

Participation in HeartsPlus, a joint addiction medicine/cardiology clinic with contingency management, is associated with improved heart failure outcomes

Evaluation of a Joint Heart Failure and Addiction Medicine Contingency Management for Patients With Stimulant-associated Cardiomyopathy

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BACKGROUND

Many substances with high addiction potential, including cocaine or methamphetamines, are known to exert adverse effects on the cardiovascular system, and substance-use disorders (SUD) have been associated with greater rates of morbidity in those with heart failure with reduced ejection fraction (HFrEF, EF<40%).

We aimed to evaluate the effect of HeartsPlus, a joint addiction medicine and heart failure clinic with contingency management, on heart failure outcomes, via comparing pre- and post-clinic basic natriuretic peptide (BNP) and ejection fraction (EF) values.

METHODS

- Collected pre- and post-clinic BNP and EF values from patients with concomitant HFrEF and SUD
- Significance ($p<0.05$) was determined via Wilcoxon signed rank tests

RESULTS

Comparing pre- and post-HeartsPlus participation, BNP values were found to be significantly decreased ($n=24$) and ejection fraction values were found to be significantly increased ($n=10$).

DISCUSSION

Participation in HeartsPlus not only increases patient engagement in care and decreases stimulant use but was also found to be associated with improved heart failure outcomes.

This study's findings are limited by the small sample size; however, the results exhibit potential for future studies with larger cohort sizes to better elucidate this approach to treating patients with stimulant-associated cardiomyopathy.

		Median (IQR) or n (%)
Age		54 (10.75)
Gender		
	F	4 (13%)
	M	26 (87%)
	NB	0 (0%)
Race		
	Asian/Pi/Filipinx	6 (20%)
	Black/African-American	14 (47%)
	White	10 (33%)
Housing		
	Stably housed	11 (37%)
	Marginally housed	10 (33%)
	Homeless	9 (30%)
EF at baseline		28 (14.25)
Stimulant use		
	Predominantly methamphetamine	21 (70%)
	Predominantly cocaine	8 (27%)
	Both	1 (3%)

Table 1. Demographic data of recruited individuals with active stimulant use disorder and stimulant-associated cardiomyopathy whom participated in HeartsPlus ($n=30$).



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