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Does a Primary Health Clinic for Formerly Incarcerated Women Increase Linkage to Care?

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A B S T R A C T

Objective: This study examined a primary care-based program to address the health needs of women recently released from incarceration by facilitating access to primary medical, mental health, and substance use disorder (SUD) treatment.
Study Design: Peer community health workers recruited women released from incarceration within the past 9 months into the Women's Initiative Supporting Health Transitions Clinic (WISH-TC). Located within an urban academic medical center, WISH-TC uses cultural, gender, and trauma-specific strategies grounded in the self-determination theory of motivation. Data abstracted from intake forms and medical charts were examined using bivariate and multivariable regression analyses.
Results: Of the 200 women recruited, 100 attended the program at least once. Most (83.0%) did not have a primary care provider before enrollment. Conditions more prevalent than in the general population included psychiatric disorders (94.0%), substance use (90.0%), intimate partner violence (66.0%), chronic pain (66.0%), and hepatitis C infection (12.0%). Patients received screening and vaccinations (65.9%–87.0%), mental health treatment (91.5%), and SUD treatment (64.0%). Logistic regression revealed that receipt of mental health treatment was associated with number of psychiatric (adjusted odds ratio [AOR], = 4.09; $p < .01$), and social/behavioral problems (AOR, 2.67; $p = .04$), and higher median income (AOR, 1.07; $p = .05$); African American race predicted lower receipt of SUD treatment (AOR, 0.08; $p < .01$).
Conclusions: An innovative primary care transitions program successfully helped women recently released from incarceration to receive medical, mental health, and SUD treatment. Primary care settings with specialty programs, including community health workers, may provide a venue to screen, assess, and help recently incarcerated women access needed care.

The United States has the highest incarceration rate in the world, with roughly 1 in every 100 adults residing within jails and prisons (Hughes & Wilson, 2002). As the justice system population has increased, the number of individuals reentering their communities after incarceration has grown correspondingly, combining with a lack of appropriate primary health care, creating public health concerns. Recently released individuals tend to have poorer overall health, are often from medically underserved communities, and experience health care disparities typical of poor individuals of color (Dumont, Brockmann, Dickman, Alexander, & Rich, 2012). These factors likely contribute to a 12.7 times higher mortality rate during the first 2 weeks after release compared with the general population (Binswanger et al., 2007). Moreover, recently released women have a higher relative risk of death compared with recently released men (5.5 vs. 3.3) in the first year after release when both groups are compared with the general population (Binswanger

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et al., 2007). Lapsed Medicaid coverage, untreated mental health and substance use disorder (SUD) issues, and difficulty accessing primary care can exacerbate these health outcomes (Kulkarni, Baldwin, Lightstone, Gelberg, & Diamant, 2010; Mallik-Kane & Visher, 2008; Rosen et al., 2014; Wakeman, McKinney & Rich, 2009). A multidisciplinary and integrated primary care approach is imperative to improving the health of formerly incarcerated individuals (Sellers et al., 2012).

Women are the fastest growing members of the incarcerated U.S. population, increasing 646% from 15,118 women in 1980 to 112,797 women in 2010, nearly 1.5 times the rate of increase for men (Cahalan & Parsons, 1986; Guerino, Harrison & Sabol, 2011). Ninety percent of recently released women have chronic medical, mental health, or SUDs, higher than in the general population (Mallik-Kane & Visher, 2008; Schnittker, Massoglia & Uggen, 2012). Recently released women face additional risks, including intimate partner violence (IPV), sexual trauma including from justice system employees, and sex work involvement with ensuing medical and psychiatric sequelae (Cottler, O'Leary, Nickel, Reingle, & Isom, 2014; Millay, Satanarayana, O'Leary, Crecelius, & Cottler, 2009; Sartor et al., 2012). Few treatment programs offer effective trauma- and gender-specific treatment (Grella, Scott, Foss, & Dennis, 2008; Messina, Calhoun & Warda, 2012; Nelson-Zlupko, Dore, Kauffman, & Kaltenbach, 1996) or motivational strategies such as those grounded in self-determination theory (SDT). SDT-informed practices are efficacious in increasing health behaviors such as condom use and smoking cessation, shown to be mediated by patient autonomy and competence (Deci & Ryan, 1985; Ng et al., 2012). Furthermore, autonomy and competence were shown to mediate depression and anxiety symptoms (Keatley, Clarke & Hagger, 2012; Ng et al., 2012).

Most medical practices lack strategies to address the complex needs of recently released individuals (Barnert, Perry & Wells, 2014; Flanagan, 2004; Morse et al., 2014). Specific primary care models can be effective for individuals with SUD and mental health symptomology, but have not been adapted for recently released people (Barnert et al., 2014; Huffman, Niazi, Rundell, Sharpe, & Katon, 2014; Parthasarathy, Merten, Moore, & Weisner, 2003; Saitz, Horton, Larson, Winter, & Samet, 2005). Other approaches propose bridging justice and health systems and integration of wraparound services for women, such as childcare, counseling, and employment assistance (Oser, Knudsen, Staton-Tindall, & Leukefeld, 2009; Paino, Aletraris, & Roman, 2016; Pringle et al., 2002; Wenzel, Longshore, Turner, & Ridgely, 2001).

The Transitions Clinic Network is a 16-site, 7-state (including Puerto Rico) consortium providing culturally specific primary medical care to recently released individuals, and approximately 14% of its clients are women (Fox et al., 2014; E. A. Wang, personal communication, April 4, 2016; Wang et al., 2010; Wang et al., 2012). Formerly incarcerated community health workers (CHWs) provide support and health care management, drawing from shared experiences (Bedell, Wilson, White, & Morse, 2015; Lebel, Richie & Maruna, 2015; Wang et al., 2012). WISH-TC is a Transitions Clinic Network site and primary care clinic within a local academic medical center's Department of Psychiatry and has additional unique qualities. WISH-TC CHWs are trained in trauma-specific and SDT-based motivational strategies (Amaro, Chernoff, Brown, Arévalo, & Gatz, 2007; Amaro, Larson, et al., 2007; Deci & Ryan, 1985; Ng et al., 2012). A community advisory board composed of local stakeholders provides feedback regarding the program, consistent with community-based participatory research strategies (Israel et al., 2010).

The literature is limited with regard to research surrounding health outcomes and use trends among women recently released from incarceration. Understanding these women's unique health needs, risks, and factors that promote health care use are critical for improving clinical interventions targeted toward this population and overall community health. We aim to fill this gap in the literature by presenting findings from a descriptive chart review of patients attending our program, examining the following questions: 1) What proportion of recently released women will voluntarily attend a primary care transitions program? 2) What are patient characteristics and health conditions (e.g., medical, psychiatric, and SUD)? 3) What percent of patients receive recommended care, and what patient characteristics are associated with receipt of care?

Material and Methods

Recruitment

The principal investigator and a CHW publicized the initiative at collaborative community postincarceration programs in a mid-sized city in upstate New York, seeking stakeholder input (Israel et al., 2010), access to qualifying women, and referrals. CHWs also offered WISH-TC program participation through weekly visits to women in the local jail, prison, probation office, parole office, women's transitional housing programs, an SUD inpatient treatment program, and diverse community agencies serving recently released people between September 2012 and August 2014. Eligible women either had been released from incarceration within 9 months or were scheduled to be released within 2 months. Recruitment occurred through advertising, approaching women in varied locations, and advising varied community leaders and providers, meaning that some women called to make appointments and some were given appointments upon release. Because recruitment strategies evolved over time with community and patient feedback (Israel et al., 2010), to assess recruitment strategy effectiveness, we ran statistical tests to compare means/counts across all screener (demographic) data to 1) compare attendees versus non-attendees and 2) compare year 1 with year 2. We further explored statistically significant associations. The University of Rochester Research Subjects Review Board approved the current study as a minimal risk chart review and quality improvement analysis not requiring informed consent.

Data Collection and Variables of Interest

An intake form provided the following information: age, address, and recruitment location. Additional demographics and the rest of the data were collected from the system-wide electronic medical record database using i2b2, a query tool (Murphy et al., 2010), and manual searches of patient records, laboratory results, and physician notes from September 1, 2012, through December 31, 2014.

Variables of interest comprised five categories: a) clinic recruitment outcomes, b) sociodemographic characteristics, c) medical, mental health, and behavioral health conditions, d) substance use, and e) patient receipt of recommended testing, cancer screenings, pneumococcal vaccinations, and mental health and SUD treatment. Variables for recruitment outcomes included whether enrolled patients attended WISH-TC in year 1