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Improving HIV Treatment Program Adherence in an Ethnically Diverse Urban Clinic

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Purpose:

The purpose of this project was to understand the roles and perspective of healthcare providers in facilitating and improving treatment adherence of high risk HIV positive clients in an ethnically diverse urban HIV treatment clinic. The objectives were to identify barriers and facilitators to adherence, review best practices at each treatment clinic and provide recommendations for improving adherence.

Methods:

Semi-structured interviews were used to gather information regarding factors that contributed to non-adherence to HIV treatment regimens. The perceptions and attitudes of health care providers towards clients who were non-adherent to their prescribed treatment regimen were ascertained. Strategies employed by healthcare providers to facilitate adherence were discussed and shared among the participating clinics. The Social Cognitive Theory and the Logic Model were the conceptual frameworks used to guide the project. Participants included a convenient sample of 12 ethnically diverse care providers; age ranged 28 to 62 years, from three California HIV treatment clinics.

Results:

Themes identified as contributing to poor treatment adherence were mental health status, substance abuse, homelessness, and stigma related to a positive HIV status. Fear and misunderstanding of care providers instructions were also noted as major factors contributing to treatment non-adherence. Healthcare system barriers included, lack of cultural diversity among providers, bureaucratic issues relating to insurance coverage, and clinic times of operation interference with access to specialized services. Incentives for adherence included food, transportation, housing assistance, compassion and staff support. Love and positive reinforcement were the greatest influences of adherence. Implementation of a 2nd Medical Care Coordination Team in the project's primary clinic increased adherence by 5% within a seven month period

Conclusion:

The project demonstrated the need for further investigation on how the factors within the healthcare system, particularly as it relates to insurance, affect adherence. The effectiveness of the assessment tools used to identify clients at high risk for treatment non adherence should also be evaluated.

Title:

Improving HIV Treatment Program Adherence in an Ethnically Diverse Urban Clinic

Keywords:

ADHERENCE, ETHNICALLY DIVERSE URBAN CLINIC and HIV TREATMENT

References:

- Abara, W. E., Smith, L., Shun, Z., Fairchild, A. J., Heiman, H. J., & Rust, G. (2014). *The Influence of race and comorbidity on the timely initiation of antiretroviral therapy among older persons living with HIV/AIDS*. American Journal Of Public Health, 104(11), e135-41. doi:10.2105/AJPH.2014.302227
- Aragónés, C., Sánchez, L., Campos, J. R., & Pérez, J. (2011). *Antiretroviral Therapy Adherence in Persons with HIV/AIDS in Cuba*. MEDICC Review, 13(2), 17-23.
- Arnold, E. A., Rebchook, G. M., & Kegeles, S. M. (2014). *'Triply cursed': racism, homophobia and HIV-related stigma are barriers to regular HIV testing, treatment adherence and disclosure among young Black gay men*. Culture, Health & Sexuality, 16(6), 710-722. doi:10.1080/13691058.2014.905706
- Bandura, A. (1997). Insights. Self-efficacy. *Harvard Mental Health Letter*, 13(9), 4-6.
- Bandura, A., Adams, N. E., & Beyer, J. (1977). *Cognitive processes mediating behavioral change*. Journal of Personality and Social Psychology, 35(3), 125-139. doi:10.1037/0022-3514.35.3.125
- Bandura, A., & Jourden, F. J. (1991). *Self-regulatory mechanisms governing the impact of social comparison on complex decision making*. Journal of Personality and Social Psychology 60(6), 941-951. doi:10.1037/0022-3514.60.6.941
- Berkman, A., Garcia, J., Muñoz-Laboy, M., Paiva, V., & Parker, R. (2005). *Public health matters. A critical analysis of the Brazilian response to HIV/AIDS: lessons learned for controlling and mitigating the epidemic in developing countries*. American Journal Of Public Health, 95(7), 1162-1172. doi:10.2105/AJPH.2004.054593
- Brawner, B. M. (2014). *A Multilevel understanding of HIV/AIDS disease burden among african american women*. JOGNN: Journal Of Obstetric, Gynecologic & Neonatal Nursing, 43(5), 633-643. doi:10.1111/1552-6909.12481
- Brown, J. L., Littlewood, R. A., & Venable, P. A. (2013). *Social-Cognitive Correlates of antiretroviral therapy adherence among hiv-infected individuals receiving infectious disease care in a medium-sized northeastern U.S. city*. AIDS Care, 25(9), 1149–1158. doi:10.1080/09540121.2012.752566
- Centers for Disease Control and Prevention. *Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, Sexual Transmitted Diseases and Tuberculosis Prevention*. <http://www.cdc.gov/hiv/basics/whatishiv.html>. Accessed May 1, 2015
- Centers for Disease control and Prevention. "Framework for Program Evaluation in Public Health." MMWR 1999; 48 (No. RR-11)
- Clark, N. M., & Zimmerman, B. J. (2014). *A social cognitive view of self-regulated learning about health*. Health education & behavior, 41(5), 485-491. doi:10.1177/1090198114547512
- Coates, T., Richter, L., & Caceres, C. (2008). *Behavioural strategies to reduce HIV transmission: how to make them work better*. Lancet, 372(9639), 669-684.

Costa, A. G., Pessoa, I. V., Lopes, S. O., & Melo, R. P. (2012). *What are the factors that affect HIV-positive patient adherence to therapeutic regimen: systematic review of the literature*. Nursing: Revista De Formacao Continua Em Enfermagem, 24(281), 18-24.

da Costa, T. M., Barbosa, B. J., E Costa, D. A., Sigulem, D., de Fatima Marin, H., Filho, A. C., & Pisa, I. T. (2012). *Results of a randomized controlled trial to assess the effects of a mobile SMS-based intervention on treatment adherence in HIV/AIDS-infected Brazilian women and impressions and satisfaction with respect to incoming messages*. International Journal of Medical Informatics, 81(4), 257-269.

Demmer, C. (2003). *Treatment adherence among clients in AIDS service organizations*. Journal of HIV/AIDS & Social Services, 2(3), 33-47.

Dewar, D. L., Plotnikoff, R. C., Morgan, P. J., Okely, A. D., Costigan, S. A., & Lubans, D. R. (2013). *Testing social-cognitive theory to explain physical activity change in adolescent girls from low-income communities*. Research Quarterly For Exercise & Sport, 84(4), 483-491.

Enriquez, M., Lackey, N. R., O'Connor, M. C., & McKinsey, D. S. (2004). *Successful adherence after multiple HIV treatment failures*. Journal of Advanced Nursing, 45(4), 438-446. doi: 10.1046/j.1365-2648.2003.02928.x

Glanz, K., Rimer, B. K., (2005). *Theory at a glance: a guide for health promotion practice*, 2nd Edition. National Cancer Institute, National Institutes of Health, U.S. Department of Health and Human Services. NIH Pub. No. 97-3896. Washington, DC: NIH, Revised 2005.

Kalichman, S., & Grebler, T. (2010). *Stress and Poverty predictors of treatment adherence among people with low-literacy living with HIV/AIDS*. Psychosomatic Medicine, 72(8), 810-816. doi:10.1097/PSY.0b013e3181f01be3.

Kellogg, W.K., Foundation. (2004). Using logic models to bring together planning, evaluation and action. *W.K. Kellogg Foundation Logic Model Development Guide*. One East Michigan Avenue East, Battle Creek, Michigan 49017-4012 www.wkkf.org, Accessed May 14, 2015.

Lester, R. T., Ritvo, P., Mills, E. J., Kariri, A., Karanja, S., Chung, M. H., Plummer, F. A. (2010). *Effects of a mobile phone short message service on antiretroviral treatment adherence in Kenya (WelTel Kenya1): a randomised trial*. Lancet, 376(9755), 1838-1845. doi: 10.1016/S0140-6736(10)61997-6

Michielsen, K., Chersich, M., Temmerman, M., Dooms, T., & Van Rossem, R. (2012). *Nothing as practical as a good theory? the theoretical basis of HIV prevention interventions for young people in sub-saharan africa: a systematic review*. AIDS Research and Treatment, 2012, 345327. doi:10.1155/2012/345327

Nokes, K., Johnson, M. O., Webel, A., Rose, C. D., Phillips, J. C., Sullivan, K., Holzemer, W. L. (2012). *Focus on Increasing Treatment Self-Efficacy to Improve Human Immunodeficiency Virus Treatment Adherence*. Journal of Nursing Scholarship: an Official Publication of Sigma Theta Tau International Honor Society of Nursing / Sigma Theta Tau, 44(4), 403-410. doi:10.1111/j.1547-5069.2012.01476.x.

Prestwich, A., Whittington, C., Rogers, L., Sniehotta, F. F., Dombrowski, S. U., & Michie, S. (2014). *Does theory influence the effectiveness of health behavior interventions? Meta-Analysis*. Health Psychology, 33(5), 465-474. doi:10.1037/a0032853

Ramirez-Valles, J., Molina, Y., & Dirkes, J. (2013). *Stigma towards PLWHA: the role of internalized homosexual stigma in latino gay/bisexual male and transgender communities*. *AIDS Education & Prevention*, 25(3), 179-189. doi:10.1521/aeap.2013.25.3.179

Remien, R. H., Hirky, A. E., Johnson, M. O., Weinhardt, L. S., Whittier, D., & Le, G. M. (2003). *Adherence to medication treatment: a qualitative study of facilitators and barriers among a diverse sample of HIV+ men and women in four U.S. cities*. *AIDS & Behavior*, 7(1), 61-72.

Rogers, S. J., Corcoran, C. L., Hamdallah, M., & Little, S. (2012). What HIV/AIDS Case Management Approaches Bring About Positive Client Outcomes? Results from ConnectHIV. *Journal Of HIV/AIDS & Social Services*, 11(1), 77-97. doi:10.1080/15381501.2012.652546

Saleh, L. D., Operario, D., Smith, C. D., Arnold, E., & Kegeles, S. (2011). *'We're going to have to cut loose some of our personal beliefs': barriers and opportunities in providing HIV prevention to african american men who have sex with men and women*. *AIDS Education & Prevention*, 23(6), 521-532. doi:10.1521/aeap.2011.23.6.521

Scheid, T. L. (2007). *Specialized adherence counselors can improve treatment adherence guidelines for specific treatment issues*. *Journal of HIV/AIDS & Social Services*, 6(1-2), 121-138.

Sison, N., Yolken, A., Poceta, J., Mena, L., Chan, P. A., Barnes, A., & Nunn, A. (2013). *Healthcare provider attitudes, practices, and recommendations for enhancing routine hiv testing and linkage to care in the mississippi delta region*. *AIDS Patient Care & Standards*, 27(9), 511-517. doi:10.1089/apc.2013.0169

Stirratt, M. J., & Gordon, C. M. (2007). *HIV treatment adherence research and intervention: current advances and future challenges*. *Journal of HIV/AIDS & Social Services*, 6(1-2), 9-22.

Sundra, D. L., Scherer, J. & Anderson, L.A. (2003) A guide on logic model development for CDC's prevention research centers. *Prevention Research Centers Program Office*.

Abstract Summary:

Advances in research and treatment modalities have greatly increased the lifespan and outcomes for individuals living with HIV. However, the emotional challenges and social stigma remain barriers to treatment. This project review steps implemented in three urban California clinics to help counteract these issues.

Content Outline:

Background and Significance: The treatment and containment of HIV/AIDS remain a major Public Health challenge and a burden for society globally. Non-adherence to HIV treatment regimen has been a primary contributor to the debilitating effect experienced by individuals infected with the disease. Antiretroviral treatment (ART) is effective in increasing the life expectancy of individuals beyond the known natural course of the disease. Clients who maintain 95% or better adherence rate to their treatment regimen are more likely to consistently have an undetectable viral load.

Procedure:

This descriptive qualitative study used semi-structured interviews. Social cognitive theory and the logic model were the conceptual frameworks used to ascertain the essence of adherence. Three HIV treatment clinics served as the project's resource centers.

The phenomenon of interest in this project that focused high-risk clients in an ethnically diverse urban HIV treatment clinic is treatment adherence. There are two primary research questions; What are the main factors that contribute to non-adherence to HIV treatment regimens? and How can health care providers increase the rate of HIV treatment adherence among people living with HIV/AIDS?

The first phase of the project involved a review of the patient assessment form. The second phase involved the development of topics and interview questions. During the third phase, tape-recorded semi-structured individual interviews were conducted with professionals at the clinics, which took 30 to 45 minutes to complete. Interviews with providers identified the strengths, weaknesses, opportunities, and threats to treatment program adherence. The fourth phase consisted of the analysis of the narrative data. Social cognitive theory (SCT) was used as an overarching theory to categorize and evaluate factors that providers identified in their case management activities as contributing to treatment adherence and continuance of care for high-risk HIV clients. A gap analysis provided information of the interventions at the clinics as well as what additional interventions were used to address adherence.

Main Points: Themes focused on mental health status, homelessness, and stigma related to a positive HIV status as factors contributing to poor treatment adherence. Practitioners placed greater emphasis on client behaviors as affecting adherence rather than barriers relating to the healthcare system.

Conclusion: Future projects should investigate how the dynamics of the healthcare system affect HIV treatment adherence. The effectiveness of assessment tools used to identify clients at high risk for treatment non-adherence should also be evaluated.

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Author Summary: Dr. Brown Farr incorporated a non-profit Service Learning Foundation in 2012 and is involved extensively in the community in various outreach and disaster preparedness programs. She serves as Nurse Faculty, Family Nurse Practitioner and also facilitates global service learning trips. She is passionate about the care of people living with HIV and completed training in Voluntary Counseling and Testing for HIV/AIDS and Disease Surveillance. Conference presentations include: APHA 144th Annual National Conference, Denver, CO.