Role of Social Support in Diagnosis and Treatment of HIV-Associated Kaposi's Sarcoma

Poster #: 570

MASSACHUSETTS GENERAL HOSPITAL
MEDICAL PRACTICE EVALUATION CENTER

*Rhea Singh[1,2], ***Sigrid Collier[3]**, Aggrey Semeere[4], Helen Byakwaga[4], Miriam Laker-Oketta[4], Devon E. McMahon[1], Linda Chemtai[5], Merridy Grant[6], Lisa M. Butler[7], Ingrid V. Bassett[1], Samson Kiprono[8,5], Toby Maurer[9], Jeff Martin[10], Naftali Busakhala[11,5], Esther E. Freeman[1]

[1]Department of Dermatology, Massachusetts General Hospital, Harvard Medical School, Boston, USA; [2]Virginia Commonwealth University School of Medicine; [3]University of Washington, Seattle, WA; [4]Infectious Diseases Institute, Kampala, Uganda; [5]Academic Model Providing Access to Healthcare, Eldoret, Kenya; [6]University of KwaZulu-Natal, Durban, South Africa; [7]University of Connecticut, Storrs, CT, USA; [8]Moi University, College of Health Sciences, School of Medicine, Department of Internal Medicine, Eldoret, Kenya; [9]Indiana University, Indianapolis, IN, USA; [10]University of California San Francisco, San Francisco, California, USA; [11]Moi University, College of Health and Sciences, School of Medicine, Department of Pharmacology and Toxicology, Eldoret, Kenya

BACKGROUND

- Kaposi's Sarcoma is a debilitating and deadly HIV-associated malignancy.
- Kaposi's sarcoma is also one of the most common HIV-associated malignancies in sub-Saharan Africa (SSA).
- Social support has been closely linked to health outcomes in both HIV and cancer.
- In low resource settings, the process of KS diagnosis and treatment is complex and time-consuming.
- In this context, social support may contribute to timely diagnosis and treatment in Kaposi's Sarcoma.

OBJECTIVE

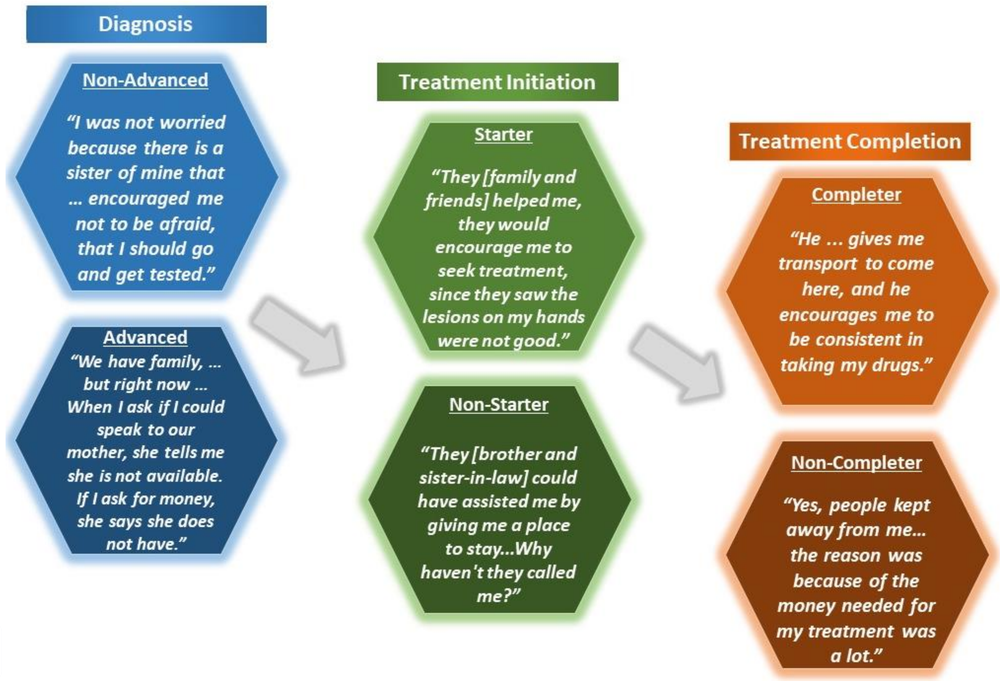
- Understand the role of social support in diagnosis and treatment of HIV-associated KS in sub-Saharan Africa in the modern ART era.

METHODS

- A convergent mixed-methods study was nested in a longitudinal cohort of people with HIV-associated KS in western Kenya.
- We collected 12-item Multidimensional Scale of Perceived Social Support (MSPSS) every 16 weeks from February 2019 to December 2020 among all participants (score range: 12-84; higher score = more social support).
- We simultaneously conducted 88 semi-structured interviews among a purposive sample of people with KS stratified by timing of diagnosis (non-advanced stage vs advanced stage) and chemotherapy status (not started, not completed, completed).
- Interviews were coded using framework analysis based on MSPSS sub-constructs and the following social support constructs (informative, instrumental, and emotional support).

FRAMEWORK FOR SKIN DISEASE STIGMA IN KS

Figure 1. Qualitative Representation of Social Support in HIV-Associated Kaposi's Sarcoma: Experiences of Social Support contributing to KS diagnosis and treatment.



Description: Experiences of social support in patients stratified by time to diagnosis and treatment completion. Representative quotes for each group are included in the hexagons.

Strong social support networks may be essential to early diagnosis and treatment of people with HIV-associated KS in sub-Saharan Africa.

QUANTITATIVE RESULTS

- A total of 118 adults completed the MSPSS questionnaires during at least one study visit.
- Participants had a median age of 36.5 (IQR: 31.0, 42.0) and 61.1% identified as male.
- Median overall social support scores across all timepoints was 84.0 (IQR: 66.0, 84.0).

QUANTITATIVE RESULTS, Continued

- Median MSPSS subconstruct scores (4-items, score range: 4-28) were as follows: family (28.0; IQR: 27.0,28.0); friend (28.0; IQR:16.3,28.0); significant other (28.0; IQR:28.0,28.0).
- Social support scores increased significantly over time (adjusted $\beta = 0.11$, $p < 0.001$).

QUALITATIVE RESULTS

- Lack of social support was a major barrier to diagnosis and treatment in HIV-associated KS.
- Key themes among participants with non-advanced stage diagnosis or who did not start or complete chemotherapy:
  - Lack of instrumental support (financial and physical assistance)
  - Lack of emotional support
- Key themes: Participants who completed chemotherapy:
  - Larger support networks
  - Having a friend or family member who was a healthcare worker
  - Access to instrumental support (financial support and assistance traveling to clinic visits)

CONCLUSION

- Social networks are important sources of instrumental and emotional support in people with HIV-associated KS in western Kenya
- Lack of social support may contribute to delays in the diagnosis and treatment of KS.

Sources:

1. Cesarman E, Damania B, Krown SE, et al. Kaposi sarcoma. Nat Rev Dis Primers 2019;5(1):9. doi: 10.1038/s41572-019-0060-9 [published Online First: 2019/02/02]
2. Semeere AS, Busakhala N, Martin JN. Impact of antiretroviral therapy on the incidence of Kaposi's sarcoma in resource-rich and resource-limited settings. Curr Opin Oncol 2012;24(5):522-30. doi: 10.1097/CCO.0b013e328355e14b [published Online First: 2012/06/26]
3. Stewart RC, Umar E, Tomenson B, et al. Validation of the multi-dimensional scale of perceived social support (MSPSS) and the relationship between social support, intimate partner violence and antenatal depression in Malawi. BMC Psychiatry 2014;14(1):180. doi: 10.1186/1471-244x-14-180
4. Unger-Saldaña K, Infante-Castañeda CB. Breast cancer delay: a grounded model of help-seeking behaviour. Soc Sci Med 2011;72(7):1096-104. doi: 10.1016/j.socscimed.2011.01.022 [published Online First: 2011/03/11]