



had higher rates of multiple concurrent partnerships; these partnerships were most prevalent in societies where “sexual norms are widely permissive.”<sup>15</sup>

### **PMTCT**

Higher community socio-economic status, as well as higher mean educational status, positively correlated with increased involvement in PMTCT.<sup>22,23</sup> Community support was also found to reduce stigma surrounding accessing PMTCT services. Women were found to be more likely to feel comfortable seeking services if they had increased community support, whether through CBOs or through friends and families.<sup>24</sup> The positive impact of male involvement was noted in multiple studies but many CLFs created barriers for men’s participation.<sup>23,25,26</sup> These included antenatal care (ANC) services and providers that failed to include men, or to sensitize men to ANC and educate them on its importance.<sup>23,25</sup> In some communities and cultures, male participation was viewed as emasculating and socially discouraged.<sup>25</sup>

### **HIV Counseling and Testing**

Communities with high levels of membership in organized groups were more likely to use HIV counseling and testing (HCT) services, and use them more frequently, than communities with low membership.<sup>22,27,28</sup> Stigma, a continuing problem for almost all HIV outcomes, was associated with a reluctance to test.<sup>29,30</sup> Among woman in Central Asia, stigma was associated with decreased HIV testing as well as decreased receipt of results.<sup>31</sup> Social support was found to increase an individual’s likelihood of disclosing their status to a main partner and encourage self-efficacy to access HTC.<sup>32,33</sup> Improved community capacity was associated with community action for health and significantly and positively related to HIV testing.<sup>28</sup>

### **Access to Services and ART**

Multiple studies found that strengthening social support for those living with HIV was associated with an increase in uptake of antiretroviral therapy (ART).<sup>24,35,36,37</sup> The structure of a community, particularly in relation to CBOs, was a critical determinant of access to HIV services including ART.<sup>24,35,38,39</sup> In Nigeria, a study found that the strength of engagement from CBOs could increase both availability and utilization of HIV services.<sup>40</sup>

### **Adherence**

By increasing the communal knowledge of the benefits of ART, misconceptions were likely to be reduced, leading to a

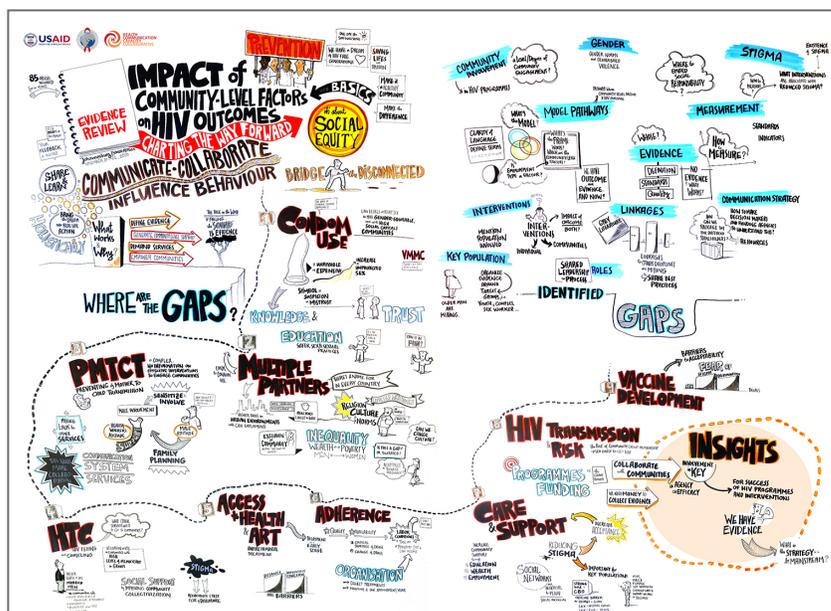
more supportive environment for those affected by HIV.<sup>41,42,43</sup> Stigma reduction was also found to be essential in building community support and ensuring adherence.<sup>37,41,44,45</sup> Multiple interventions in Africa found that social support resulted in higher adherence and that has now emerged as a predictor of treatment success.<sup>35,37,41,45,46,47,48</sup> A study in South Africa measuring viral load found community support was the most important predictor of treatment success. In Malawi and Ethiopia, community support was associated with not only better adherence but also a lower death rate over time.<sup>48,50</sup> Likewise, community support was essential for sustaining adherence to ART among pediatric clients in Kenya.<sup>51</sup>

### **Care and Support**

Community education and community wealth both had positive associations with the level of care and support for people living with HIV (PLHIV).<sup>52</sup> Several studies found stigma reduction led to an increase in social support for PLHIV at the community level.<sup>52,53</sup> Social capital was important for care and support because communities with a large and wide-ranging set of social networks were found to be better able to confront risk and vulnerability and allow for greater social inclusion.<sup>54,55,56</sup> The advantages of a community safety net included the provision of both emotional and materials support.<sup>43</sup> An intervention in Nigeria designed to mobilize communities began to change social norms over a two-year period and provided opportunities for economic empowerment and networking.<sup>57</sup>

### **Transmission and Risk**

Higher community income inequality was associated with increased HIV rates in women, but not men.<sup>58</sup> Two Zimbabwe studies found young females who were members of well-functioning community groups





their influence on HIV prevention, care and treatment.

- There is minimal evidence on interventions positively associated with decreasing stigma and improving HIV outcomes.
- Organizing evidence around specific key populations is currently missing.
- Improvements are needed to bridge the gap between disciplines and encourage sharing of best practices.
- An overall gap is evident in evaluations of interventions addressing CLFs.

To address some these gaps, several participants agreed to assist with the development of briefs outlining the evidence related to CLFs across HIV outcomes, participate in webinars related to CLFs, and participate in the development of journal manuscripts

to advance the field in the peer-review literature.

This consultation provided an opportunity to bring together experts to dive deeper into the issues surrounding CLFs and the impact they have on HIV outcomes. CLFs are an essential component in high impact combination prevention programming which influence everything from the number of concurrent partners one may have to whether a person living with HIV remains on treatment.

Many participants commented on the insights they gained from the consultation renewing their commitment to continue working at the community-level to reduce HIV transmission while also ensuring those living with the virus have the social support and self efficacy to access and adhere to their treatment. HC3 invites further discussion on this topic and recognizes the power and necessity of community engagement and leadership in the HIV response.



Consultation participants from left to right: Jessie Mbwambo, MD, Muhimbili University of Health & Allied Sciences; Joseph Kagaayi, MBChB, MPH, Rakai Health Sciences Program; Todd Koppenhaver, USAID/Southern Africa; Beth Deutsch, USAID/Malawi; Obrian Nyamucherera, MSc, CIET Africa; Glory Mkandawire, HC3 Swaziland; Kirsten Böse, HC3 Project Director; Sereen Thaddeus, MA, MPH, USAID/Mozambique; Suzanne Leclerc-Madlala, PhD, USAID; John Lengwe Kunda, PhD, Millennium Challenge Account Zambia; Lynette Mudekunye, Regional Psychosocial Support Initiative (REPSI); Kim Ahanda, USAID; Flavien Ndonko, PhD, GIZ; Florence Kayambo, Jhpiego; Lynn Van Lith, HC3 HIV Team Lead; Caspian Chouraya, MD, MSc, Elizabeth Glaser Pediatric AIDS Foundation; Beth Mallalieu, HC3 Program Officer.



## References

1. Kayeyi, N., Fylkesnes, K., Wium, N., & Sandøy, I. F. (2013). Decline in Sexual Risk Behaviours among Young People in Zambia (2000-2009): Do Neighbourhood Contextual Effects Play a Role? *PLOS*, 8(5), e6488.
2. Stephenson, R., Winter, A., & Elfstrom, M. (2013). Community environments shaping transactional sex among sexually active men in Malawi, Nigeria, and Tanzania. *AIDS Care*, 25(6), 784-792.
3. Benefo, K. D. (2010). Determinants of condom use in Zambia: A multilevel analysis. *Studies in Family Planning*, 41(1), 19-30.
4. Cain, D., Pitpitan, E., Eaton, L., Carey, K., Carey, M., Mehlomakulu, V., . . . Kalichman, S. (2013). Collective Efficacy and HIV Prevention in South African Townships. *J Community Health*.
5. Sen, S., Aguilar, J., & Goldbach, J. (2010). Does Social Capital Act as a Buffer Against HIV Risk Among Migrant Men in Sub-Saharan Africa? (Vol. 9, pp. 190-211). *Journal of HIV/AIDS & Social Services*.
6. Smith, R., & Rimal, R. (2009). The Impact of Social Capital on HIV-related Actions as Mediated by Personal and Proxy Efficacies in Namibia (Vol. 13, pp. 133-144). *AIDS Behav*.
7. Guha, M., Baschieri, A., Bharat, S., Bhatnagar, T., Sane, S. S., Godbole, S. V., . . . Collumbien, M. (2010). Risk reduction and perceived collective efficacy and community support among female sex workers in Tamil Nadu and Maharashtra, India: the importance of context. *Journal of Epidemiology and Community Health*, 66(Suppl 2), ii55-61.
8. Kippax, S., Stephenson, R., Parker, R. G., & Aggleton, P. (2013). Between individual agency and structure in HIV prevention: Understanding the middle ground of social practice. *American Journal of Public Health*, 103(8), 1367-1375.
9. Urada, L. A., Morisky, D. E., Pimental-Simbulan, N., Silverman, J. G., & Strathdee, S. A. (2012). Condom negotiations among female sex workers in the Philippines: environmental influences. *PLoS One*, 7(3), e33282.
10. Blanchard, A., Lakkappa Mohan, H., Shahmanesh, M., Prakash, R., Isac, S., Manjappa Ramesh, B., . . . Blanchard, J. (2013). Community mobilization, empowerment and HIV prevention among female sex workers in south India (Vol. 13). *BMC Public Health*.
11. Paruk, Z., Petersen, I., & Bhana, A. (2009). Facilitating health-enabling social contexts for youth: qualitative evaluation of a family-based HIV-prevention pilot programme. *African Journal of AIDS Research*, 8(1), 61-68.
12. Lippman, S., Chinaglia, M., Donini, A., Diaz, D., Reingold, A., & Kerrigan, D. (2012). Findings From Encontros: A Multilevel STI/HIV Intervention to Increase Condom Use, Reduce STI, and Change the Social Environment Among Sex Workers in Brazil (Vol. 39, pp. 209-216). *Sexually Transmitted Diseases*.
13. Ghose, T., Swendeman, D., George, S., & Chowdhury, D. (2008). Mobilizing collective identity to reduce HIV risk among sex workers in Sonagachi, India: the boundaries, consciousness, negotiation framework. *Social Science & Medicine*, 67(2), 311-320.
14. Blankenship, K., West, B., Kershaw, T., & Biradavolu, M. (2008). Power, community mobilization, and condom use practices among female sex workers in Andhra Pradesh, India (Vol. 22 (5), pp. 109-116). *AIDS*.
15. Uchudi, J., Magadi, M., & Mohammad, M. (2012). A Multilevel Analysis of the Determinants of High-risk Sexual Behaviour in Sub-Saharan Africa. *Journal of Biosocial Science*, 44(3), 289-311.
16. Frumence, G., Killewo, J., Kwisigabo, G., Nyström, L., Eriksson, M., & Emmelin, M. (2010). Social capital and the decline in HIV transmission – A case study in three villages in the Kagera region of Tanzania (Vol. 7, pp. 9-20). *Journal des Aspects Sociaux du VIH/SIDA*.
17. Campbell, C., Williams, B., & Gilgen, D. (2002). Is social capital a useful conceptual tool for exploring community level influences on HIV infection? An exploratory case study from South Africa. *AIDS Care*, 14(1), 41-54.
18. Dickson-Gomez, J., McAuliffe, T., Rivas de Mendoza, L., Glasman, L., & Gaborit, M. (2012). The relationship between community structural characteristics, the context of crack use, and HIV risk behaviors in San Salvador, El Salvador. *Substance Use & Misuse*, 47(3), 265-277.
19. Mwanga, J. R., Mshana, G., Kaatano, G., & Changalucha, J. (2011). "Half plate of rice to a male casual sexual partner, full plate belongs to the husband": findings from a qualitative study on sexual behaviour in relation to HIV and AIDS in northern Tanzania. *BMC Public Health*, 11(2), 1-9.
20. Speizer, I. S., Gómez, A. M., Steward, J., & Voss, P. (2001). Community-level HIV risk behaviors and HIV prevalence among women and men in Zimbabwe. *AIDS Educ Prev*, 23(5), 437-447.
21. Uthman, O. A., & Kongnyuy, E. J. (2008). A multilevel analysis of effect of neighbourhood and individual wealth status on sexual behaviour among women: Evidence from Nigeria 2003 Demographic and Health Survey. *BMC International Health and Human Rights*, 8(9), 9.
22. Gregson, S., Nyamukapa, C., Sherr, L., Mugurungi, O., & Campbell, C. (2013). Grassroots community organizations' contribution to the scale-up of HIV testing and counselling services in Zimbabwe. *AIDS*, 27(10), 1657-1666.
23. Byamugisha, R., Tumwine, J., Semiyaga, N., & Tylleskär, T. (2010). Research Determinants of male involvement in the prevention of mother-to-child transmission of HIV programme in Eastern Uganda: a cross-sectional survey (Vol. 7). *Reproductive Health*.
24. Gourlay, A., Birdthistle, I., Mburu, G., Iorpenda, K., & Wringe, A. (2013). Barriers and facilitating factors to the uptake of antiretroviral drugs for prevention of mother-to-child transmission of HIV in sub-Saharan Africa: a systematic review. *16(1)*.
25. Auvinen, J., Kylmä, J., & Suominen, T. (2013). Male involvement and prevention of mother-to-child transmission of HIV in Sub-Saharan Africa: an integrative review. *Current HIV Research*, 11(2), 169-177.
26. Peltzer, K., Sikwane, E., & Majaja, M. (2011). Factors associated with short-course antiretroviral prophylaxis (dual therapy) adherence for PMTCT in Nkangala district, South Africa. *Acta Paediatrica*, 100(9), 1253-1257.
27. Paz-Soldan, V. A., Bisika, T., deGraft-Johnson, J., & Tsui, A. O. (2012). Community, social group, and individual level correlates of rural Malawian men's and women's reproductive health intentions and practices. *African Journal of Reproductive Health*, 16(3), 56-66.
28. Nhamo-Murire, M., Campbell, C., & Gregson, S. (2013). Community Group Membership and Stigmatising Attitudes Towards People Living with HIV in Eastern Zimbabwe. *Journal of Community Health*.
29. Airhihenbuwa, C., Okoror, T., Shefer, T., Brown, D., Iwelunmor, J., Smith, E., . . . Shisana, O. (2009). Stigma, Culture, and HIV and AIDS in the Western Cape, South Africa: An Application of the PEN-3 Cultural Model for Community-Based Research. *Journal of Black Psychology*, 35(5), 407- 432.
30. Jewkes, R. (2006). Beyond stigma: social responses to HIV in South Africa. *368, 9534, 430-431*.
31. Smolak, A., & El-Bassel, N. (2013). Multilevel Stigma as a Barrier to HIV

- Testing in Central Asia: A Context Quantified. *AIDS Behavior*, 1-13.
32. Suzan-Monti, M., Blanche, J., Bile, P., Koulla-Shiro, S., Abu-Zaineh, M., Marcellin, F., . . . Spire, B. (2011). Individual and Structural Factors Associated With HIV Status Disclosure to Main Partner in Cameroon: ANRS12-116 EVAL Survey, 2006–2007 (Vol. 57, pp. 22-26). *J Acquir Immune Defic Syndr*.
  33. Parimi, P., Mishra, R. M., Tucker, S., & Saggurti, N. (2012). Mobilising community collectivisation among female sex workers to promote STI service utilisation from the government healthcare system in Andhra Pradesh, India. *Journal of Epidemiology and Community Health*, 66 (Suppl 2), ii62-ii68.
  34. Underwood, C., Boulay, M., Snetro-Plewman, G., Macwan'gi, M., Vijayaraghavan, J., Namfukwe, M., & Marsh, D. (2012-2013). Community capacity as means to improved health practices and an end in itself: evidence from a multi-stage study. *International Quarterly of Community Health Education*, 33(2), 105-127.
  35. Campbell, C., Scott, K., Nhamo, M., Nyamukapa, C., Madanhire, C., Skovdal, M., . . . Gregson, S. (2013). Social capital and HIV Competent Communities: The role of community groups in managing HIV/AIDS in rural Zimbabwe. *AIDS Care*, 25(Suppl 1), S114-S122.
  36. Jones, D. L., Zulu, I., Vamos, S., Cook, R., Chitalu, N., & Weiss, S. M. (2013). Determinants of Engagement in HIV Treatment and Care Among Zambians New to Antiretroviral Therapy. *Journal of the Association of Nurses in AIDS Care*, 24(5), e1-e12.
  37. Roura, M., Busza, J., Wringe, A., Mbata, D., Urassa, M., & Zaba, B. (2009). Barriers to Sustaining Antiretroviral Treatment in Kisesa, Tanzania: A Follow-Up Study to Understand Attrition from the Antiretroviral Program. *AIDS Patient Care STDS*(23), 3.
  38. Krüsi, A., Wood, E., Montaner, J., & Kerr, T. (2010). Social and structural determinants of HAART access and adherence among injection drug users. *International Journal of Drug Policy*, 21(1), 4-9.
  39. Posse, M., & Baltussen, R. (2009). Barriers to access to antiretroviral treatment in Mozambique, as perceived by patients and health workers in urban and rural settings. *AIDS Patient Care and STDs*, 23(10), 867-875.
  40. Kakietek, J., Geberselassie, T., Manteuffel, B., Ogungbemi, K., Krivelyova, A., Bausch, S., . . . Gar, S. (2013). It takes a village: community-based organizations and the availability and utilization of HIV/AIDS-related services in Nigeria. *AIDS Care*, 25(Suppl 1), 78-87.
  41. Lyimo, R. A., de Bruin, M., van den Boogaard, J., Hospers, H. J., van der Ven, A., & Mushi, D. (2012). Determinants of antiretroviral therapy adherence in northern Tanzania: a comprehensive picture from the patient perspective. *BMC Public Health*, 12(1), 716.
  42. Shuster, J. M., Sterk, C. E., Frew, P. M., & del Rio, C. (2009). The cultural and community-level acceptance of antiretroviral therapy (ART) among traditional healers in Eastern Cape, South Africa. *Journal of Community Health*, 34(1), 16-22.
  43. Skovdal, M., Magutshwa-Zitha, S., Campbell, C., Nyamukapa, C., & Gregson, S. (2013). Community groups as 'critical enablers' of the HIV response in Zimbabwe. *BMC Health Serv Res*, 13(1), 195.
  44. Campbell, C., Skovdal, M., Mupambireyi, Z., Madanhire, C., Nyamukapa, C., & Gregson, S. (2012). Building adherence-competent communities: factors promoting children's adherence to antiretroviral HIV/AIDS treatment in rural Zimbabwe. *Health & Place*, 18(2), 123-131.
  45. Musheke, M., Bond, V., & Merten, S. (2012). Individual and contextual factors influencing patient attrition from antiretroviral therapy care in an urban community of Lusaka, Zambia. *Journal of International AIDS Society*, 15(Suppl 1), 17366.
  46. Ware, N., Idoko, J., Kaaya, S., Andia Biraro, I., Wyatt, M., Agbaji, O., . . . Bangsberg, D. (2009). Explaining Adherence Success in Sub-Saharan Africa: An Ethnographic Study (Vol. 6, pp. 39-47). *PLoS Medicine*.
  47. Hodgson, I., Nakiyemba, A., Seely, J. A., Vitira, D., & Gitau-Mburu, D. (2012). Only connect--the role of PLHIV group networks in increasing the effectiveness of Ugandan HIV services. 24, 11(1368-1374).
  48. Okello, F. O., Stuer, F., Kidane, A., & Wube, M. (2013). Saving the sick and improving the socio-economic conditions of people living with HIV in Ethiopia through traditional burial groups. *Health Policy and Planning*, 28(5), 549-557.
  49. Wouters, E., Van Damme, W., Van Loon, F., van Rensburg, D., & Meulemans, H. (2009). Public-sector ART in the Free State Province, South Africa: community support as an important determinant of outcome. *Social Science & Medicine*, 69(8), 1177-1185.
  50. Zachariah, R., Teck, R., Buhendwa, L., Fitzerland, M., Labana, S., Chinji, C., . . . Harries, A. D. (2007). Community support is associated with better antiretroviral treatment outcomes in a resource limited rural district in Malawi. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 101(1), 79-84.
  51. Vreeman, R. C., Nyandiko, W. M., Ayaya, S. O., Walumbe, E. G., Marrero, D. G., & Inui, T. S. (2009). Factors Sustaining Pediatric Adherence to Antiretroviral Therapy in Western Kenya. *Qualitative Health Research*, 19(12), 1716-1729.
  52. Chiao, C., Mishara, V., & Sambisa, W. (2009). Individual- and community-level determinants of social acceptance of people living with HIV in Kenya: Results from a national population-based survey. *Health & Place*, 15(3), 742-750.
  53. Stephenson, R. (2009). Community factors shaping HIV-related stigma among young people in three African countries. *AIDS Care*, 21(4), 403-410.
  54. Thomas-Slayter, B. P., & Fisher, W. F. (2011). Social capital and AIDS-resilient communities: Strengthening the AIDS response. *Global public health*, 6(3), S323-S343.
  55. Cáceres, C. F., Aggleton, P., & Galea, J. T. (2008). Sexual diversity, social inclusion and HIV/AIDS. *AIDS*, 22(Suppl 2), S45-S55.
  56. Omorodion, F., Akpede, E., Maticka-Tyndale, E., Agbontean-Eghafona, K., & Onokerhoraye, A. (2012). The use of National Youth Service Corp members to build AIDS competent communities in rural Edo State Nigeria. *African Journal of Reproductive Health*, 16(2), 71-86.
  57. Feldacker, C., Ennett, S. T., & Speizer, I. S. (2011). It's not just who you are but where you live: an exploration of community influences on individual HIV status in rural Malawi. *Social Science & Medicine*, 72, 717-725.
  58. Gregson, S., Terceira, N., Mushati, P., Nyamukapa, C., & Campbell, C. (2001). School education and avoidance of early HIV infection: the mediating roles of social capital and psychosocial factors among young women in rural Zimbabwe. *International Union for the Scientific Study of Population*. Salvador, Brazil.
  59. Gregson, S., Terceira, N., Mushati, P., Nyamukapa, C., & Campbell, C. (2004). Community group participation: Can it help young women to avoid HIV? An exploratory study of social capital and school education in rural Zimbabwe. *Social Science & Medicine*, 58(11), 2119-2132.
  60. Gregson, S., Mushati, P., Grusin, H., Nhamo, M., Shumacher, C., Skovdal, M., . . . Campbell, C. (2011). Social capital and women's reduced vulnerability to HIV infection in rural Zimbabwe. *Population and Development Review*, 37(2), 333-359.