INTRODUCTION

Women experiencing homelessness have compounding healthcare needs that are largely unmet by existing healthcare systems – a problem made progressively worse by the increasing numbers of these women living in Los Angeles’ Downtown Skid Row Community (a 55-square block area in Los Angeles’ Central City East). Since 2013, the number of women experiencing homelessness has increased by 55% in Los Angeles County. The 2016 Downtown Women’s Needs Assessment survey results show a continuing demographic shift toward older women in Skid Row. More than half of all survey respondents (60.2%) were age 51 and over, a nearly 8% increase from 2013 (52.4%), and a 13% increase from 2010 (47%). With a life expectancy in the low 60s, older adults who have spent years living unhoused disproportionately use emergency healthcare services because of complex health problems, including chronic health diseases like diabetes, the effects of which are compounded by the lack of housing. Research demonstrates the considerable cost-effectiveness of Chronic Disease Self-Management programs, however a lack of research exists regarding how these programs improve the health and healthcare of female homeless populations. This paper demonstrates that accessible, culturally appropriate, and flexible approaches to these self-management programs can help women who are currently or formerly homeless successfully manage chronic health conditions such as diabetes.

BACKGROUND

The Downtown Women’s Center, in partnership with the University of Southern California Suzanne Dworak-Peck School of Social Work, L.A. Health Care Plan, Los Angeles Central Providers Collaborative, United Homeless Healthcare Partners, and Wesley Health Centers, formed a steering committee that would focus on improving the health of women living and receiving services in the Skid Row Community of Los Angeles, California. This effort was supported by the Robert Wood Johnson Foundation’s Spreading Community Accelerators through Learning and Evaluation, or SCALE Initiative, which is part of the 100 Million Healthier Lives Campaign, and is a project of the Institute for Healthcare Improvement (IHI). The purpose of SCALE is to support community-based solutions that create system-level improvements in population health. The SCALE initiative supports 20 Pacesetter Communities through on-going mentoring and four in-person training sessions known as Community Health Improvement and Leadership Academies (CHILAs) to promote experiential community health improvement work.
Improving Health Outcomes for Women

As a Pacesetter Community, the steering committee in Los Angeles looked at a growing need to improve health outcomes of women experiencing homelessness in the Skid Row Community; particularly those at risk for or living with chronic diseases such as diabetes. Three women with lived experience of homelessness, one of whom is diabetic, served as members of the SCALE steering committee. The members provided personal insight into the needs of the community, gaps in services, program development and the best ways to engage participation. They shared the challenges that they experience when trying to improve their own health and healthcare. For example, they stated that many people who are homeless do not have access to refrigeration, both for their medications (like insulin) and to be able to store healthy perishable foods. They shared that many shelters do not allow guests to bring in their own food, and that most shelters and other places that provide meals do not provide healthy food options, leaving them to frequently go days without fruit or vegetables. They stated that women in this community want to eat healthier, but they also need education regarding quantities of food to eat and how each food item impacts diabetes treatment or prevention efforts. They also shared that they do not feel safe in this community, impacting their ability to exercise outside. Having a better understanding of the barriers to diabetes treatment for this population, the steering committee created and executed a 12-month direct service diabetes intervention program, Women for Wellness, as well as a collaborative of 13 partners forming the Skid Row Diabetes Learning Collaborative.

APPROACHING HEALTH EQUITY

Throughout the execution of the Women for Wellness Program, the steering committee grappled with how to create programming incorporating a health equity lens. The Centers for Disease Control and Prevention notes that, “health equity is achieved when every person has the opportunity to ‘attain his or her full health potential’ and no one is ‘disadvantaged from achieving this potential because of social position or other socially determined circumstances.’”vii As health inequities can lead to shorter life spans, complex health concerns, and reduced access to health resourcesviii the steering committee made decisions with, not for, members with lived experience. For the steering committee, incorporating the concept of health equity into conversations involved facilitation of meaningful feedback and dialogue about programmatic recommendations and strategies, as well as relationship-building among non-traditional service partners. As a core strategy to achieving health equity in our local community, community partners that work outside the homeless healthcare setting were invited to collaborate with us in new ways, thereby improving health outcomes for members within the Skid Row Community by learning firsthand about barriers to care and the need for flexible, patient-centered approaches. The steering committee frequently turned to the 100 Healthier Lives Equity and Social Drivers of Health Approach White Paperix and framed our program design by asking, “Who isn’t thriving, and what would it take for that to change?”

THE WOMEN FOR WELLNESS PROGRAM

The Women for Wellness program was hosted at the Downtown Women’s Center, a community-based non-profit organization providing housing and supportive services to adult women experiencing poverty and homelessness. Based on the Diabetes Prevention Program (DPP) model, the core program provided weekly group classes and individual coaching to monitor food and activity goals, blood pressure, Body Mass Index, and A1c levels. The facilitator was trained as a Lifestyle Coach for the Diabetes Prevention Program (DPP), an evidence-based program funded primarily by the National Institutes of Health and supported by the Centers for Disease Control and Prevention. DPP was adapted to this population in order to address their unique barriers – such as lack of affordable housing, financial stress, lack of affordable and nutritious foods, and safe places to exercise.

DPP’s Lifestyle Intervention curriculum required one trained Lifestyle Coach to lead the year long program, including the CORE Sessions (Weeks 1-16) and the Post-CORE Sessions (Weeks 16+). Fifty
women referred from social services in Skid Row voluntarily enrolled in the Women for Wellness Program for one year. Due to requests by the program participants for additional information on nutrition, the program also focused on healthy food access and skill-building exercises to increase efficacy in food preparation and cooking while factoring in their limited budgets. For many of the sessions, one of the program participants volunteered to lead in order to share her expertise as a nutritional chef; her weekly food demonstrations used healthy recipes modified for diabetics, with affordable and accessible ingredients amenable to the homeless and low-income population. For participants with limited education, curriculum was also modified to best fit their literacy and reading comprehension levels. For example, the facilitator provided additional materials and translators for monolingual Spanish-speakers that were more culturally appropriate.

In order to increase program retention and outcomes reporting, incremental incentives were delivered based on attendance and class participation. These included gift cards to local grocery stores, blood pressure monitors, kitchen and household items, exercise equipment, and clothing. If participants missed group sessions, they were able to meet with the Lifestyle Coach in order to make-up the session. Phone sessions were also allowed if participants could not attend in-person sessions due to major health or housing concerns such as temporary hospitalizations.

During the classes, participants were informed about the health and social services at the Downtown Women’s Center to encourage access when needed. Available services include housing, daily meals, case management, showers, and bathrooms. Additional health programming at the Downtown Women’s Center included medical case management, health education classes, nutritional counseling, chronic disease self-management support groups, peer support, fitness classes, and other health screenings.

Participants who were patients at the co-located Women’s Health Center, a Federally Qualified Health Center (FQHC) and satellite site of the Wesley Health Centers, were also encouraged to meet with the Primary Care Physician.

Women completed a risk assessment survey in order to determine program eligibility. Women ages 18 and above who met criteria for being at risk or currently diagnosed with pre-diabetes or diabetes were eligible for this study. Participants monitored blood pressure and BMI monthly at minimum. Participants with A1c tests monitored their levels every six months. As a part of the DPP model, participants were asked to complete food tracking records to monitor daily calorie and fat intake. Participants were also encouraged to exercise regularly and set weekly personal health goals.
THE WOMEN FOR WELLNESS PROGRAM RESULTS

Out of the 50 participants in the one-year program, 48% improved Body Mass Index totals from baseline and 92% improved Blood Pressure from baseline. Out of the 34 participants who completed the A1c screening tests, 44% reported an improvement from baseline. The percentage of overweight individuals decreased from 28% at baseline to 26% at the end of the program. However, the percentage of obese individuals increased from 50% at baseline to 56% at the end of the program. Additionally, during this program, the percentage of participants who were permanently housed increased from 32% to 44%. The percentage of program participants who were uninsured and without a primary care provider decreased from 8% to 0%. More participants were assigned to the co-located FQHC clinic (60% to 64%) in order to receive primary health care. As measured by the 100 Million Healthier Lives Well-Being Survey, after 6-months, women perceived a 44% increase in ‘Healthier Lives’ and by the end of the year, they described an 84% increase in ‘Healthier Lives’.

AGE DEMOGRAPHICS

DIABETES LEARNING COLLABORATIVE

To support the work at a systems level, the coalition began a Diabetes Learning Collaborative for healthcare providers in the Skid Row Community providing diabetes treatment and educational programs. The collaborative was intended to share effective practices and increase networking opportunities for providers, thereby improving resource sharing and overall care coordination for patients. The members quickly realized that to impact healthcare for women living with diabetes, access to healthy food had to be addressed and women with lived experience needed to be collaborative members. Partners with a focus on food equity and participants of the Women for Wellness program were quickly added to the collaborative and the group convened monthly to create innovative and community-led solutions focusing on increased opportunities and the elimination of health disparities for women experiencing homelessness.

DIABETES LEARNING COLLABORATIVE RESULTS

The first year of the collaborative culminated in an Action Lab, a model supported by SCALE and IHI to encourage a community-wide process focusing on health equity to improve health outcomes for women. The Action Lab structure is a model of community engagement completed within a compressed timeframe and includes forming a leadership team, picking a topic area, conducting stakeholder analysis, and engaging community members. After assessment of community health access gaps, the

DIABETES LEARNING COLLABORATIVE MEMBERS

Champions for Change
Cooking Laboratory
Downtown Women’s Center
JWCH Institute
Los Angeles Christian Health Center
Los Angeles Community Action Network
Los Angeles Department of Public Health/Office of Women’s Health
L.A. Care
Los Angeles County Department of Social Services
Los Angeles Food Policy Council
Partners in Care Foundation
United Homeless Healthcare Partners
Village Health Foundation
coalition designed an eight-week walking group for women in the Skid Row Community. The walking group program, called DiaBEATit! Women’s Walking Group Program, focused on creating a safe and supportive environment for women to establish exercise goals, learn about diabetes and nutrition and foster social support. In addition, the walking group program exposed its participants to local community resources for healthy food including farmer’s markets and community gardens. An average of two coalition members were group facilitators each week, where members led walking group activities including food demonstrations, nutrition education, mindfulness exercises, community asset mapping, and a health resource fair. The walking group was open for all women, although many were already participants in the Women for Wellness Program.

**DiaBEATit! WOMEN’S WALKING GROUP RESULTS**

Results from the DiaBEATit! Women’s Walking Group were collected through the 10-item community walking group survey tool adapted from a Los Angeles County Department of Public Health community walking group survey tool. Seven questions assessed for demographic information, perceived safety, program satisfaction, and engagement methods. Three questions assessed for program-specific health knowledge and behaviors, feedback, and recommendations. During the 8-week walking group program, an average of 13.8 participants attended each group. Similarly, an average of 8 participants completed the surveys after each group. The average age of participants was 50 years. Overall, 119 women participated in the walking group. The survey noted that 47% reported that they felt safe enough in the community to exercise outside, 73% were very satisfied with the walking group program, 39% reported that they have never participated in a walking group before, and 91% said they would refer a friend into the group.

**DISCUSSION**

The Women for Wellness program achieved an 84% increase in ‘Healthier Lives’ by the end of the year, indicating that the participants’ overall sense of well-being had improved since the beginning of the program. As social support and female empowerment themes were incorporated into the program, participants may have developed stronger relational bonds with each other and the facilitators throughout the program, increasing well-being indicators.

Although less than half of participants improved their Body Mass Index totals from baseline, 92% improved Blood Pressure screenings. The program also provided instruction for blood pressure monitoring, which may have increased participants’ self-efficacy for self-monitoring behaviors. A slight decrease in overweight percentages and an increase in obese percentages suggest that the program was not as effective in weight management outcomes. A majority of program participants presented with common comorbid health issues – including mental health and substance abuse/addiction – which increase the risk for chronic health conditions such as diabetes. Systemic
barriers and accumulated stress from poverty and lack of sufficient housing and nutrition resources may also have contributed to these results.

Demographic trends indicate that the number of homeless individuals vulnerable to the effects of health inequities will continue to increase. In comparison to the housed population, homeless individuals face additional systemic barriers to achieving successful health outcomes. Food “deserts” encompassed by a lack of local and affordable grocery stores results in a scarcity of healthy foods available for the local population to purchase and consume. Most program participants experiencing homelessness lacked sufficient income to afford non-perishable foods. Moreover, many homeless individuals who could afford non-perishable foods were not allowed to keep their items in shelters due to strict policies. Food preparation became a common theme for homeless participants – individuals who could not find a place to cook or appropriately prepare meals were limited in what they could eat during any given day. The Skid Row Community in Los Angeles is also increasingly becoming an unsafe community in which the incidents of violence against women have increased.

Women in the program reported that despite their motivation to engage in meaningful physical activity in the community, there are scant resources for safe places to exercise. Although the Downtown Women’s Center offers fitness classes and the Walking Group which exposes participants to safe green spaces in the community, current statistics suggest that community safety for homeless women remains a serious public health issue.

Program participants with a chronic disease such as diabetes may also present with additional social and psychological barriers such as trauma, mental health disorders, and substance abuse or addictions. SCALE has adopted programs with an awareness of trauma-informed care as a necessary component to program delivery. Trauma-informed care involves incorporating the knowledge of both the prevalence and the symptoms of trauma history in program design and implementation. This also includes a system for caring for the caregivers who work with trauma survivors on a daily basis to ensure sustainability of their health and well-being. For providers with programming for the homeless population, particularly women, incorporating trauma-informed best practices reduces the risk for re-traumatization in patients, increasing their likelihood of meeting health goals and achieving successful health outcomes.

**LIMITATIONS**

There are limitations with respect to the generalizability of the findings. Because only 50 women from one agency participated in the program, it is difficult to generalize the findings to the larger population of homeless women. Because some data was self-reported, misclassification and recall bias may have resulted. As another confounding factor, social desirability bias may have occurred.

Other limitations include retention difficulties as attrition generally remains an issue for homeless healthcare programs. Chronically homeless individuals are less likely to complete a 1-year program as a population with multiple sociocultural, environmental, health, and safety barriers. Knowledge of each participant’s individual housing status, health barriers, and utilization rates of existing...
community resources can further inform future programming efforts. Moreover, dedication of additional staff resources to manage outreach and evaluation needs for health programming can increase capacity to successfully manage the program. As another limitation, there is generally a lack of reliable population data on homeless women with regards to chronic disease health programming.

**RECOMMENDATIONS**

Through a community-based participatory process, the SCALE Steering Committee and Diabetes Learning Collaborative recommend the following to improve health for women experiencing homelessness or who are formerly homeless and at risk or living with diabetes.

**To Healthcare Providers:**

- Ensure that women with lived experience are active participants in any and all healthcare delivery. Invite them to fully participate on steering committees and/or advisory boards to ensure that their input results in program design elements that reflect their needs.
- Apply flexibility with evidence-based chronic disease models to account for competing needs of homeless and low-income women. For example, if a patient misses appointments, do not remove her services entirely. Work with and around her schedule so that she can continue to address her health needs while also attending to other factors in her life.
- Ensure that psycho-social needs are addressed in addition to physical needs. Consider having a social worker attend Primary Care Provider appointments to help with emotional and resource needs that arise when managing diabetes and other health and behavioral health issues. This can help address social determinants of health.
- Train women with lived experience of chronic health conditions and homelessness to be Community Health Workers or lead classes and groups. Their ability to provide insight and outreach to other women has been invaluable to SCALE’s successes.
- Make services fun and get outside. The DiaBEATit! walking group got people outside and into the community. Participants visited local farmers markets, community gardens, and made exercise a safe social activity.
- Ensure that women know they can use their food stamps cards at certain farmer’s markets.
- Ensure that women are provided with enriched services or case management to link them to other resources that can help with basic needs, including shelter and housing referrals and job search assistance.
- Understand the barriers to obtaining and storing certain medications that treat diabetes and other diseases. Provide education to patients regarding medication effectiveness with or without refrigeration. When possible, prescribe medications that do not require refrigeration.

**To Housing and Shelter Providers:**

- Ensure that women with lived experience are active participants in planning and administering any and all housing and shelter services. Invite them to fully participate on steering committees and/or advisory boards to ensure that their needs are fully implemented.
- Allow shelter residents to bring in healthy food of their choosing so that they can accommodate their specific health needs.
- Ensure that residents can safely store medications, such as insulin, that needs to be refrigerated.
Partner with local groups to ensure that residents are aware of gardens, food delivery services and other non-traditional healthy food sources.

Serve fresh vegetables and fruit at every meal. Partner with organizations like local food banks or other local organizations to improve the inventory of healthy food options for shelter residents.

Invite local welfare agencies to provide education and enrollment on food stamps and welfare onsite to expand access to healthy foods. Provide education on how food stamps can be used at local farmer’s markets.

Ensure that residents enroll in Medicaid and are assigned a Primary Care Provider that they know how to call.

Provide healthcare workshops to increase education and awareness about diabetes prevention and treatment.

Provide workshops on healthy eating and food preparation in housing developments to create community and teach individuals how to enjoy healthy foods.

Provide transportation to medical appointments if not co-located in shelters or housing.

Help residents apply for welfare or disability benefits if they qualify. If possible, help residents improve their income through job preparation programs.

To Program and Policy Makers:

- Ensure that women with lived experience are active participants in any and all program or policy development. Invite them to fully participate on steering committees and/or advisory boards to ensure that their needs are fully implemented.
- Help women testify to elected officials on the barriers that they experience and how certain programs or policies can help them improve their healthcare.
- Utilize an equity model when designing programs and policy. This Racial Equity Toolkit can help organizations assess the impact of all proposed policies and insure that participants have what they need to thrive: http://www.seattle.gov/Documents/Departments/RSJI/RacialEquityToolkit_FINAL_August2012.pdf
- Encourage partners to think critically about health equity and what this means. Be open-minded to non-traditional partners who can provide unique expertise, capacity, and resources for advocacy efforts.

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