HIV and adolescents: guidance for HIV testing and counselling and care for adolescents living with HIV

ANNEX 2: PICO questions and references

PICO 1

Should HTC be offered to adolescents?

- a) living in countries with generalized epidemics
- b) living in countries with a concentrated epidemic
- c) among key affected populations of adolescents at high risk of HIV

Bibliography of included studies: Adolescent HTC

Generalised epidemic

- Coates T. Efficacy of voluntary HIV-1 counselling and testing in individuals and couples in Kenya, Tanzania, and Trinidad: a randomised trial. The Voluntary HIV-1 Counseling and Testing Efficacy Study Group. *Lancet*, 2000 Jul 8;356(9224):103-12.
- 2. Kabiru CW et al. The correlates of HIV testing and impacts on sexual behavior: evidence from a life history study of young people in Kisumu, Kenya. *BMC Public Health*, 2010; 10:412.
- 3. Muhamadi L et al. A single-blind randomized controlled trial to evaluate the effect of extended counseling on uptake of pre-antiretroviral care in Eastern Uganda. *Trials*, 2011 Jul 27;12:184.
- 4. Naughton J et al. Voluntary counselling and HIV testing in schools of the Mbhashe district, Eastern Cape in rural South Africa: retrospective analysis. Abstract # MOPE231 (poster), 6th IAS Conference on HIV pathogenesis, Treatment and Prevention. Rome, Italy, 17-20 July 2011.
- 5. Olley BO. Improving well-being through psycho-education among voluntary counseling and testing seekers in Nigeria: a controlled outcome study. *AIDS Care*, 2006 18:8, 1025-31.
- 6. Wanyenze RK et al. Linkage to HIV care and survival following inpatient HIV counseling and testing. *AIDS and Behaviour*, 2011;15:751-60.

Concentrated epidemic

1. Müller O et al. Sexual risk behaviour reduction associated with voluntary HIV counselling and testing in HIV infected patients in Thailand. *AIDS Care*, 1995; 7:567-72.

Key populations in low-level epidemic

- 1. Apoola A, Brunt LA. Randomised controlled study of mouth swab testing versus same day blood tests for HIV infection in young people attending a community drug service. *Drug and Alcohol Review*, 2011 30:101-103.
- 2. Bolu OO et al. HIV/sexually transmitted disease prevention counseling effective among vulnerable populations. *Sexually Transmitted Diseases*, 2004; 31:468-74.
- 3. Gwadz MV et al. CDC HIV testing guidelines and the rapid and conventional testing practices of homeless youth. *AIDS Education and Prevention*, 2010 22:4, 312-327.

PICO 2

Disclosure

- a) Should adolescents disclose their HIV status to parents, family members, sexual partners and others?
- b) What is the best way to support adolescents to disclose their HIV status safely and effectively?

Bibliography of included Studies: Adolescent Disclosure

PICO 3a: Should adolescents disclose their HIV status to parents, family members, sexual partners, others?

- 1. Abaynew Y, Deribew A, Deribe K. Factors associated with late presentation to HIV/AIDS care in South Wollo Zone Ethiopia: a case-control study. *AIDS Research and Therapy*. 2011 8:8.
- Beyene KA et al. Highly active antiretroviral therapy adherence and its determinants in selected hospitals from south and central Ethiopia. *Pharmacoepidemiology and Drug Safety*, 2009;18(11):1007–1015.
- 3. Bird JD, Fingerhut DD, McKirnan DJ. Ethnic differences in HIV-disclosure and sexual risk. *AIDS Care*, 2011 23:4, 444–8.
- 4. Chepkurui Ngeno H, et al. Non-disclosure of HIV status among patients with advanced HIV starting antiretroviral therapy (ART) is associated with virologic failure: the Kericho IRIS study. : 19th International AIDS Conference: [Abstract no. THPE450].
- 5. Comer LK et al. Illness disclosure and mental health among women with HIV/AIDS. *Journal of Community & Applied Social Psychology*, 2000 10:6, 449---464.
- 6. Crepaz N, Marks G. Serostatus disclosure, sexual communication and safer sex in HIV-positive men. *AIDS Care*, 2003 15:3, 379–87.
- 7. Dempsey AG et al. Patterns of disclosure among youth who are HIV-positive: a multisite study. *Journal of Adolescent Health*, 2012 50:3, 315–7.
- 8. Ding Y, Li L, Ji G. HIV disclosure in rural China: Predictors and relationship to access to care. *AIDS Care Psychological and Socio-Medical Aspects of AIDS/HIV*, 2011 23:9, 1059–1066.
- 9. Gari T, Habte D, Markos E. HIV positive status disclosure among women attending ART clinic at Hawassa University Referral Hospital, South Ethiopia. *East African Journal of Public Health*, 2010 7:1, 87–91.
- 10. Hatcher AM et al. Predictors of linkage to care following community-based HIV counseling and testing in rural Kenya. *AIDS and Behavior*, 2012 16:5, 1295–1307.
- 11. Holzemer WL, et al. Impact of HIV stigma on disclosure of HIV status. : 19th International AIDS Conference: [Abstract no. THPE437].
- 12. Jasseron C et al. Non-Disclosure of a Pregnant Woman's HIV Status to Her Partner is Associated with Non-Optimal Prevention of Mother-to-Child Transmission. AIDS Behavior, 2011.
- 13. Kassaye KD, Lingerh W, Dejene Y. Determinants and outcomes of disclosing HIV-seropositive status to sexual partners among women in Mettu and Gore towns, Illubabor Zone southwest Ethiopia. *Ethiopian Journal of Health and Development*, 2005; 19(2):126–131.
- 14. Kilewo C et al. HIV counseling and testing of pregnant women in sub-Saharan Africa: experiences from a study on prevention of mother-to-child HIV-1 transmission in Dar es Salaam, Tanzania. *Journal of Acquired Immune Deficiency Syndromes*, 2001 Dec 15;28(5):458–62.
- 15. Lam PK, Naar-King S, Wright K. Social support and disclosure as predictors of mental health in HIV-positive youth. *AIDS Patient Care and STDs*, 2007 Jan;21(1):20–9.

- McKirnan DJ, Tolou-Shams M, Courtenay-Quirk C. The Treatment Advocacy Program: A
 randomized controlled trial of a peer-led safer sex intervention for HIV-infected men who have
 sex with men. *Journal of Consulting and Clinical Psychology*, 2010 78:6, 952–963.
- 17. Ochieng-Ooko V et al. Influence of gender on loss to follow-up in a large HIV treatment programme in western Kenya. *Bulletin of the World Health Organization*, 2010;88:681–688.
- 18. Parsons JT et al. Consistent, inconsistent, and non-disclosure to casual sexual partners among HIV-seropositive gay and bisexual men. *AIDS*, 2005 19 Suppl 1:S87–97.
- 19. Pearson CR et al. One year after ART initiation: psychosocial factors associated with stigma among HIV-positive Mozambicans. *AIDS Behavior*, 2009 Dec;13(6):1189–96.
- 20. Pearson CR et al. Change in sexual activity 12 months after ART initiation among HIV-positive Mozambicans. *AIDS Behavior*, 2011 15:4, 778–87.
- 21. Peltzer K, Mlambo G. Factors determining HIV viral testing of infants in the context of mother-to-child transmission. *Acta Paediatrica*, 2010 99:4, 590–6.
- 22. Peltzer K, Sikwane E, Majaja M. Factors associated with short-course antiretroviral prophylaxis (dual therapy) adherence for PMTCT in Nkangala district, South Africa. *Acta Paediatrica*, 2011 100:9, 1253–7.
- 23. Rotheram-Borus MJ et al. Benefits of family and social relationships for Thai parents living with HIV. *Prevention Science*, 2010, 298--307.
- 24. Sayles JN, Wong MD, Cunningham WE. The inability to take medications openly at home: does it help explain gender disparities in HAART use? *Journal of Women's Health (Larchmont)*, 2006, 15:2, 173–81.
- 25. Seid M, Wasie B, Admassu M. Disclosure of HIV positive result to a sexual partner among adult clinical service users in Kemissie district, northeast Ethiopia. *African Journal of Reproductive Health*, 2012 Mar;16(1):97-104.
- 26. Sherman BF et al. When children tell their friends they have AIDS: possible consequences for psychological well-being and disease progression. *Psychosomatic Medicine*, 2000 62:2, 238–47.
- 27. Sigxashe TA, Baggaley R, Mathews C. Attitudes to disclosure of HIV status to sexual partners. *South African Medical Journal*, 2001 91:11, 908–909.
- 28. Skogmar S et al. Effect of antiretroviral treatment and counselling on disclosure of HIV-serostatus in Johannesburg, South Africa. *AIDS Care*, 2006 18:7, 725–30.
- 29. Strachan ED et al. Disclosure of HIV status and sexual orientation independently predicts increased absolute CD4 cell counts over time for psychiatric patients. *Psychosomatic Medicine*, 2007 69:1, 74–80.
- 30. Wong LH et al. Test and tell: correlates and consequences of testing and disclosure of HIV status in South Africa (HPTN 043 Project Accept). *Journal of Acquired Immune Deficiency Syndromes*, 2009 50:2, 215–22.

PICO 3b: What is the best way to support adolescents to disclose their HIV status safely and effectively?

GRADE-d:

- 1. Mundell JP et al. The impact of structured support groups for pregnant South African women recently diagnosed HIV positive. *Women's Health*, 2011 51:6, 546–65.
- 2. Murphy DA et al. Pilot trial of a disclosure intervention for HIV+ mothers: the TRACK program. Journal of Consulting and Clinical Psychology, 2011 79:2, 203–14.
- 3. Otis J et al. Effects of an empowerment program on the ability of women living with HIV (WLHIV) in Mali to manage decisions regarding whether or not to disclose HIV status. 19th International AIDS Conference: [Abstract no. MOPE502].
- 4. Rotheram-Borus MJ et al. Teens Linked to Care Consortium. Efficacy of a preventive intervention for youths living with HIV. *American Journal of Public Health*, 2001 Mar;91(3):400–5.

- 5. Rotheram-Borus MJ et al. An intervention for parents with AIDS and their adolescent children. *American Journal of Public Health*, 2001 91:8, 1294–302.
- 6. Serovich JM et al. An intervention to assist men who have sex with men disclose their serostatus to casual sex partners: results from a pilot study. *AIDS Education and Prevention*, 2009, 21:3, 207–19.
- 7. Wolitski RJ, Gomez CA, Parsons JT. Effects of a peer-led behavioral intervention to reduce HIV transmission and promote serostatus disclosure among HIV-seropositive gay and bisexual men. *AIDS*, 2005, 19 Suppl 1:S99–109.

To be addressed separately:

- 1. Chiasson MA et al. Increased HIV disclosure three months after an online video intervention for men who have sex with men (MSM). *AIDS Care*, 2009 21:9, 1081–9.
- 2. Dewo Z et al. Strengthening treatment, care and support to people living with HIV through community-based treatment services. : 19th International AIDS Conference: [Abstract no. TUAD0202].
- 3. Olley BO. Improving well-being through psycho-education among voluntary counseling and testing seekers in Nigeria: a controlled outcome study. *AIDS Care* 2006 18:8, 1025–31.
- 4. Patterson TL, Shaw WS, Semple SJ. Reducing the sexual risk behaviors of HIV+ individuals: outcome of a randomized controlled trial. *Annals of Behavioral Medicine*, 2003 25:2,137-45.
- 5. Rotheram-Borus MJ et al. Masihambisane: an HIV+ peer community health worker (CHW) intervention for South African mothers living with HIV (MLH) improves longitudinal maternal and infant outcomes. : 19th International AIDS Conference: [Abstract no. WEPE680].
- 6. Serovich JM et al. An intervention to assist men who have sex with men disclose their serostatus to family members: results from a pilot study. *AIDS Behavior*, 2011 15:8, 1647–53.
- 7. Smith-Fawzi MC et al. Psychosocial support intervention for HIV-affected families in Haiti: implications for programs and policies for orphans and vulnerable children. Social Science & Medicine, 2012 May;74(10):1494–503. Epub 2012 Mar 6.
- 8. Teti M et al. A mixed methods evaluation of the effect of the protect and respect intervention on the condom use and disclosure practices of women living with HIV/AIDS. *AIDS Behaviour*, 2010 14:3, 567–79.
- 9. Wouters E et al. Community support and disclosure of HIV serostatus to family members by public-sector antiretroviral treatment patients in the Free State Province of South Africa. *AIDS Patient Care and STDs*, 2009 23:5, 357–364.

PICO 3

Can training of health workers in adolescent health improve retention and adherence among adolescents living with HIV?

Bibliography of included studies

- 1. Gregory J et al. Development and evaluation by a cluster randomised trial of a psychosocial intervention in children and teenagers experiencing diabetes: the DEPICTED study. *Health Technology Assessment* (Winchester, England). 2011 15:29, 1-202.
- 2. International Center for Research on Women (2012). "Study to Evaluate the Effectiveness of WHO Tools Orientation Programme on Adolescent Health for Health Care Providers and Adolescent Job Aid in improving the quality of health services provided by health workers provided by health workers to their female adolescent clients in India." Available from: http://www.icrw.org/files/publications/A%20Study%20to%20Evaluate%20the%20Effectiveness %20of%20WHO%20Tools.pdf [accessed on February 27, 2013]

- Lozano P et al. A multisite randomized trial of the effects of physician education and organizational change in chronic-asthma care: health outcomes of the Pediatric Asthma Care Patient Outcomes Research Team II Study. Archives of Pediatrics & Adolescent Medicine, 2004 158:9, 875-883.
- 4. Robling M et al. The effect of the Talking Diabetes consulting skills intervention on glycaemic control and quality of life in children with type 1 diabetes: cluster randomised controlled trial (DEPICTED study). *British Medical Journal*, 2012 Apr 26;344:e2359.

PICO 4

Can community-based approaches improve adherence to treatment in care among adolescents?

Bibliography of included Studies: Adolescent community-based approaches GRADE-d:

- 1. Chang LW et al. Effect of peer health workers on AIDS care in Rakai, Uganda: a cluster-randomized trial. *PLoS One*, 2010 5:6, e10923.
- 2. Chang LW et al. Impact of a mHealth Intervention for Peer Health Workers on AIDS Care in Rural Uganda: A Mixed Methods Evaluation of a Cluster-Randomized Trial. *AIDS and Behaviour*, 2011 15:8, 1776-1784.
- 3. Fatti G et al. Improved survival and antiretroviral treatment outcomes in adults receiving community-based adherence support: Five-year results from a multicenter cohort study in South Africa. 2012. *Journal of Acquired Immune Deficiency Syndromes*, DOI:10.1097/QAL.0b013e31826a6aee.
- 4. Futterman D et al. Mamekhaya: a pilot study combining a cognitive-behavioral intervention and mentor mothers with PMTCT services in South Africa. *AIDS Care*, 2010 22:9, 1093-1100.
- 5. Grimwood A et al. Community adherence support improves programme retention in children on antiretroviral treatment: a multicentre cohort study in South Africa. *Journal of the International AIDS Society*, 2012 15:2, 17381.
- 6. Kabore I et al. The effect of community-based support services on clinical efficacy and health-related quality of life in HIV/AIDS patients in resource-limited settings in sub-Saharan Africa. *AIDS Patient Care and STDs*, 2010 24:9, 581-594.
- 7. Kipp W et al. Antiretroviral Treatment for HIV in Rural Uganda: Two-Year Treatment Outcomes of a Prospective Health Centre/Community-Based and Hospital-Based Cohort. *PLoS One*, 2012 7:7, e40902.
- 8. Munoz M et al. Matching social support to individual needs: a community-based intervention to improve HIV treatment adherence in a resource-poor setting. *AIDS Behaviour*, 2011 15:7, 1454-1464.
- 9. Pearson CR et al. Randomized control trial of peer-delivered, modified directly observed therapy for HAART in Mozambique. *Journal of Acquired Immune Deficiency Syndromes*, 2007 46:2, 238-244
- 10. Selke HM et al. Task-shifting of antiretroviral delivery from health care workers to persons living with HIVAIDS: Clinical outcomes of a community-based program in Kenya. *Journal of Acquired Immune Deficiency Syndromes*. 2010 55 (4) 483-490.
- 11. Taiwo BO et al. Assessing the viorologic and adherence benefits of patient-selected HIV treatment partners in a resource-limited setting. *Journal of Acquired Immune Deficiency Syndromes*, 2010 54:1, 85-92.
- 12. Talisuna-Alamo S et al. Socioeconomic support reduces nonretention in a comprehensive, community-based antiretroviral therapy program in Uganda. *Journal of Acquired Immune Deficiency Syndromes*, 2012 59:4, e52-59.

RCTs in high-income countries:

- 1. Altice FL et al. Superiority of directly administered antiretroviral therapy over self-administered therapy among HIV-infected drug users: a prospective, randomized, controlled trial. *Clinical Infectious Diseases*, 2007 Sep 15;45(6):770-8.
- 2. Macalino GE et al. A randomized clinical trial of community-based directly observed therapy as an adherence intervention for HAART among substance users. *AIDS*, 2007 Jul 11;21(11):1473-7.
- 3. Simoni JM et al. A randomized controlled trial of a peer support intervention targeting antiretroviral medication adherence and depressive symptomatology in HIV-positive men and women. *Health Psycholology*. 2007 Jul;26(4):488-95.
- 4. Simoni JM et al. Peer support and pager messaging to promote antiretroviral modifying therapy in Seattle: a randomized controlled trial. *Journal of Acquired Immune Deficiency Syndromes*, 2009 Dec 1;52(4):465-473.
- 5. Williams AB et al. Home visits to improve adherence to highly active antiretroviral therapy: a randomized controlled trial. *Journal of Acquired Immune Deficiency Syndromes*, 2006 Jul;42(3):314-21.

To be addressed in narrative form:

- 1. Achieng L et al. An observational cohort comparison of facilitators of retention in care and adherence to anti-retroviral therapy at an HIV treatment center in Kenya. *PLoS One*, 2012 7:3, e32727.
- 2. Bekker LG et al. Rapid scale-up of a community-based HIV treatment service: programme performance over 3 consecutive years in Guguletu, South Africa. *South African Medical Journal*, 2006 96:4, 315-320.
- 3. Chang LW et al. Two-year virologic outcomes of an alternative AIDS care model: evaluation of a peer health worker and nurse-staffed community-based program in Uganda. *Journal of Acquired Immune Deficiency Syndromes*, 2009 50:3, 276-282.
- 4. Igumbor JO et al. An evaluation of the impact of a community-based adherence support programme on ART outcomes in selected government HIV treatment sites in South Africa. *AIDS Care*, 2011 23:2, 231-236.
- 5. Kipp W et al. Results of a community-based antiretroviral treatment program for HIV-1 infection in Western Uganda. *Current HIV Research*, 2010 Mar;8(2):179-85.
- 6. Kipp W et al. Comparing antiretroviral treatment outcomes between a prospective community-based and hospital-based cohort of HIV patients in rural Uganda. *BMC International Health and Human Rights*, 2011, 11 Suppl 2:S12.
- 7. Nglazi MD et al. Changes in programmatic outcomes during 7 years of scale-up at a community-based antiretroviral treatment service in South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 2011 56:1, e1-8.
- 8. Nglazi MD et al. Treatment outcomes in HIV-infected adolescents attending a community-based antiretroviral therapy clinic in South Africa. *BMC Infectious Diseases*, 2012 Jan 25;12:21.
- 9. Rich ML et al. Excellent clinical outcomes and high retention in care among adults in a community-based HIV treatment program in rural Rwanda. *Journal of Acquired Immune Deficiency Syndromes*, 2012 59:3, e35-42.
- 10. Stubbs BA et al. Treatment partners and adherence to HAART in Central Mozambique. *AIDS Care*, 2009 21:11, 1412-1419.