

45th Biennial Convention (16-20 November 2019)

Couple-Centered HIV Prevention and Treatment: It's Time for Uptake in US Health Settings

Natalie M. Leblanc, PhD, MPH, RN

School of Nursing, University of Rochester, Rochester, NY, USA

In a renewed urgency to end the epidemic the Joint United Nations Programme on HIV/AIDS developed the 90-90-90 global treatment targets - benchmarks aimed toward galvanizing global public health efforts to eliminate HIV transmission.¹ In selected US jurisdictions, campaigns to end the epidemic (EtE) have incorporated the concept that sustained engagement in HIV care in tandem with consistent viral suppression allows people living with HIV to live a prolonged healthy life and to be incapable of transmitting HIV to others.² The concept embodies the belief that those with an undetectable HIV viral load are untransmittable (U=U) to others.³ The U=U campaign is specific to sex-based transmission and not modes (i.e. intravenous drug use) however certain HIV screening and care modalities can be a mechanism that encourages the concept of U=U to extend beyond those limitations.

Couple-centered HIV prevention and treatment is a dyadic approach to facilitate a couple's engagement in HIV prevention and treatment together.⁴ It involves health providers' provision of HIV/STD preventative services, joint consultation to self-defined couples with the intention of facilitating joint serostatus disclosure and integrating HIV prevention and treatment for a dyad. Couple-centered HIV prevention and treatment interventions have been shown to be effective and efficient in reducing HIV transmission and engaging people into the HIV care continuum (HCC)⁵ and have been instrumental in reducing both vertical and horizontal transmission.⁶ More recently couple-centered research in HIV prevention demonstrated the efficacy of pre-exposure prophylaxis for HIV (PrEP) as a biomedical intervention and the concept of U=U as a mechanism for understanding the importance of sustained engagement in treatment as prevention.^{7,8} Longitudinal studies have further demonstrated that engagement in couples HIV testing and counseling (CHTC), a couple-centered HIV prevention and treatment strategy has resulted in significant decreases in extra-dyadic partners and STI incidence, facilitates entry into the HCC and sustained engagement in HIV care and treatment.⁶

Couple-centered HIV prevention and treatment optimizes the availability of advances in HIV testing technology and biomedical options for HIV prevention and treatment.⁹⁻¹⁰ It also addresses the psycho-socio-behavioral elements of HIV transmission and support for people living with HIV.^{11,12} Despite the evidence, universal uptake of couple-centered HIV prevention and treatment in the United States has been slow.^{9,16-19}

Specific recommendations brought forth by the EtE campaign calls for adopting innovative strategies to engage people into the HIV care continuum (HCC). In this report, we are calling for a concentrated effort to include within this renewed efforts to end the epidemic the availability and practice of couple-centered HIV prevention and treatment in the U.S. in order to address the current gaps in the HIV care continuum (HCC) and to achieve national and local HIV prevention and treatment goals. This

concentrated effort would: 1) optimize current bio-medical and socio-behavioral interventions; 2) address the interpersonal nature of HIV acquisition and cultivate the positive role of social support for people living with HIV within couple-based care; and 3) offer considerations for couple-centered HIV prevention and treatment. The effort is informed by biomedical and psycho-socio-behavioral strategies and interventions²⁰ demonstrated to reduce HIV infection and supported by the literature, as well as existing frameworks^{16,21} in HIV prevention and treatment.^{12,16,22} We have outlined 4 main components to an integrated couple-centered HIV prevention and treatment effort: 1) Initiation of couple-centered HIV prevention and treatment either by a self-defined couple seeking joint HIV screening or a providers as part of routine practice or following a patient assessment; 2) Couples and provider awareness of couple-centered HIV prevention and treatment approaches, 3) Through a shared decision making process between the provider and couple an assessment would be made to determine the uptake of an appropriate joint sexual health strategy conducive to the couples needs or which may be clinically indicated, and 4) Depending on the joint sexual health strategy providers would monitor and evaluate the couple's adherence to the strategy. Currently couples who seek joint HIV screening are denied services and therefore patient's demands are not met. Health settings with these restrictions may want to reconsider their policies to allow couples seeking joint integrated HIV screening and treatment services, particularly settings that are located in jurisdictions with relatively high seroprevalence or whose clientele are, from an epidemiological perspective, the most affected by HIV infection. Therefore we conclude with considerations for translation of couple-centered HIV prevention and treatment in the US health settings at the couple, provider, and health setting levels.

Title:

Couple-Centered HIV Prevention and Treatment: It's Time for Uptake in US Health Settings

Keywords:

Couple-centered HIV Prevention and Treatment, Providers and couples and Treatment as Prevention

References:

1. Bain LE, Nkoke C, Noubiap JN. UNAIDS 90-90-90 targets to end the AIDS epidemic by 2020 are not realistic: comment on "Can the UNAIDS 90-90-90 target be achieved? A systematic analysis of national HIV treatment cascades". *BMJ global health*. 2017;2(2):
2. New York State Department of Health. *Blueprint on Ending the AIDS Epidemic*: NYSDOH; 2015
3. HIV The Lancet. U=U taking off in 2017. *The Lancet*. 2017; 4(11):PE475.
4. World Health Organization. *Guidance on couples HIV testing and counselling - including antiretroviral therapy for treatment and prevention in serodiscordant couples Recommendations for a public health approach*: World Health Organization; 2012
5. Centers for Disease Control and Prevention. HIV Continuum of Care, U.S., 2014, Overall and by Age, Race/Ethnicity, Transmission Route and Sex. 2017;

<https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html>. Accessed April 17, 2018.

6. Burton J, Darbes LA, Operario D. Couples-focused Behavioral Interventions for Prevention of HIV: Systematic Review of the State of Evidence. *AIDS and Behavior*. 2010;14(1):1-10.
7. Wall KM, Kilembe W, Vwalika B, et al. Sustained Effect of Couples' HIV Counselling and Testing on Risk Reduction among Zambian HIV Serodiscordant Couples. *Sexually Transmitted Infections*. 2017;93(4):259-266.
8. Crepaz N, Tungol-Ashmon MV, Vosburgh HW, Baack BN, Mullins MM. Are Couple-based Interventions More Effective than Interventions Delivered to Individuals in Promoting HIV Protective Behaviors? A Meta-analysis. *AIDS Care*. 2015; 27(11):1361-1366.
9. Anton P, Herold BC. HIV transmission: Time for translational studies to bridge the gap. *Science translational medicine*. 2011;3(77):77ps11-77ps11.
10. Heffron R, Ngure K, Mugo N, et al. Willingness of Kenyan HIV-1 serodiscordant couples to use antiretroviral-based HIV-1 prevention strategies. *Journal of acquired immune deficiency syndromes (1999)*. 2012;61(1):116-119.
11. Centers for Disease Control and Prevention. Effective Interventions HIV Prevention that Works Testing Together. 2012; <https://effectiveinterventions.cdc.gov/en/HighImpactPrevention/PublicHealthStrategies/testing-together>. Accessed April 17, 2018.
12. Baeten JM, Heffron R, Kidoguchi L, et al. Integrated Delivery of Antiretroviral Treatment and Pre-exposure Prophylaxis to HIV-1-Serodiscordant Couples: A Prospective Implementation Study in Kenya and Uganda. *PLoS Medicine*. 2016;13(8)
13. Mendelsohn JB, Calzavara L, Daftary A, et al. A Scoping Review and Thematic Analysis of Social and Behavioural Research among HIV-serodiscordant couples in High-income Settings. *BMC Public Health*. March 13 2015;15(1):241.
14. Trinh TT, Yatich N, Ngomoa R, et al. Partner Disclosure and Early CD4 Response among HIV-Infected Adults Initiating Antiretroviral Treatment in Nairobi Kenya. *PLoS ONE*. 2016;11(10)
15. Ware NC, Wyatt MA, Haberer JE, et al. What's Love Got to Do With It? Explaining Adherence to Oral Antiretroviral Pre-exposure Prophylaxis (PrEP) for HIV Serodiscordant Couples. *Journal of Acquired Immune Deficiency Syndromes*. 2012;59(5)
16. Morton JF, Celum C, Njoroge J, et al. Counseling Framework for HIV-serodiscordant Couples on the Integrated Use of Antiretroviral Therapy and Pre-Exposure Prophylaxis for HIV Prevention. *Journal of Acquired Immune Deficiency Syndromes*. 2017;74(Suppl 1):S15-S22.
17. Lee J-Y, Mitchell JW. Expanding Couples-Based HIV Testing and Counseling in the United States: Findings from a Nationwide, Online Survey of Partnered Adults. *Journal of the Association of Nurses in AIDS Care*. 2018;5(5):728-736.
18. McMahon JM, Tortu S, Pouget ER, Torres L, Rodriguez W, Hamid R. Effectiveness of Couple-Based HIV Counseling and Testing for Women Substance Users and Their Primary Male Partners: A Randomized Trial. *Advances in Preventive Medicine*. 2013;2013:15.

19. Painter T. Voluntary Counseling and Testing for Couples: A High Leverage Intervention for HIV/AIDS Prevention in Sub-Saharan Africa. *Soc Sci Med.* 2001;53(11):1397-411.
20. Martinez O, Wu E, Frasca T, et al. Adaptation of a Couple-Based HIV/STI Prevention Intervention for Latino Men Who Have Sex With Men in New York City. *American Journal of Men's Health.* 2017;11(2):181-195.
21. Karney BR, Hops H, Redding CA, Reis HT, Rothman AJ, Simpson JA. A Framework for Incorporating Dyads in Models of HIV-prevention. *AIDS and Behavior.* 2010;14(Suppl 2):189-203.

Abstract Summary:

This presentation situates the need and considerations for translation of couple-centered HIV prevention and treatment in U.S. health settings as an effort to achieve the 90-90-90 global benchmarks for HIV screening, engagement in HIV care and viral load suppression; and as part of the U.S. End the Epidemic campaigns.

Content Outline:

1. Introduction

- In a renewed urgency to end the epidemic, the Joint United Nations Programme on HIV/AIDS, developed the 90-90-90 global treatment targets - a benchmark aimed toward galvanizing global public and medical health efforts to eliminate HIV transmission by optimizing current HIV prevention and treatment options.
- In selected U.S. jurisdictions campaigns to end the epidemic (EtE)⁴ has incorporated the concept of treatment is prevention with sustained engagement in HIV care. Specific recommendations brought forth by the EtE campaign calls for adopting innovative strategies to engage people into HIV screening and the HCC.
- Couple-centered HIV prevention and treatment is a dyadic approach to HIV prevention support patients in a sexual primary relationship to facilitate mutual awareness of the couple's serostatus and engagement in HIV prevention and treatment services together.
 - Couple-centered HIV prevention and treatment optimizes the availability of advances in HIV testing technology and biomedical options for HIV prevention and treatment.
 - It also addresses the psycho-socio-behavioral involved in HIV transmission and support for people living with HIV
 - Despite the research, evidence and even a national protocol for couples HIV testing and counseling (CHTC) – a couple-centered approach, universal uptake of couple-centered HIV prevention and treatment in the United States has been slow, despite 20 years of evidence supporting such strategies and a current demand for the approach

2. Main Body

- Couple-centered HIV prevention and treatment interventions have been shown to be effective and efficient in reducing HIV transmission and engaging people into the HIV care continuum.
- In this report, we are calling for a concentrated effort to increase the availability and practice of couple-centered HIV prevention and treatment in the U.S. in order to address the current gaps in the HIV care continuum (HCC) and to achieve national and local HIV prevention and treatment goals.

- The effort is informed by biomedical and psycho-socio-behavioral strategies and interventions demonstrated to reduce HIV infection and supported by the literature as well as existing frameworks in HIV prevention and treatment.
- We have outlined 4 main components to an integrated couple-centered HIV prevention and treatment effort:
 - Initiation of couple-centered HIV prevention and treatment either by a self-defined couple seeking joint HIV screening or a provider as part of routine practice or following a patient assessment.
 - Couples and provider awareness of couple-centered HIV prevention and treatment approaches.
 - Through a shared decision making process between the provider and couple an assessment would be made to determine the uptake of an appropriate joint sexual health strategy conducive to the couples needs or which may be clinically indicated.
 - Depending on the joint sexual health strategy providers would monitor and evaluate the couple's adherence to the strategy.
- We propose considerations for couple-centered HIV prevention and treatment at the following levels:
 - Couple-based considerations include understanding that couples' types and motivations vary, and are self-defined, couples' understanding of joint serostatus may not be readily apparent, and research has shown that U.S. couples are willing to engage in couple-centered HIV prevention and treatment.
 - Provider-based considerations include that some health providers in the U.S. use couple-based approaches to engage patients into the HIV care continuum despite the absence of any national clinical guidelines.
 - Health care costs and provider scope of practice within certain jurisdictions and health systems are two important considerations in the implementation of couple-centered HIV prevention and treatment.

3. Closing

- Currently couples who seek joint HIV screening are denied services and therefore patient's demands are not met. Health settings with these restrictions may want to reconsider their policies to allow couples seeking joint integrated HIV screening and treatment services, particularly settings that are located in jurisdictions with relatively high seroprevalence or whose clientele are, from an epidemiological perspective, the most affected by HIV infection.

First Primary Presenting Author

Primary Presenting Author

Natalie M. Leblanc, PhD, MPH, RN
 University of Rochester
 School of Nursing
 Assistant Professor
 Rochester NY
 USA

Author Summary: Dr. Leblanc has 15 years as a public health professional and health/nurse science researcher. Her interests include eliminating health inequity by

specifically examining and addressing provider practice and perceptions, and disease risk among vulnerable populations like men of color who have sex with men, women of color and immigrant women. Further, she is interested in health systems influence of provider practice to deliver optimal care, sexual health and interpersonal /dyadic approaches to HIV prevention.