Article



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#### Abstract

This study investigated the causes of homelessness in Ghana and associated psychosocial distress. A sample of 86 homeless participants listed perceived causes of their homelessness and completed measures of psychosocial distress, and 97 non-homeless participants completed the same measures psychosocial distress. Causes of homelessness among the participants included poverty (30.1%), migration (10.4%), unemployment (2.2%), parental demise (2.2%), parental neglect (0.5%), and parental divorce (0.5%). Multivariate analysis revealed higher psychosocial distress among the homeless than the non-homeless. Homeless females reported higher levels of stress and suicidality than their male counterparts. The study demonstrates the need for timely and effective implementation of interventions such as provision of affordable housing, financial assistance, job-creation, and skill training for the homeless directly related to known causes of homelessness and accounting for gender differences.

#### Keywords

Ghana, homelessness, causes, interventions, psychosocial distress

## Introduction

## Background

Homelessness is an undesirable life circumstance that results in psychosocial distress. It is characterized by economic deprivations, social marginalization, poor mental health, and negative self-concept (Embleton et al., 2016; Osei Asibey et al., 2020; Schütz, 2016; Smartt et al., 2019). Homelessness usually limits individuals' access to resources, employment opportunity, and social network (Calvo et al., 2018; Nishio et al., 2017; Vázquez et al., 2018). It can affect every part of a person's daily life.

In the past three decades, homelessness has become a major public health concern that poses severe challenges to policymakers and researchers alike (Byrne et al., 2013). It is a serious global problem with the situation affecting about 2.5–3.5 million people annually (Balasuriya et al., 2020) and about 650,000 people sleeping on the streets on daily basis in high income countries such as the United States (Corrigan et al., 2015; Fox et al., 2016).

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## Nature of homelessness in Ghana

Homelessness is considered a major social and public health issue in developing countries (Abekah-Carter and Oti, 2022; Osei Asibey et al., 2020), and more so in developed countries (Toro, 2007). Research on homelessness and associated health challenges have received increased attention in developed countries. However, the concept of homelessness appears to be relatively new in developing countries. In Ghana, for example, the term "homelessness" has no direct local rendition in any Ghanaian language. This suggests that homelessness is an emerging issue in developing countries. However, De-Graft Aikins and Ofori-Atta (2007) have reported that homeless individuals in Ghana are exposed to elevated levels of mental health challenges that threaten their life and well-being.

By large, the nature of homelessness in developing countries like Ghana is significantly different from homelessness in developed countries (Komla, 2013). The Ghana Statistical Service (2002) defined homelessness not only in housing terms but also lack of belongingness to a household. However, it must be noted that while the concept of homelessness is well understood in Ghana, there is no formal definition rendered by any state department. Previous studies on homelessness in Ghana conceptualized homelessness in terms of the quality of residential facilities primarily identifying people living in slums as homeless (Asante et al., 2015; De-Graft Aikins and Ofori-Atta, 2007). It must be pointed out that such conceptualization of homelessness in Ghana is highly superficial and limited in focus. A valid definition of homelessness should take into consideration lack of settlement structures and enormity of financial stress. These two defining elements are highly conspicuous in the streets of Accra.

### Impact of homelessness

Homelessness poses a consistent challenge to health systems, especially to mental health practitioners, policymakers, and researchers (Cleverley and Kidd, 2011; Osei Asibey et al., 2020). Several studies have shown that homeless individuals are at extreme risk of abuse and victimization, poor physical and mental health, and high premature mortality (e.g., Balasuriya et al., 2020; Fox et al., 2016; Osei Asibey et al., 2020; Urbanoski et al., 2018). Compared to the non-homeless, homeless people suffer worse mental health (Hwang, 2001; Lippert and Lee, 2015; Public Health Agency of Canada, 2006). Among the mental health conditions frequent in the literature are depression, traumatic symptoms, anxiety, stress, and somatization (Asante et al., 2015; Votta and Manion, 2003). Chronically homeless individuals in particular are reported to have higher rates of mental health problems than episodically homeless people or new-entry homeless people (Lippert and Lee, 2015).

Research evidence further demonstrates that homeless individuals are at an elevated risk of substance abuse (Baggett et al., 2015), healthrisk behaviors and delinquency especially among homeless youth (Chondraki et al., 2014). Studies have cited substance use as normative of homelessness, with evidence indicating as high as 69% to 71% of homeless youth reporting abuse of alcohol or drugs (Fox et al., 2016; Urbanoski et al., 2018). Abuse of drugs and alcohol places homeless youths at an increased risk of negative health consequences such as risk of disease infection, depression, suicide, physical victimization, and illegal activities (Chondraki et al., 2014; Fekadu et al., 2014).

#### Rationale for the present study

Much of the existing research has focused on examining the risk factors for homelessness (Chamberlain and Johnson, 2013; Fox et al., 2016). Some researchers, however, are shifting attention to examining physical and mental health consequences that homeless individuals confront on daily basis (Chondraki et al., 2014). Due to the substantial body of literature on risk factors of homelessness, there is a need to shift attention to mental health outcomes of homeless individuals, especially those in developing countries (Smartt et al., 2019). Given the increasing number of homeless people in Ghana, the current study aimed at examining the psychosocial consequences of homelessness in Ghana. The psychosocial consequences include depression, anxiety, stress, somatization, loneliness, traumatic symptoms, and suicidality. Other psychosocial symptoms such as hyperactivity, emotional difficulty, relationship problems, substance abuse, violent behaviors, and conduct disorders have previously been investigated in Ghana (Asante et al., 2015; De-Graft Aikins and Ofori-Atta, 2007).

In addition to assessing the psychosocial consequences of homelessness, the study sought to examine gender differences in the psychosocial impact of homelessness. Previous research had reported high rates of violence against homeless women (Vaughn, 2017), yet minimal research had focused on how these experiences impact on homeless women's mental health. In line with these objectives, two hypotheses were formulated. First, it was hypothesized that there are higher levels of psychosocial distress among homeless people compared to non-homeless people. Second, it was hypothesized that female homeless people experience higher levels of psychosocial distress than male homeless people. In the context of this study, psychosocial consequences of homelessness are conceptualized as psychosocial distress and operationalized as depression, anxiety, stress, somatization, loneliness, traumatic symptoms, and suicidality.

## Methods

## Design and procedure

The research involved a quantitative cross-sectional survey. Structured questionnaires were used to capture self-report information of the participants' mental health experiences. The questionnaires were translated into a major Ghanaian language (Twi) and adapted to fit the Ghanaian culture. In situations where a participant could not comprehend neither the English language nor the Twi language, the assistance of a native speaker of a particular Ghanaian language was sought to facilitate local translation to other languages. A pilot study was carried out by the researchers to test the reliability of the measuring instruments (questionnaire). In line with ethical requirements, the researchers explained the nature and purpose of the study to prospective participants and sought their consent for participation. Participants were asked to complete informed consent forms prior to answering the questionnaire. Participants took an average of 18 minutes to complete the questionnaire.

## Participants

The study participants (n=183) were purposively drawn from the Greater Accra Region of Ghana. They comprised of 86 homeless people (47.0%) and 97 non-homeless people (53.0%). The non-homeless sample served as a comparison group. The ages of the participants ranged from 14 to 49 years (M=24.95, SD=8.75). In terms of gender composition, there were more females (52.5%) than males (47.5%). Expectedly, there was a significant educational gap between homeless participants and non-homeless participants. Majority of homeless participants were either uneducated (41.9%) or had received only basic education (50.0%). On the contrary, nonhomeless participants mostly had high school education (61.9%) or tertiary education (35.1%). Table 1 provides further details on the demographic characteristics of the participants.

#### Measures

Structured questionnaires were used for data collection. They were used to collect participants' demographic information, causes of homelessness, and the state of their mental health. The mental health mental variables were loneliness, depression, anxiety, stress, posttraumatic symptoms, suicidality, and somatic symptoms. These variables were assessed using standardized instruments whose psychometric descriptions are provided below.

Revised UCLA Loneliness Scale. Russell et al. (1978) developed the UCLA Loneliness Scale consisting of 20 negatively worded items.

Variables	Homeless, $n = 86$	Non-homeless,	Total, <i>N</i> = 183 (100%)	
	(47.0%)	n=97 (53.0%)		
Gender				
Males	41 (47.7%)	46 (47.4%)	87 (47.5%)	
Females	45 (52.3%)	51 (52.6%)	96 (52.5%)	
Age range				
14–49 years	M=27.37, SD=9.53	M=22.80, SD=7.41	M=24.95, SD=8.75	
Educational background				
No formal education	36 (41.9%)	l (l.0%)	37 (20.2%)	
Basic education	43 (50.0%)	2 (2.1%)	45 (24.6%)	
Secondary education	7 (8.1%)	60 (61.9%)	67 (36.6%)	
Tertiary education	0 (0.0%)	34 (35.1%)	34 (18.6%)	
Marital status				
Never married	63 (73.3%)	76 (78.4%)	139 (76.0%)	
Married	14 (16.3%)	21 (21.6%)	35 (19.1%)	
Divorced	6 (7.0%)	0 (0.0%)	6 (3.3%)	
Widowed	3 (3.5%)	0 (0.0%)	3 (1.6%)	
Religious affiliation	· · ·	· · ·	· · ·	
Christianity	40 (46.5%)	89 (91.8%)	129 (70.5%)	
Islam	46 (53.5%)	8 (8.2%)	54 (29.5%)	

 Table I. Demographic characteristics of the respondents.

Russell et al. (1980) revised the instrument by reversing half of the test items to positive. Items 1, 4, 5, 6, 9, 10, 15, 16, 19, and 20 are the positively worded items and the remaining 10 items are negatively worded. Example items include "There is no one I can turn to," "I am no longer close to anyone," and "I feel left out." Each item on the scale is rated as Never (1), Rarely (2), Sometimes (3), and Often (4). Total scores can range from 20 to 80. Higher scores represent greater levels of loneliness. Regarding the psychometric properties of the UCLA loneliness scale, Russell (1996) reported Cronbach's alpha internal reliability coefficient range of 0.89-0.94, and 1-year testretest reliability coefficient of 0.73. The Cronbach's alpha for the current Ghanaian sample was 0.84.

Depression, Anxiety and Stress Scale-21 (DASS-21). The DASS-21 (Lovibond and Lovibond, 1995) assesses the psychosocial symptoms of depression, anxiety, and stress. It consists of three subscales with seven items each. The

depression subscale is labeled DASS-D and measures devaluation of life, dysphoria, lack of interest, hopelessness, self-deprecation, anhedonia, and inertia. The anxiety subscale is labeled DASS-A and evaluates situational anxiety, skeletal muscle effects, autonomic arousal, and subjective experience of anxious affect. The stress subscale is labeled DASS-S and measures nervousness, difficulties in relaxation, and irritability. Example items include "I couldn't seem to experience any positive feeling at all," "I tended to over-react to situations," and "I found it difficult to relax." Each item on the scale is rated Never (0), Sometimes (1), Often (2), and Almost always (3). The cumulative score ranges from 0 to 21 for each sub-scale; and 0 to 63 for the whole scale. High Cronbach's alpha internal reliability has been reported for DASS-D (0.90), DASS-A (0.83), and DASS-S (0.86). Among the current sample, the Cronbach's alpha for the whole DASS was 0.88, DASS-D was 0.86, DASS-A was 0.75, and DASS-S was 0.77.

Modified PTSD Symptom Scale-Self Report (MPSS-SR). The MPSS-SR (Falsetti et al., 1993) is a 17-item measure that employs a 5-point scale to measure the frequency and severity of posttraumatic stress disorder symptoms. Response options range from "not at all" (rated 0), "a little bit" (rated 1), "moderately" (rated 2), "quite a bit" (rated 3), "to extremely" (rated 4). Total rating scores range from 0 to 68. Example items are, "Have you had repeated or intrusive upsetting thoughts or recollections of the event(s)?", "Have you been having repeated bad dreams or nightmares about the event(s)?", and "Have you had the experience of suddenly reliving the event(s), flashbacks of it or acting or feeling as if the event were happening again?". The MPSS-SR has Cronbach's alpha internal reliability of 0.96. The Cronbach's alpha for the local Ghanaian sample was 0.87.

#### Suicidal Behaviors Questionnaire-Revised (SBQ-R).

The SBQ-R (Osman et al., 2001) is a 4-item rating scale that measures the history of suicide behaviors, suicidal ideation, frequency of suicidal ideation, previous suicide attempts, and the probability of future suicidal attempts. Sample items from the scale are "Have you ever thought about or attempted to kill yourself?" and "How likely is it that you will attempt suicide someday?" Responses to the SBQ-R differ across its items but are summed up to generate a single measure of suicidality for each respondent ranging from 4 to 23. Higher scores suggest greater risk of suicidality. The SBQ-R is known to have a Cronbach's alpha internal reliability of 0.88. The Cronbach's alpha among the current sample was 0.85.

Somatic Symptom Scale-8 (SSS-8). The SSS-8 (Gierk et al., 2014) is a short version of the PHQ-15 questionnaire (Kroenke et al., 2002). It was designed to measure fatigue, pain, cardiopulmonary and gastrointestinal elements of the somatic symptom burden. Sample items include "back pain," "headaches," and "trouble sleeping." Response options comprise not at all (rated 0), a little bit (rated 1), somewhat (rated 2), quite a bit (rated 3), and very much (rated 4).

Table 2.	Causes	of homelessness	among the
participan	cs.		

Causes of homelessness	Frequency (n=86)	Percentage (%)
Unemployment	4	2.2
Migration	19	10.4
Death of parent(s)	4	2.2
Poverty	55	30.1
Domestic violence	2	1.1
Parental neglect	I	0.5
Divorce of parents	I	0.5

The total rating scores range from 0 to 32. The SSS-8 is reported to have a Cronbach's alpha internal reliability of 0.81. Among the local sample, Cronbach's alpha was 0.86.

#### Data analysis

Data analysis was conducted in SPSS version 27. Descriptive analyses were performed on demographic variables and causes of homelessness. The results of the descriptive analyses are reported in frequencies and percentages (see Tables 1 and 2). Multivariate analysis of variance (MANOVA) test was used to analyze the two research hypotheses. Each hypothesis compared two independent groups of participants on seven dependent variables whose data were continuous and normally distributed. Normal distribution analysis was conducted on each of the seven dependent variables using momentbased measures (i.e. skewness and kurtosis). It has been argued that data with skewness between -2 to +2 and Kurtosis between -7 to +7 are acceptable for normal distribution (Byrne, 2010; Hair et al., 2010). However, for analysis in SPSS, skewness and kurtosis values ranging from -2 to +2 are considered as satisfactory (George and Mallery, 2010). In the current study, the SPSS analysis produced values ranging from -0.95 to 1.68 for both skewness and kurtosis, thus satisfying normality assumption for multivariate analysis in the hypothesis testing. The results of the hypothesis testing are presented in Tables 3 and 4 respectively.

Psychosocial distress	Homeless (n=86) Mean (SD)	Non-homeless (n=96) Mean (SD)	F	Sig.	η²
Depression	10.65 (3.97)	4.08 (3.35)	146.46	0.000	0.45
Anxiety	5.53 (3.78)	4.39 (3.25)	4.86	0.029	0.03
Stress	7.09 (3.93)	5.20 (3.33)	12.40	0.001	0.06
Traumatic symptoms	22.19 (11.98)	16.47 (10.97)	11.29	0.001	0.06
Suicidal behavior	7.69 (3.85)	4.11 (2.94)	50.11	0.000	0.22
Somatic symptoms	13.52 (8.20)	9.32 (7.45)	13.28	0.000	0.07

 Table 3. Psychosocial distress among the participants.

Pillai's trace: V = 0.52;  $F_{(7, 174)} = 27.20$ ; p = 0.000; Partial eta squared = 0.52; df = 1/181.

Table 4. Gender differences in psychosocial distress among the homeless participants.

Psychosocial distress	Female (n=45) Mean (SD)	Male $(n=41)$	F	Sig.	$\eta^2$
		Mean (SD)			
Loneliness	52.51 (5.92)	54.44 (3.20)	3.44	0.067	_
Depression	10.98 (3.65)	10.29 (4.31)	0.64	0.428	_
Anxiety	5.16 (4.32)	5.95 (3.08)	0.95	0.333	_
Stress	8.29 (3.89)	5.78 (3.57)	9.64	0.003	0.10
Traumatic symptoms	22.69 (12.92)	21.63 (11.00)	0.17	0.686	_
Suicidal behaviors	8.62 (4.01)	6.66 (3.41)	5.92	0.017	0.07
Somatic symptoms	14.64 (7.20)	12.29 (9.10)	1.78	0.186	_

Pillai's trace: V = 0.18;  $F_{(7,78)} = 2.50$ ; p < 0.05; Partial eta squared = 0.18; df = 1/84.

#### Data sharing statement

The current article includes the complete raw dataset collected in the study including the participants' data set, syntax file and log files for analysis. Pending acceptance for publication, all the data files will be automatically uploaded to the Figshare repository.

### Results

Table 2 displays causes of homelessness as reported by the 86 homeless participants. In all, seven causes of homelessness were reported by the homeless participants based on their individual circumstances. Among them, poverty emerged as the leading cause of homelessness for 30.1% of the homeless participants. It was followed by migration which implicated 10.4% of the homeless participants. Unemployment and death of parent(s) each affected 2.2% of the homeless participants. Finally, parental neglect and divorce of parents affected just a few (0.5% each).

Table 3 shows the MANOVA results on the effects of homelessness on psychosocial distress. Using Pillai's trace, there was a significant impact of homelessness on psychosocial distress (V=0.52,  $F_{(7, 174)}$ =27.20, p < 0.001, Partial  $\eta^2$ = 0.52). Separate univariate analyses (ANOVAs) on the outcome variables revealed significant effects of homelessness on loneliness ( $F_{(1, 181)}$ = 5.21, p < 0.05, Partial  $\eta^2$ =0.03), depression ( $F_{(1, 181)}$ =146.46, p < 0.001, Partial  $\eta^2$ =0.45), anxiety ( $F_{(1, 181)}$ =4.86, p < 0.05, Partial  $\eta^2$ = 0.03), stress ( $F_{(1, 181)}$ =12.40, p=0.001, Partial  $\eta^2$ =0.06), traumatic symptoms ( $F_{(1, 181)}$ =11.29,

p = 0.001, Partial  $\eta^2 = 0.06$ ), suicidal behavior  $(F_{(1,181)}=50.11, p < 0.001, Partial \eta^2=0.03)$ , and somatic symptoms  $(F_{(1, 181)}=13.28, p=0.000,$ Partial  $\eta^2 = 0.06$ ). The mean scores show that homeless participants felt lonelier (M=53.43, SD=4.89) than their non-homeless counterparts (M=51.51, SD=6.28). They also felt more depressed (M=10.65, SD=3.97) than the nonhomeless (M=4.08, SD=3.35), reported higher anxiety level (M=5.53, SD=3.78) than nonhomeless participants (M=4.39, SD=3.25), and had higher level of stress (M=7.09, SD=3.93) than non-homeless participants (M=5.20, SD= 3.33). Again, homeless participants reported higher traumatic symptoms (M=22.19, SD= 11.98) than their non-homeless counterparts (M=16.47, SD=10.97), engaged in more suicidal behaviors (M=7.69, SD=3.85) than the non-homeless (M=4.11, SD=2.94), and had higher level of somatic symptoms (M=13.52, SD=8.20) than their non-homeless counterparts (M=9.32, SD=7.45). These results confirm that there was higher psychosocial distress among the homeless than the non-homeless.

Table 4 displays the MANOVA results for gender differences in psychosocial distress among the homeless participants. Using Pillai's trace, there was a significant gender differences in psychosocial distress (V=0.18,  $F_{(7, 78)}=2.50$ , p < 0.05, Partial  $\eta^2 = 0.18$ ). Analyses of variance on individual distress variables reveal significant gender differences in stress  $(F_{(1, 84)}=9.64,$ p < 0.01, Partial  $\eta^2 = 0.10$ ), and suicidal behavior  $(F_{(1, 84)} = 5.92, p < 0.05, Partial \eta^2 = 0.07)$ . Female homeless participants reported higher stress levels (M=8.29, SD=3.89) than did their male counterparts (M=5.78, SD=3.57). Similarly, there was greater suicidality among female homeless participants (M=8.62, SD=4.01) than the male homeless participants (M=6.66, SD=3.41). However, there were no significant gender differences in loneliness ( $F_{(1, 84)} = 3.44, p > 0.05$ ), depression ( $F_{(1, 84)} = 0.64$ , p > 0.05), anxiety ( $F_{(1, 84)} = 0.64$ , p > 0.05), anxiety ( $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ , p > 0.05), and  $F_{(1, 84)} = 0.64$ .  $_{84)} = 0.95, p > 0.05)$ , traumatization,  $(F_{(1, 84)} = .17)$ , p > 0.05), and somatic symptoms ( $F_{(1, 84)} = 1.78$ , p > 0.05). These results provide partial confirmation for the prediction that female homeless participants will experience significantly higher levels of psychosocial distress than male homeless participants.

## Discussion

The purpose of the study was to investigate psychosocial distress among the homeless in Ghana. As indicated, psychosocial distress was defined as depression, anxiety, stress, somatization, loneliness, somatic symptoms, and suicidality. It emerged that financial distress, dysfunctional family structure, and personal motivation to migrate were the major forces that resulted in the unfortunate incident of homelessness. This observation is consistent with previous reports (Calvo et al., 2018; Embleton et al., 2016; Vázquez et al., 2018). The nature of the causes of homelessness, as reported by the participants, suggests that homelessness should not only be understood as the result of dysfunctions in individual personal character, but more so, the resultant effect of weak national economy and ineffective institutional structures in the larger socio-economic context (McLeroy et al., 1988; Nooe and Patterson, 2010). This is consistent with the call to shift perspective from a single-model approach to a multilateral-model approach in efforts to resolve homelessness (Anderson and Christian, 2003).

The findings supported the first research hypothesis. Consistent with prediction, there were significantly higher levels of psychosocial distress among the homeless participants than the non-homeless participants. Compared to non-homeless, homeless participants felt lonelier, were more depressed, more anxious, more stressed, more traumatized, more suicidal, and had higher level of somatic symptoms. The high incidence of psychosocial distress among the homeless participants supports the assertion of the Gelberg-Andersen behavioral model for vulnerable populations (Padgett et al., 1990, 1995; Swanson et al., 2003) which outlines the vulnerabilities common to homeless individuals such as environmental hazards, drug and alcohol use, and lack of access to health care (Kushel et al., 2006). The present study confirmed that these common vulnerabilities among the homeless undermines psychosocial wellbeing, thus the need for health care service providers to focus attention on reducing or eliminating these vulnerabilities in order to enhance the mental health of the homeless.

The above finding is also consistent with previously reported findings in the literature (Hwang, 2001; Lippert and Lee, 2015; Public Health Agency of Canada, 2006). The Canadian Institute for Health Information (2007), for example, reported that homeless adults in Canada experienced about 24% higher stress level than their non-homeless counterparts. Similarly, Votta and Manion (2003) found that Canadian homeless male youth had twice as high stress level than Canadian non-homeless male youth. Research on homelessness in the U.S. confirmed higher depressive symptoms, higher stress, poorer health, and greater use of drugs and alcohol among youth who were homeless than those who were not (Unger et al., 1998).

In the African context, it has been reported that as many as 90% of homeless adults in Ethiopia had experienced one form of mental disorder or another (Fekadu et al., 2014). Within the Ghanaian context, the study validates the earlier findings of De-Graft Aikins and Ofori-Atta (2007) that showed higher prevalence of physical and psychological stressors among homeless participants in Accra. It should be emphasized that the definition of homelessness of De-Graft Aikins and Ofori-Atta (2007) focused on individuals living in squatter settlements. However, the present study adopted a deeper definition of homelessness which incorporates a lack of access to settlement structures. The present finding also agrees with the conclusion of Asante et al. (2015) which indicated that homeless individuals in Ghana experience severe psychosocial problems including hyperactivity, emotional difficulty, relationship problems, and conduct disorders. Beyond these, the present study reveals higher incidence of traumatic symptoms, depression, anxiety, stress, somatization, loneliness, and suicidality among homeless individuals in Ghana.

The second research objective was to determine gender differences in psychosocial distress among the homeless. Pursuant to this objective, the researchers predicted that female homeless participants are likely to experience significantly higher levels of psychosocial distress than male homeless participants. This hypothesis was partially supported. The study revealed no significant gender differences in loneliness, depression, anxiety, traumatization, and somatic symptoms. However, female homeless participants reported higher stress and greater suicidal behavior than the male homeless participants. The observed gender differences in some aspects of psychosocial distress may have resulted from socio-cultural norms in Ghana that sometimes tend to put females at a disadvantaged position and cause them to suffer unreasonably greater amounts of hardships. Homeless females may also have greater vulnerability to various forms of harassment including sexual harassment and physical assaults. These vulnerabilities together with adverse socio-cultural norms in the Ghanaian society may have contributed to the higher stress level and greater suicidality among the homeless female participants.

Johnson et al. (2017) found the intergenerational impact of homelessness to be highly gendered. They found a stronger relationship between homelessness and physical health for females than for males. According to them, the indispensable role of women as heads of homeless families made the impact of homelessness on children proportionally remarkable. In their study, children under the care of homeless women experienced poorer health outcomes. Those in schools exhibited lower achievement on cognitive tests. Although the current study did not assess intergenerational impact of homelessness it is reasonable to assume that in situations where homeless women in Ghana experience higher stress and suicidality, the wellbeing of children under their care will most likely be compromised. The impact of women homelessness implies that any planned intervention should seek to prioritize homeless women over their homeless male counterparts,

especially in situations where homeless women carry the burden of childcare in addition to their daily struggles.

The findings of this study should be understood and interpreted within the socio-cultural context of the Ghanaian society. Generalized implications of the findings beyond the confines of this study must be drawn with caution since the investigated sample was, at best, only representative of the Ghanaian population. In addition, it should be noted that inherent differences between the homeless group and the non-homeless comparison group such as significant gap in education, family structure, and economic conditions may have contributed to the higher psychosocial distress of the homeless. However, the current study did not examine the influence of these variables. Therefore, future studies should examine correlates of homelessness that result into higher psychosocial distress. Sample size should also be increased in future studies to enhance the reliability and generalizability of findings.

Provision of housing should be fundamental in the institution of any intervention that aims to provide lasting and effective solution to homelessness in Ghana. The request for housing intervention is consistent with the housing-first policy (Atherton and Nicholls, 2008; U.S. Department of Housing and Urban Development Office of Policy Development and Research, 2007). Housing-first policy intervention does not only entail provision of housing facilities, but more importantly the provision of essential services that meet the social and healthcare needs of the individual. It has been proven that the application of the housing-first model has facilitated the coping abilities of many homeless individuals in managing the myriad of problems associated with homelessness (Atherton and Nicholls, 2008). Although the housing-first policy intervention may be expensive to implement in developing countries, the government of Ghana through partnership with the private sector can have a laid down plan to make housing facilities both accessible and affordable to disadvantageous groups in the population. This may serve as a protective intervention for the atrisk population.

Given that financial difficulty is one of the key causes of homelessness, it is recommended that job creation and skill training be integrated into interventional policies in Ghana. With reliable employment, individuals can have the financial ability to afford housing and meet their daily needs. The task of creating jobs for the homeless should be a shared responsibility between government, the private sector, and other stakeholders like non-government organizations (NGOs), religious institutions, and philanthropic individuals. This mission has the potential to see a comprehensive transformation of lives among the homeless population in Ghana.

Unarguably, homelessness and poverty are threaded together. Although financial aid may not be a sustainable intervention, it can serve as a head start for talented homeless individuals with unflinching determination to succeed. Financial aid can also be tied to specific efforts such as housing, skill training, and entrepreneurial adventure. When tied to efforts, financial aid can yield the most useful and lasting results to homeless individuals.

## Conclusion

The study has revealed the gravity of psychosocial distress that homeless people in Ghana experience. The homeless, compared to non-homeless, reported significantly higher levels of depression, stress, anxiety, traumatic symptoms, loneliness, somatic symptoms, and suicidality. Although no significant gender differences were observed on loneliness, depression, anxiety, traumatization, and somatic symptoms, female homeless participants were found to have higher stress and greater suicidality than their male counterparts. The observed gender differences in psychosocial distress may have emanated from the biased sociocultural norms and discrimination against females in the Ghanaian society. Given the gravity and pervasiveness of the psychosocial consequences of homeliness in Ghana, it is recommended that the government of Ghana and other stakeholders implement immediate interventions that will help to improve the wellbeing of homeless individuals in the Ghanaian society.

#### Authors' note

Nelly BF Amissah was previously known as Nelly Betty Fosu.

#### **Consent to participate**

Informed consent was obtained from all individual participants included in the study.

#### **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **Ethics** approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the University of Ghana Ethics Committee for Humanities (Ref No. ECH/030/17-18).

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#### Supplemental material

Supplemental material for this article is available online.

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