

Research Findings

A Closer Look at Employment and PLWHA

Research on the impact of employment on the health of PLWHA is still in its early stages, and there remains a need for longitudinal research from which to draw long-term conclusions. Furthermore, as with all research, sampling methodologies and the definition of variables—for example, what even constitutes employment—vary widely. Nevertheless, an evidence-based argument for offering employment services is emerging. This document offers a brief review of a few recent studies that show the positive impact of employment for individuals living with HIV/AIDS.

The Impact of HIV on Employment: a Retrospective Analysis of the Characteristics of Persons with HIV Disease Seeking Job Placement Services

This 1992 study of Multitasking Systems (MTS) of New York, Inc., assessed the first employment and training program in the U.S. for PLWHA. MTS was a demonstration project funded by the Rehabilitation Services Administration (RSA). Titled *The Impact of HIV on Employment: a Retrospective Analysis of the Characteristics of Persons with HIV Disease Seeking Job Placement Services*, it was conducted by Sandy DeRobertis, MTS's project director from 1991 to 1993. The population reviewed was 385 PLWHA served by MTS between March of 1989 and April of 1992.

The principal finding was that HIV is frequently not the primary vocational impediment for PLWHA. Rather, poverty, homelessness, discrimination, lack of job skills and illiteracy, conditions that predated development of HIV-related immunodeficiency functional limitations, were the primary impediments to employment for those PLWHA seeking services from MTS—not HIV/AIDS. This study also revealed that PLWHA who continued to work were less susceptible to depression and lived longer than those who disengaged, providing an early indication of the potential role of employment for PLWHA.

As is often the case today for economically disadvantaged PLWHA, MTS's participants frequently reported

that the quality of their lives was better post diagnosis because of the living plan, housing assistance, free medical care, financial aid and food stamps received from New York City's HIV/AIDS Services Administration. Interestingly, the MTS study reported that its cases were 6.3 times as likely to be closed at MTS based on benefits concerns than medical concerns, highlighting the importance of attending to concerns about the potential impact of paid employment on one's public benefits.

NWPC Vocational Development and Employment Needs Survey (NWPC-VDENS)

This study explored the employment needs and experiences of PLWHA in the U.S., taking into consideration a range of demographic variables. It was conducted in 2008-2009 by Dr. Liza Conyers in collaboration with the National Working Positive Coalition (NWPC) and the New York State Department of Health AIDS Institute.

Among the survey's respondents, 32 percent were employed. Among these, 63 percent worked full time, 26 percent worked part time and 12 percent worked less than 14 hours per week. Some of these participants faced financial challenges despite being employed; 19 percent earned less than \$15,000 per year. Regardless, findings suggest that working may positively impact health and reduce health risk behaviors. Specifically, among employed participants who were unemployed prior to their current job:

Health and Prevention Outcomes—Employed Participants			
Behavior	Increased (%)	Decreased (%)	No Change (%)
Self-Care	49	10	40
CD4 Count	46	18	37
Medication Adherence	21	8	71
Alcohol Use	2	35	63
Drug Use	3	34	63
Unprotected Sex	6	30	63
Number of Sex Partners	4	35	61

When the survey's unemployed participants were asked to predict health and prevention outcomes if they were to go to work, similar trends occurred:

Health and Prevention Outcome Predictions—Unemployed Participants			
Behavior	Increased (%)	Decreased (%)	No Change (%)
Self-Care	42	14	44
CD4 Count	36	17	47
Medication Adherence	24	3	66
Alcohol Use	3	31	66
Drug Use	3	31	67
Unprotected Sex	3	26	71
Number of sex partners	5	26	69

The small percentages who reported negative outcomes or predications of outcomes highlight the need for more research to better understand what characteristics, whether individual or work-related, may contribute to both positive and negative outcomes.

An Overview of Research Findings Related to Implementation of the NHAS is available at: <http://www.workingpositive.net/pdf/conyers-pacha.pdf>.

The Ontario HIV Treatment Network Cohort Study (OCS)

The OHTN Cohort Study (OCS) is a multi-site research study that collects clinical and socio-behavioral data on a group of participants living with HIV over time. This unique research database is governed by PLWHA in Ontario and used by scientists, community-based researchers and other stakeholders. More information on OCS is available at: <http://www.ohtncohortstudy.ca>.

In 2011, researchers published the first of several OCS studies exploring the relationships between employment and the physical and mental health of PLWHA. Publications include:

Employment Status is Associated with Both Physical and Mental Health Quality of Life in People Living with HIV

[Citation: Rueda, S., Raboud, J., Mustard, C., Bayoumi, A., Lavis, J.N., & Rourke, S.B. (2011). Employment status is associated with both physical and mental health quality of life in people living with HIV. *AIDS Care*, 23(4), 435-443.]

The study summarized in this article explored the relationship between employment status and health-related quality of life for PLWHA by analyzing baseline data provided by 361 participants in the OCS. Specifically, it used regression analysis—a process for estimating the relationships among different variables—to evaluate the contribution of employment status to both physical and mental health quality of life measures. The analysis showed that employment status was

strongly correlated with both physical and mental health quality of life after controlling for potential confounding variables. The correlation was stronger with physical health than mental health.

The Influence of Employment and Job Security on Physical and Mental Health in Adults Living with HIV: A Cross-Sectional Analysis

[Citation: Rueda, S., Raboud, J., Rourke, S. B., Bekele, T., Bayoumi, A., Lavis, J., ... & Mustard, C. (2012). Influence of employment and job security on physical and mental health in adults living with HIV: cross-sectional analysis. *Open Medicine*, 6(4), e118. Available at: <http://www.openmedicine.ca/article/view/486/475>]

The study presented in this article used data from 1,930 people (1,660 men and 270 women) who participated in the OCS to determine the relationship between employment and health-related quality of life for PLWHA. It specifically looked at the differences related to employment with job security versus employment alone and examined the impact of other demographic variables, socioeconomic factors, HIV-disease markers and substance use indicators on health-related quality of life. Overall, it found that employment is positively related to physical and mental health quality of life for both men and women with HIV/AIDS, and that employment with job security may offer additional mental health benefits for men.

Labor Force Participation and Health-Related Quality of Life in HIV-Positive Men Who Have Sex with Men: the Multicenter AIDS Cohort Study

[Citation: Rueda, S., Raboud, J., Plankey, M., Ostrow, D., Mustard, C., Rourke, S. B., Jacobson, L., Bekele, T., Bayoumi, A., Lavis, J., Detels, R., & Silvestre, A. J. (2012). Labor force participation and health-related quality of life in HIV-positive men who have sex with men: the Multicenter AIDS Cohort Study. *AIDS and Behavior*, 16(8), 2350-2360. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3575137>]

The study summarized in this article analyzed data from 1,415 HIV-positive men who have sex with men who participated in the OCS. Its findings indicate that employment is associated with better physical and mental health quality of life and, furthermore, that people whose physical health is less stable when they lose their jobs may experience steeper declines upon unemployment than those with better health. However, this may also be because poor physical health contributes to unemployment.

The Relationship Between Social Roles and Self-Management Behavior in Women Living with HIV/AIDS

[Citation: Webel, A.R. & Higgins, P. (2012). The relationship between social roles and self-management behavior in women living with HIV/AIDS. *Women's Health Issues*. 22(1): e27-33. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3206212>]

This research explored, through 12 focus groups with 48 women, the key social roles associated with positive HIV self-management in women. Six predominant social roles emerged: employee, pet owner, mother/grandmother, faith believer, advocate and stigmatized patient. The first five roles had a positive impact on HIV self-management.

The role of stigmatized patient, however, was not associated with improved HIV self-management. In fact, this role contributed to fear of disclosure and thus a decreased likelihood of seeking out available supports.

The Impact of Social Context on Self-Management in Women Living with HIV

[Citation: Webel, A.R., Cuca, Y., Okonsky, J.G., Asher, A.K., Kaihura, A., & Salata, R.A. (2013). The impact of social context on self-management in women living with HIV. *Social Science and Medicine*. 87, 147-154. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3656470>]

This study's findings—based on self-reported data from 260 participants—indicate that having a job helps women with HIV manage their illnesses. The average age of

the women was 46, and many were African-American mothers. It was determined that the routine of work as well as its income and benefits provides additional emotional support, leading to positive psychological effects.

Additional Studies

As research into the topic of the impact of employment on health for PLWHA is still in its early stages, many studies are yet to be completed or published. At the 2012 Institute on HIV/AIDS and Employment (an affiliated independent event of the XIX International AIDS Conference) sponsored by the U.S. Department of Labor's Office of Disability Employment Policy (ODEP) in collaboration with NWPC, several researchers presented findings of concluded and ongoing research initiatives, including some of those summarized in the previous sections. Additional studies presented at this event included the following:

Helping Overcome Problems Effectively (HOPE) Pilot Program

Researcher: Ken Hergenrather, The George Washington University

The Helping Overcome Problems Effectively (HOPE) pilot program was a community-based participatory research project conducted by researchers at The George Washington University (GWU) in partnership with Whitman-Walker Health. The purpose of the study was to look at the mental health and employment outcomes of African-American gay men living with HIV/AIDS. It involved three-hour interventions over seven weeks, during which participants strengthened skills such as problem solving, job seeking strategies and how to better communicate with

health care providers. Each session was in a group setting, where individuals had the opportunity to learn from and share ideas with each other. At the time of the interventions, not all of the men were working. At a three-month follow up, three were enrolled in college, one had obtained employment and three were actively seeking employment. There were also significant decreases reported in depression and anxiety and increases in self-efficacy, self-esteem, medication compliance and job-seeking skills. Based on the program, participants created a model for better communicating with physicians and other health care providers, with a focus on planning and asking questions and confirming understanding of answers received.

iFOUR Employment Program

Researcher: Lisa Razzano, University of Chicago at Illinois

Through its ongoing Employment Intervention Demonstration Program (EIDP), the Center on Mental Health Services Research and Policy (CMHSRP), part of the Department of Psychiatry at the University of Illinois, Chicago, has conducted significant research into supported employment for people with disabilities. Within this context, CHMSRP, in partnership with HIV/AIDS service provider Chicago House, conducted a study exploring the effects of medication adherence on employment. This research evaluated a model based on supported employment called "Increase Individual Independence and Income," or "iFOUR." This model was piloted at Chicago House, and participants—350 individuals who generally reflected the demographics of the HIV/AIDS community in Chicago—were followed for two years. Several variables were examined, including

employment outcomes, mental health indicators, social support indicators, empowerment, residential stability, financial stability, and whether or not participants accessed additional services and supports. Six months after participation in the iFOUR program, 49 percent of people had returned to competitive work, meaning they earned minimum wage or above and worked in integrated settings where most people did not have disabilities. At nine-month follow up, this number rose to 63 percent. Over the evaluation period, 43 percent of people were able to achieve full-time employment. Furthermore, participants reported improvements related to depression, anxiety, health beliefs, medication adherence, treatment engagement, and other health indicators. There were not substantial changes in the symptomology of HIV, indicating that individuals were able to both manage their conditions and maintain employment in tandem; that treatment did not need to keep them out of the workforce. Based on these results, further research on the iFOUR program has been done.