Women's HEART: Timely access and retention in HIV/AIDS care

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INTRODUCTION

Minority women in the U.S. are over represented among HIV/AIDS cases among women. Most women contract HIV through sexual contact. Despite the higher prevalence of HIV among men, women are more susceptible to HIV infection due in part to the increased efficiency of male to female transmission[1]. In addition to this biological barrier, women of color face a host of socio-demographic, psychosocial, and systems barriers that are perceived to increase their risk for infection but also their access to and retention in care[2].

Lower retention rates in care ultimately translate to lowered survival rates[1]. The Women's HEART Project represents one of 11 HRSA-funded demonstration projects intended to develop innovative strategies for the timely access and entry into HIV care of minority women. The HEART Intervention represents a multi-component intervention consisting of intense outreach, medical coordination, patient navigation and peer advocacy/education.

Patient navigation included accompanying women to doctor's appointments, reminding them of appointments and reducing barriers, such as transportation issues, to keep those appointments. Intensive outreach efforts involved street outreach work including repeated attempts to meet with a woman and offer immediate on the spot assistance until the woman was ready to come into care, as well as concentrated efforts to locate women who missed HIV medical appointments to retain them in care. Medical coordination involved expediting labs and preliminary paperwork in preparation for primary care visits. Peer advocacy included one-on-one as well as group level education, the latter in the form of the Healthy Relationships curriculum. Education focused on basic HIV information, self-care, nutrition, medication adherence, developing skills and building self-efficacy about new behaviors, and other supplemental sessions based on the needs of the women. A comparison of preliminary baseline and 3-month data findings for the 109 women enrolled to date in the multi-component intervention are presented here.

METHODS

The three community partners in this study are The University of Texas Health Science Center at San Antonio-Community Pediatrics, University Health System - Family Focused AIDS Clinical Treatment Services Clinic (FFACTS) and the Alamo Area Resource Center (AARC). One hundred and nine HIV-positive women of color from San Antonio, Bexar County and three surrounding counties have been enrolled to date in this ongoing study. See Figures 1-4 for baseline demographics. Women are eligible if they are:

1) newly diagnosed with HIV (N=28, 25.7%);
2) new to HIV medical care (N=31; 28.4%);
3) sporadic users of care (N=15, 13.8%);
4) have been previously lost to care (N=34; 31.2%), or
5) at risk of being lost to care (N=1, 0.9%).

We are using a longitudinal study design to examine baseline characteristics and changes in outcomes over an 18-month period of time as a result of the intensive outreach, patient navigation, medical coordination, and peer education services that Women's HEART provides. Data collection methods include face-to-face structured interviews.

GOAL

The goal of this preliminary analysis is to examine changes in barriers to care, unmet service needs, health and wellness indicators over a three month period (see Table 1 for assessments utilized).

Figure 1. Race/Ethnicity

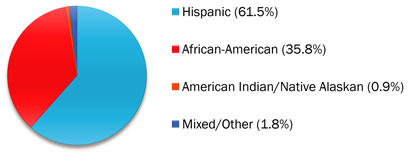
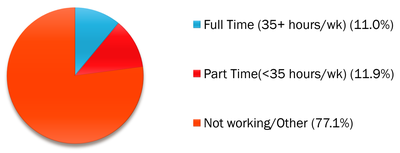


Figure 2. Employment



METHODS CONTINUED

Figure 3. Income

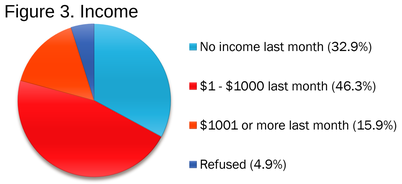


Figure 4. Education

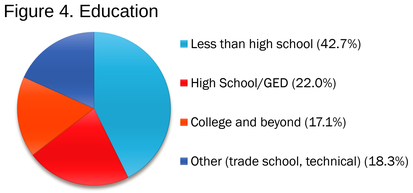


Table 1. Baseline Measures

Assessments Used	
Barriers to Care Scale (BACS)	CDC's HRQOL-4 Healthy Days
Unmet Needs/Services Needed and Received	Interpersonal Support Evaluation List (ISEL)
Brief Symptom Inventory (BSI)	Short Acculturation Scale (SAS)

PRELIMINARY FINDINGS

Socio-demographic barriers:

- 50.5% of HEART participants did not have any form of health insurance, compared to 22.4% of Bexar County's overall female population under 65 years of age who are uninsured.[3]
- Of our Hispanic women, 45.5% had low levels of acculturation in regards to ethnic social relations at baseline and 33.3% continued to report low levels at 3-months, *as assessed by the Short Acculturation Scale*
- Personal financial resources was the major **socio-demographic barrier to care** at baseline (59.6%), as well as a lack of affordable housing (53.2%),*as assessed by the Barriers to Care Scale*. This remained the top socio-demographic barrier to care at 3-month follow-up (53.0%). Although not a major barrier to care at 3- months, the proportion of change for those who needed affordable housing was not significantly different from baseline to 3-months.
- The proportion of women who had a need for food or other basic needs, *assessed by the Unmet Needs/Services Needed measure,* significantly decreased from baseline to3-month follow-up (z= 3.16, df= 1, p<.01).

Systems barriers:

Wilcoxon Signed Rank Tests were used to see if there was a reduction in the unmet needs of our participants from baseline to 3-month follow-up assessment as *assessed by the Unmet Needs/Services Needed measure.* See Table 2 for important findings.

Table 2. Unmet Needs/ Services Needed

Service Needed	Baseline %	3-month %	Z score
HIV related medical services	21.3	3.3	3.16**
HIV Education	21.0	6.8	2.31*
Transportation	25.2	4.9	2.89**
Health Insurance	36.8	13.3	2.50*
Total Unmet Needs	M= 2.62 ± 2.42	M= 1.54 ± 1.35	t = 3.41**

Note: (**) represents a significant value at p<.01. (*) represents a significant value at p<.05.

Lack of transportation to access medical services was **a major geographical barrier to care** at baseline (52.3%) and at 3-month follow-up (51.5%), *as assessed by the Barriers to Care Scale*. Long distances to medical facilities and personnel was not listed as one of the top barriers to care at baseline (46.8%), but was at 3-month follow-up (53.0%); however, this was not a significant increase.

Data was split into Medical User Type to see if there was a difference in the types of barriers to care (see Table 3) and the total number of unmet needs (see Table 4) reported at baseline and three-month follow-up.

Table 3. Significant differences in barriers to care at baseline vs. 3-month by user type.

Medical User Type	Barrier to Care	McNemar Test of Change
Sporadic User of Care	Long distance to medical facility	χ^2=0.38, p=0.06 *increase*
Lost to Care	Lack of supportive & understanding work environments of people living with HIV/AIDS.	χ^2=0.18, p=0.04 *decrease*
Lost to Care	Lack of adequate housing.	χ^2= 2.57, p=0.01 *decrease*

Table 4. Total number of unmet needs reported per medical user type.

Medical User Type	Baseline [M, (SD)]	3-month [M, (SD)]
Newly Diagnosed	2.64 (1.71)	2.15 (1.57)
New to Care	1.86 (1.58)	1.23 (1.07)
Sporadic User of Care	2.50 (1.85)	1.63 (1.51)
Lost to Care	3.61 (3.50)*	1.44 (1.38)*

*Note: There was a significant decrease in the total number of unmet needs (t= 3.01, df=17, p=.01) for Lost to Care clients.

Psychosocial barriers:

- There was no significant difference between the 37.6% who reported alcohol use and 11.0% who reported marijuana use in the last 30 days at baseline, compared to 27.5% for alcohol use and 7.3% for marijuana use at 3-month follow-up.
- 40.4% of our women met clinical criteria for a mental health problem (*as assessed by the Brief Symptom Inventory- GSI*) at baseline, compared to only 29.5% at 3-month follow-up (not significant).
- On an overall functional support measure (*ISEL*), our women had a much lower average score for social support (M=26.15, SD=8.41) at baseline compared to a generalized college sample (M=34.33 - 38.8, SD=7.3-7.5)[4]. There was no significant difference found at 3-months (M=26.50, SD=8.46).

Health and Wellness:

- Although the percentage of our women who rated their health fair to poor at baseline (52.3%) was not significantly different to 3-month follow-up (39.4%), there is a trend in the positive direction.
- There was a significant decrease in the *average number of days* that their activity was limited due to poor health from baseline (M=7.89, SD=11.00) to 3-months (M=4.02, SD=8.46) (t=2.40, p< 0.05).
- Although not significant, there was a decrease in the percentage of women who reported frequent mental distress because of their poor health at baseline (45.5%) compared to 3-months (36.5%) *(as measured by the Center for Disease Control's Health Related Quality of Life-4 Healthy Days).*

DISCUSSION

Visibly HEART women experience numerous barriers that are commonly associated with HIV health disparities including delayed entry into care and unequal health outcomes. For instance, antiretroviral medication adherence is associated with educational attainment and employment[5-9], yet the majority of HEART women are unemployed and undereducated. Research reveals that health insurance is associated with increased antiretroviral use and decreased mortality[10-12]; however, the majority of women in HEART did not have any form of health insurance at baseline. Patient Navigators and Medical Coordinators in HEART have helped these women gain access to health insurance or fees to pay for medical services.

HEART women also experience similar systems barriers to accessing HIV care (e.g., transportation issues and long distance to medical facilities) as do many other HIV-positive women[13]. The total number of these unmet service needs reported by HEART women has been significantly reduced while in the program. Psychosocial barriers (e.g. poor mental health and poor social support) put these women at greater risk of poor medication adherence and decreased immune functioning[14]. Data shows a decrease in these barriers. It can also be seen that women who were originally lost-to-care reported a higher number of unmet needs at baseline; however, they were most positively affected by the program with a significant decrease in their reported barriers to care and total number of unmet needs as opposed to the other medical user types.

Overall, HEART women's health and wellness has increased, with less women reporting fair to poor health and frequent mental distress at follow-up. Also, the average number of days their activity was limited due to poor health significantly decreased within the first three months of being in the HEART program. Given these preliminary findings, it can be seen that the HEART intervention has helped to counter some of these health disparities and increased overall health.

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