see www.m2m.org.
- Consistent adherence to antiretroviral treatment is important for durable viral suppression, prolonged patient survival, and reduction of HIV transmission risk.
- Peer support programs using HIV positive lay health workers report high adherence amongst HIV positive pregnant and breastfeeding women.
- This study investigated multi-level factors associated with self-reported adherence amongst these women in an HIV peer support program.

Methods

- We conducted a secondary analysis of data collected from HIV positive pregnant and breastfeeding women in Eswatini, Lesotho and South Africa between 2016 and 2018.
- We augmented the data with population data from national Demographic and Health Surveys.
- The sample consisted of 12,551 HIV positive women registered into the mothers2mothers' Mentor Mother program at health facility level.
- Adherence was defined as consistently reporting high adherence, 95% of the times they were seen by a Mentor Mother using at least one of two adherence self-reporting tools.
- We performed multi-level mixed-effects parametric survival analysis to identify factors associated with adherence at every time point in the program.

Results

- The median duration in the program in our sample from enrollment was 9 (IQR: 6-15) months. The median number of contact sessions with a Mentor Mother was 6 (IQR: 3-9).
- Every additional year in age at registration decreased adherence by 3% ($p < 0.001$). An increase in the median number of contacts with postpartum women at the health facility increased adherence by 44% ($p = 0.009$).
- An increase in the proportion of Mentor Mothers with high competence in ART initiation support and treatment monitoring increased adherence by 35% ($p = 0.019$). An increase in the proportion of babies delivered in public healthcare facilities in a community linked to a health facility increased adherence by 1% ($p = 0.004$).
- An additional month spent between contact sessions with a Mentor Mother, decreased adherence at every time point by 6% ($p < 0.001$). Increase in the median daily caseload per Mentor Mother decreased adherence by 19% ($p < 0.001$).

Conclusion

- The results highlight the importance of having competent lay health workers in supporting client adherence to HIV treatment.
- Our finding also underscore the value of an optimum Mentor Mother caseload and an effective frequency and interval between contacts.

