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Stressors, Self-Esteem, Social Activities, and Depression: A Sample of Patients at a Federally Qualified Health Center Who Experienced Homelessness

Joohee Lee
University of Southern Mississippi, joohee.lee@usm.edu

Morgan W. Bradwell
University of Southern Mississippi, morgan.bradwell@usm.edu

Michelle Brazeal
University of Southern Mississippi, michelle.brazeal@usm.edu

Timothy A. Rehner
University of Southern Mississippi, tim.rehner@usm.edu

Stephanie T. McLeod
University of Southern Mississippi, stephanie.t.mcleod@usm.edu

Stressors, Self-esteem, Social Activities, and Depression: A Sample of Patients at a Federally Qualified Health Center Who Experienced Homelessness*

Joohee Lee** · Morgan W. Bradwell*** · Michelle Brazeal**** · Timothy A. Rehner***** · Stephanie T. McLeod******

〈Abstract〉

This study examined the relationships between current stressors and depressive symptoms among Federally Qualified Health Center (FQHC) patients who

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** Corresponding Author, Associate Professor; School of Social Work, The University of Southern Mississippi, USA, Joohee.lee@usm.edu

*** Master of Social Work Candidate, School of Social Work, The University of Southern Mississippi, USA, morgan.bradwell@usm.edu

**** Assistant Professor, School of Social Work, The University of Southern Mississippi, USA, michelle.brazeal@usm.edu

***** Professor, School of Social Work, The University of Southern Mississippi, USA, Tim.Rehner@usm.edu

****** Research Assistant, Mississippi Integrated Health and Disaster Program, School of Social Work, The University of Southern Mississippi, USA, Stephanie.t.mcleod@usm.edu

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experienced homelessness, with a particular focus on the role of self-esteem and social activities on these relationships. The sample included patients who visited any clinic site of a FQHC in the southern part of Mississippi and qualified for the Health Care for the Homeless (HCH) Program. Assessments included the Patient Health Questionnaire (PHQ-9), the DUKE Health Profile, and a checklist of stressors. Results of the multivariate analysis using structural equation modeling revealed that ambulation difficulties were related to depressive symptoms directly and indirectly through social activities. SES-related stressors were related to depressive symptoms directly and indirectly through self-esteem and social activities. Relational and legal/police-related stressors were linked to depressive symptoms only through self-esteem. These results indicate the importance of integrated community healthcare services to address the physical, social, and mental healthcare needs of the homeless population.

Key Words: homelessness, stressors, self-esteem, social activities, depression

Ⅰ. Introduction

The economic crisis in 2008 – also known as the Great Recession – impacted countries around the world and led to a global increase in homelessness (Bainbridge & Carrizales, 2017). A few years before the Great Recession, the United Nations conducted a global survey and estimated that at least 100 million individuals worldwide – or between 1 to 2 percent of the world's population – experience homelessness, and more than one billion individuals worldwide experience inadequate housing (U.N. Commission on Human Rights, 2005). Because individuals experiencing homelessness tend to live transient lifestyles in order to meet their basic needs,

collecting reliable counts of homeless individuals in any given city or country can be very difficult. This reality, coupled with the limited resources that exist for individuals experiencing homelessness, often results in homeless individuals being underrecognized, understudied, and underserved.

To address this growing public health concern, international organizations such as the Fédération Européenne des Associations Nationales Travaillant avec les Sans-Abri (also known as FEANTSA or the European Federation of National Organizations Working with the Homeless) were established. In order to create a unified definition of homelessness on which research can be done and policy can be developed, FEANTSA (2015) created the European Typology of Homelessness and housing exclusion (ETHOS), which categorizes homelessness into four main domains: rooflessness (living without a shelter of any kind), houselessness (sleeping in temporary shelters), living in insecure housing (living with severe social exclusion due to insecure tenancies, eviction, and/or domestic violence), and living in inadequate housing (living in illegal caravans, unfit housing, or severe overcrowding). Many countries around the world have adopted this framework in order to address homelessness in a broader way; however, some countries, including the United States, have continued to use a more specific definition of homelessness, considering only those that are completely unsheltered or living in temporary housing situations (Bainbridge & Carrizales, 2017; Japan Ministry of Health, Labour and Welfare, 2014; Korea Health and Welfare White Paper, 2010).

Despite many national efforts to combat its negative impacts, homelessness remains a serious national concern as it highlights the

influence that social injustices may have on the quality of life of those experiencing homelessness (Biswas-Diener & Diener, 2006; Georgiades, 2015; Hodgetts, Stolte, & Groot, 2014; Perreault, Jaimes, Rabouin, White, & Milton, 2012; Snodgrass, 2014). In the 2016 Annual Homeless Assessment Report (AHAR) to Congress, the U.S. Department of Housing and Urban Development (HUD) reported in a cross-sectional analysis that nearly 550,000 people in the United States were experiencing homelessness, and approximately 78% of those individuals were age 18 or above (U.S. Department of Housing and Urban Development [HUD], 2016). Although the national rate of individuals experiencing chronic homelessness within the U.S. has declined by 35% since 2007 (HUD, 2016), a significant number of homeless individuals remained unsheltered, typically staying on the street, in parks, in vehicles, or under bridges. While approximately 29% of homeless individuals across the U.S. are unsheltered, an alarming 48.9% of homeless individuals in Mississippi remain unsheltered – making Mississippi the state with the fifth highest percentage of unsheltered homeless individuals in the United States (HUD, 2016). The homeless population also has higher rates of chronic disease compared to the rest of the population in the United States (National Health Care for the Homeless Council [NHCHC], 2016). According to a report by the NHCHC (2016), it was estimated that half of homeless people had hypertension, more than one-third had experienced a heart attack, and 18% were diabetic.

A growing body of literature has focused on stressors that homeless individuals experience and the impacts of these stressors on mental health (Eyrich-Garg, Cacciola, Carise, Lynch, & McLellan, 2008; Krausz, Clarkson, Strehlau, Torchalla, & Shuetz, 2013; Lippert & Lee, 2015);

however, very limited attention has been paid to homeless individuals who need care for a chronic health condition. The current study examines the relationships between daily stressors and depression among homeless patients at a Federally Qualified Health Center (FQHC), with a particular focus on the role of self-esteem and social activities on these relationships.

1. Homelessness, Stressors, and Mental Health

Previous studies have documented that homeless individuals are at an increased risk for mental health problems (Frankish, Hwang, & Quantz, 2005; Lippert & Lee, 2015). While results have varied across studies, several sources reported that more than 30% of homeless individuals had one or more mental illnesses (Burt, Aron, & Valente, 2001; Lippert & Lee, 2015), with some studies identifying considerably higher rates (Eyrich-Garg et al., 2008; Krausz et al., 2013; North, Eyrich-Garg, Pollio, & Thirthalli, 2010).

Stressors common among the general public that increase the risk of psychological difficulties (i.e., financial strain, trauma, chronic pain or illness, problems within the social network, lack of social resources, etc.) tend to occur more frequently among homeless populations (Bolger, DeLonis, Kessler, & Schilling, 1989; Cronkite, Moos, Cohen, & Swindle, 1998; Goodman, Saxe, & Harvey, 1991; Littrell & Beck, 2001; Morse & Calsyn, 1986; Toro, 1998) and may be more impactful for those experiencing homelessness. Littrell and Beck (2001) stated that “not only is the status of being homeless a stressor in itself, but additional stressful events are more likely to occur within the environments inhabited by the homeless” (p. 16). Further compounding the issue homeless individuals

often have less access to community resources – such as physical and mental healthcare, adequate housing, consistent meals, case management, etc. – than the general public (Thompson et al., 2016). Littrell and Beck (2001) also noted that insufficient transportation could contribute to homeless individuals missing healthcare appointments or employment interviews; events that could support improvements in health and stability.

Relational stressors, or stressors involving a person's relationship with other individuals, have been found to be related to both mental health and homelessness. Several reports have documented relationship problems as a reason for homelessness (Chamberlain & Johnson, 2011; Crane et al., 2005; Echenberg & Jensen, 2009; Fazel, Geddes, & Kushel, 2014; Scutella, Johnson, Moschion, Tseng, & Wooden, 2012; Shinn et al., 2007). A study of homeless youth by Wong, Clark, and Marlotte (2016) found that a "chaotic home environment" (p. 846) and emotional abuse and neglect were associated with poor mental health symptoms and behaviors. Another study of homeless adults found that family relationship problems and social problems were associated with suicidal ideation (Coohey, Easton, Kong, & Bockenstedt, 2015). It is possible that the relationship between mental health and homelessness is bidirectional; poor mental health may lead to relationship problems that ultimately result in homelessness, or homelessness may lead to or exacerbate poor mental health (Brown et al., 2016).

Moreover, homeless individuals are likely to experience additional stressors unique to the population. For example, in a study conducted by Georgiades (2015), male adults experiencing homelessness reported the most prominent daily challenges included inadequate sleep due to fear of being arrested, police harassment, and dehumanization from society. These

unique stressors occurred with more frequency in this particular sample than hunger, substance abuse withdrawal symptoms, and depression (Georgiades, 2015). Additionally, a study of African-American men experiencing homelessness noted that legal issues contribute to the unique stressors that homeless individuals face and indicated both negative attitudes from authority figures and harassment from law enforcement as significant stressors in their daily life (Littrell & Beck, 2001).

Unfortunately, the stressors unique to this population have not been sufficiently examined by current literature. Furthermore, there is limited literature about homeless individuals who suffer from chronic health problems that could impact the ways stress is experienced. Therefore, it is imperative to examine the stressors associated with adult homeless individuals and the impact that they have on social and mental health.

2. Homelessness, Physical Health, and Mental Health

Homeless individuals are at increased risk for health problems including chronic diseases, infectious diseases, mental health issues, and injuries (Frankish et al., 2005). A study by Brown et al. (2016) found that more than half of a sample of older homeless adults had poor or fair health, and more than 70% reported having had mental health issues in the past. Chambers et al. (2014) described an association between poor mental health and having a chronic health condition among a sample of homeless women. Another study reported depression among more than one-quarter of a sample of homeless mothers, as well as an association between depression and unmet health needs (Roze, Vandentorren, van der waerden, & Melchior, 2018). Studies reported that joint-, mobility-, and foot-related

problems are prevalent among the population (Raoult, Foucault, & Brouqui, 2001; To, Brothers, & Van Zoost, 2016). Therefore, the present study focuses on ambulation difficulties and views them as a daily stressor since walking is the primary method of transportation among homeless individuals (Richards & Smith, 2006; To et al., 2016). For this reason, ambulation difficulties can limit mobility, which may result in reduced social participation and disrupt social relationships.

3. Homelessness, Stressors, Self-esteem, Social Activities, and Mental Health

The relationship between stressors and depression can be better explained when addressing the role that psychosocial health factors may play on depression. Research suggests that positive self-concept and positive perceptions of the world are essential for developing empathy towards others, feeling contentment in one's life circumstances, and increasing creativity and productivity – all of which are adaptive qualities that may positively influence mental health (Taylor & Brown, 1988). Thus, an individual's positive self-image may serve as a protective factor against mental health problems. Additionally, self-esteem has been found to be an intervening mechanism that links stressors and psychological distress. Auerbach, Abela, Ho, McWhinnie, and Czajkowska (2010) longitudinal study found that the relationship between stressful events and depressive symptoms were both direct and indirect through the mediating variable of self-esteem. Lee, Joo, and Choi (2013) cross-sectional study found that self-esteem mediated the relationship between work-related stress and depression.

Previous studies have indicated that social relationships, social engagement, or social connectivity play a critical role in mental health and well-being (Glass, De Leon, Bassuk, & Berkman, 2006; Tough, Siegrist, & Fekete, 2017). Van Straaten et al. (2018)'s homeless study reported that an increase in social support and feeling of relatedness to others were associated with improved psychological distress. Engagement in social activities may play a mediating role connecting stressors and depression. Several studies have reported an association between inadequate transportation and reduced social participation (Bascom & Christensen, 2017; Levasseur et al., 2015). A scoping study by Levasseur et al. (2015) found that social participation among older adults was positively associated with having a car or driver's license, public transportation, proximity to resources, social support, and neighborhood security; therefore, as reliable transportation and supportive aspects of their community increased, so did their social participation. Nevertheless, there is little to no empirical research examining the link between stressors, self-esteem, engagement in social activities, and depression among individuals experiencing homelessness.

Ⅱ. Current Study

Although a growing body of research has focused on the various challenges and problems homeless individuals face on a daily basis as well as impacts on mental health, there has been little attention paid to how self-esteem and engagement in social activities play a role in these relationships. The current study focuses on the following daily stressors:

ambulation difficulties, socioeconomic (SES)-related stress, relational stress, and the stress related to legal/police involvement. In this study, SES-related stress is defined as events associated with socioeconomic factors, such as employment, housing, health service, and transportation. Relational stress is defined as the real or perceived threat to the individual in their social, romantic, home or family lives. Legal/police stress is defined as any involvement with the legal system or law enforcement. After reviewing available literature and considering what is known about stress and depression in the homeless population, the authors proposed a path model in which stressors predict depression both directly and indirectly through the mediating variables of self-esteem and engagement in social activities. In addition, in this model, there are positive correlations between SES-related stressors, relational stressors, and law/police-related stressors. Self-esteem is expected to be positively related to social activities.

Ⅲ. Methods

1. Sample and Sampling Procedures

The sample included patients who visited any clinic site of a Federally Qualified Health Center (FQHC) in the southern part of Mississippi. To be included in the study data, the patient must have met the following criteria: (1) be a current FQHC patient with a clinic visit between January 2015 and October 2017; (2) be at least 18 years of age; (3) completed the required assessments; and (4) qualify for the Health Care for the Homeless

(HCH) Program. HCH status was determined by housing status. Eligible housing status for inclusion in the HCH Program includes organized homeless shelters or transitional housing, living on the street (includes outdoors, car, camp, and other unsafe environments), single room occupancy housing, doubling up or temporarily living with others (NHCHC, 2011).

Using these criterion, a sample of 193 patients were included in the analysis. Assessments were conducted by the social worker at the time of the first visit. Answers were recorded in a program specific web-based database (Dagger) designed to provide assessment scoring and patient tracking for social work clinicians. The researchers did not obtain direct consent from patients in this study. All data used included variables collected from participants during routine visits with a provider in a Federally Qualified Health Center. As a part of the FQHC treatment consent process all patients sign permitting the use of this data for research purposes. Data provided to researchers could not be identified either directly or through related identifiers included in the dataset. This study was reviewed and approved by the Human Subjects Protection Review Committee of the University with which authors of the current study are affiliated.

2. Measures

1) Depression. To measure the severity of depression, the Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001) was used. The frequency of each symptom during the past two weeks was rated using a 4-point scale that ranged from 0 (not at all) to 3 (nearly every

day). A sum score was computed from the nine individual items (range from 0 – 27), with higher scores indicating greater depressive symptoms. Cronbach's alpha calculated in the current study was .85.

2) Self-Esteem. The five-item subscale of the DUKE Health Profile – Self-Esteem (Parkerson, Broadhead, & Tse, 1990) was used to measure the level of self-esteem. Items assess personal and social self-concept (e.g., I like who I am; I am comfortable being around people; Parkerson et al., 1990, 1991). For each of the five statements, respondents were asked to choose from 0 (No, doesn't describe me at all) to 2 (Yes, describes me exactly). The raw scores on a scale of 0, 1, and 2 were then transformed to scores of 0, 10, and 20 (Parkerson et al., 1990). A sum score was computed from the five items (range from 0 to 100), with higher scores indicating greater self-esteem. Cronbach's alpha calculated in the current study was .65.

3) Social Activities. To measure levels of engagement in social activities, the Duke Health Profile (DUKE) – Social Health subscale was used. The scale consists of 5 items, two of which represent social activities (e.g., "socialize with other people [talk or visit with friends or relatives]"; "Take part in social, religious, or recreation activities"; Parkerson et al., 1990: 1062). Respondents were asked to indicate how often they engaged in social activities during the past week. Responses were rated on a 3-point scale ranging from 0 (None) to 2 (A lot). A sum score was computed from the two items (range from 0 – 4), with higher scores indicating greater engagement in social activities. For the two congeneric items, the Spearman-Brown coefficient was used for testing reliability and the score was .50.

4) Stressors (SES-related Stressor, Relational Stressor, Law/Police-

related Stressor). Using a checklist of potential stressors listed in the database, participants were asked about different types of stressors that were currently causing difficulty. For this study, four types of stressors fell into the SES-related stressor category: housing problems; employment problems; poor healthcare services; transportation difficulties. Four stressors were collapsed into the relational stressor category: divorce/separation; marital problems; home or family life conflict; relationship problems. Each item was scored as 0 (no) or 1 (yes), and the number of "yes" responses to each item were summed, giving equal weight to each. Higher scores indicated more stressors (relational and SES) faced by the homeless individual. For stress related to legal/police involvement, participants were asked to respond yes or no on the following items: trouble with the police; police involvement; personally arrested or imprisoned. Those who have experienced any of these problems were coded as 1 (yes) and all others were coded as 0 (no), since a vast majority indicated either no or yes to one of these problems. Very few people reported more than one of the legal/police problems listed above.

Ambulation difficulties were measured using the DUKE – Physical Health subscale (Parkerson et al., 1990, 1991). The scale consists of 5 items, two of which represent ambulation (walking and running). Using a 3-point scale ranging from 0 (None) to 2 (A lot), respondents were asked to indicate to what extent today they would have any physical trouble and difficulties 1) walking up a flight of stairs and 2) running the length of a football field. A sum score was computed from the two individual items (range from 0 – 4), with higher scores indicating greater ambulation difficulties. For the two congeneric items, the Spearman-Brown coefficient

was used for testing reliability and the score was .68.

3. Statistical Analysis Plan

First, distributions of continuous variables were screened for normality, with the value of the skewness and kurtosis ± 1.96 (Hair, Anderson, Tatham, & Black, 1998). Additionally, outliers were identified through Z-score, with the cut-off value of 3.29 (Tabachnick & Fidell, 2001). Second, age, gender, education, race/ethnicity, and living alone were examined to determine whether they should be included in the multivariate model as control variables. Third, the proposed path model was tested using AMOS version 24 (Arbuckle, 2016). Full information maximum likelihood (FIML) in AMOS was adopted to handle missing data. To assess model fit, several indices were used: the chi-square test (χ^2), the normed fit index (NFI), the Tucker-Lewis Index (TLI), the comparative fit index (CFI), and the Root Mean Squared Error of Approximation (RMSEA) with a 90% confidence interval (CI). Non-significant chi-square, the NFI, TLI, and CFI of no less than 0.95, and the RMSEA of no more than 0.06 typically indicate a good fit (Hu & Bentler, 1999).

Ⅳ. Results

1. Sample Characteristics

A total of 193 respondents were included in the analysis. Fifty-three percent were females, while 47% were males. The majority of the

respondents were either White (72%) or African American (25%). The respondents ranged in age from 19 to 67, with an average age of 46. Educational achievement ranged from 34% receiving less than a high school diploma, 60% with a high school diploma, some college, or an associate's degree, and only 6% had a bachelor's degree or higher. Sixteen percent of respondents were currently married. Regarding stressors, 54% reported one or more relational stressor, and the vast majority of respondents (88%) had one or more SES-related stressor. Eighteen percent indicated police/law-related problems.

2. Preliminary and Bivariate Analyses

Distributions of variables were screened for normality and outliers applying the value of the skewness and kurtosis ± 1.96 and the value of Z-score 3.29, respectively. The Pearson's correlation for continuous variables and the Spearman's correlation for dichotomous or ordinal variables were computed for the relationship between variables. Possible confounding factors including age, gender, education, race/ethnicity, and living alone were examined to determine whether they should be included in the multivariate model as control variables. The magnitude of these relationships was neither moderate nor strong; therefore, these confounding variables were not included in the subsequent analysis as control variables. Bivariate correlations among the study variables are presented in <Table 1>.

<Table 1> Correlations between variables

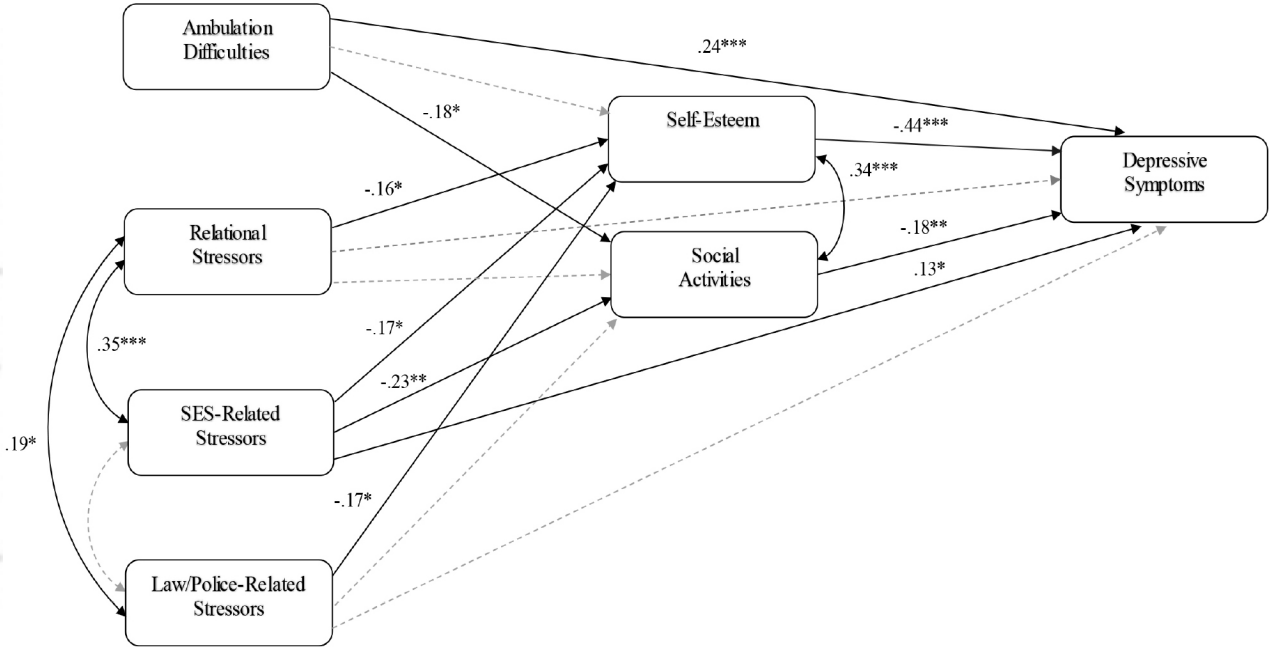
	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	–											
2. Gender	-.15*	–										
3. Education	.03	-.18*	–									
4. Race/Ethnicity	.11	-.11	.18*	–								
5. Married	.09	-.07	.07	.04	–							
6. Ambulation Difficulties	.51***	-.16*	-.11	-.10	.07	–						
7. Relational Stressors	-.02	-.07	.07	.11	.17*	.10	–					
8. SES-Related Stressors	-.01	-.01	-.14	-.09	.05	.02	.35***	–				
9. Law/Police–Related Stressors	.05	.15*	-.09	.11	-.01	-.08	.19**	.12	–			
10. Self-Esteem	-.04	.02	.07	-.08	-.08	-.10	-.28***	-.25**	-.22**	–		
11. Social Activities	-.08	.02	.15	.04	-.04	-.18*	-.21**	-.27**	-.16*	.41***	–	
12. Depressive Symptoms	.08	-.19*	-.08	.00	.05	.32***	.20**	.29***	.15*	-.57***	-.44***	–

Note: *p<.05; **p<.01; ***p<.001

3. Multivariate Analyses

Fit indices reflected an adequate fit between the model and the sample data: $\chi^2(3, N = 193) = 3.24$, $p = .356$, NFI = .98, TLI = .99, CFI = 1.00, RMSEA = .02 (90% CI [.00, .13]), PCLOSE = .55. The path diagram of the model with standardized parameter estimates appears in <Figure 1>. As expected, there was a direct relationship between ambulation difficulties and depression ($\beta = .24$, $p < .001$). Additionally, indirect pathway through the mediating variable of social activities was detected. In other words, greater levels of ambulation difficulties were related to lower social activities ($\beta = -.18$, $p = .018$) which, in turn, was related to greater depressive symptoms ($\beta = -.18$, $p = .007$). Of stressors, only SES-related stressors were directly related to depressive symptoms ($\beta = .13$, $p = .038$). Additionally, indirect pathways through the mediating variables of self-esteem and social activities were detected. Increased number of SES-related stressors was related to lower self-esteem ($\beta = -.17$, $p = .027$), which, in turn, was related to greater depressive symptoms ($\beta = -.44$, $p < .001$). Likewise, increased number of SES-related stressors was related to lower social activities ($\beta = -.23$, $p = .004$), which, in turn, was related to greater depressive symptoms ($\beta = -.18$, $p = .007$). On the other hand, direct relationships were not found between relational stressors and depression and between law/police-related stressors and depression. However, indirect pathways through self-esteem were found. Increased number of relational stressor was related to lower self-esteem ($\beta = -.16$, $p = .042$), which, in turn, was related to greater depressive symptoms ($\beta = -.44$, $p < .001$). Likewise, those who had law/police-related stressors reported lower self-esteem ($\beta = -.17$, $p = .020$), which, in turn, was

<Figure 1> Path model of factors associated with depressive symptoms



Note: $\chi^2(3, N=193)=3.24$, $p=.356$, NFI=.98, TLI=.99, CFI=1.00, RMSEA=.02 (90% CI [.00, .13]), PCLOSE=.55. Significant standardized coefficients are presented; Non-significant path are illustrated by dotted line; *$p<.05$; **$p<.01$; ***$p<.001$

related to greater depressive symptoms (β = -.44, p < .001). Results also revealed that there were positive correlations between SES-related stressors and relational stressors (r = .35, p < .001) and between relational stressors and law/police-related stressors (r = .19, p = .010). Squared multiple correlations for self-esteem, social activities, and depressive symptoms were .13, .22, and .44, respectively. This indicates that the overall model accounted for 13%, 12%, and 44% of the variance in self-esteem, social activities, and depressive symptoms, respectively.

Ⅴ. Discussion

This study examined the relationships between current stressors and depressive symptoms among FQHC patients who experienced homelessness, and the role of self-esteem and social activities on these relationships. Results from the descriptive analysis indicated that over half of respondents have currently faced one or more relational stressors, and the vast majority of respondents (88%) had one or more SES-related stressors. In addition, legal/police-related problems were identified as a current stressor among 18% of respondents.

Results of the multivariate analysis revealed ambulation difficulties were directly related to depressive symptoms and indirectly related through social activities. This finding was not surprising since ambulation difficulties may significantly limit mobility and disrupt the ability of an individual to engage in social activities, which in turn may affect depression. This may be especially true when private or public transportation is not accessible. Likewise, SES-related stressors were

related to depressive symptoms directly and indirectly through social activities. SES-related problems could also significantly limit opportunities for engagement in social activities, which in turn may affect depression. These findings are consistent with Harwood, Pound, and Ebrahim's (2000) study, which found that both socio-economic factors and health conditions were related to social engagement. These findings support the need for interventions that bolster social networks that support social activities.

In addition, the findings of the current study highlight the role of self-esteem as a mechanism in which stressors influence depression. SES-related, relational, and legal/police-related stressors were all linked to depressive symptoms through self-esteem. It has been well-documented that self-esteem can serve as a protective factor against adverse consequences of stressful events (Lee et al., 2013; Mann, Hosman, Schaalma, & de Vries, 2004). However, the findings of the current study bring our attention to relational and contextual factors that might affect self-esteem (Andrews & Brown, 1995; Hall, Kotch, Browne, & Rayens, 1996; Hayes, Harris, & Carver, 2004).

Results of this model suggest that interventions designed to address mental health disparities among homeless people must consider how individual, physical, and social characteristics promote or sustain issues like depression. In addition, these results indicate the importance of integrated community healthcare services to address the physical, social, and mental healthcare needs of the homeless population. Being able to address all healthcare concerns with an interdisciplinary healthcare team in one location may also significantly decrease the amount of appointments missed due to a lack of reliable transportation, potentially leading toward improved management of chronic health conditions, mental health

conditions and/or issues related to substance abuse. Moreover, many agencies serving homeless populations have moved toward a “day shelter” model – essentially opening their doors during daylight hours to provide homeless individuals a place to congregate during the day, escape inclement weather situations, receive case management services, and engage in social activities with other homeless individuals (Petrovich, Murphy, Hardin, & Koch, 2017). The results of this study may further validate the need for day shelters, as the services typically offered by day shelters address and/or provide protective factors for multiple stressors experienced by homeless individuals (i.e., relational stressors addressed via social activities and programs, SES-related stressors addressed via comprehensive case management, etc.). In response to the results of this study and similar studies, social workers can advocate for increased funding toward integrated community healthcare services and non-profit homeless day shelters in order to address the health concerns and stressors faced by the homeless population.

Limitations and Futures Studies

There are a few limitations of this study. First, because it was a cross-sectional study, causal relationships were not established. Second, the sample was not randomly selected; this study included adult patients who met the criteria for the HCH program. Third, the sample used in this study was specific, so the results may not be generalizable to other groups. Homeless adults in regions outside of South Mississippi and those who were not assessed by social workers at a FQHC may not report similar stressors or assessment scores compared to the individuals examined in

this study. Lastly, this research used data collected during verbal, face-to-face interviews with patients. This form of data collection may result in interviewer bias and/or response bias.

Based on these findings and limitations, future research should include longitudinal studies to clarify the causal processes of study variables. Longitudinal research could also aid in understanding whether the relationships between the studied factors continue to exist in formerly homeless individuals who have secured permanent housing. It would also be useful to explore whether any differences exist within the homeless group based on type of homelessness (street homeless, doubling up, etc.). Finally, it may be of interest to compare homeless FQHC patients to non-homeless FQHC patients to determine if the relationships are truly homelessness-specific or whether they are shared by the entire FQHC patient population, nearly all of whom are of low socioeconomic status.

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