Addressing Intersecting Social and Mental Health Needs Among Transition-Age Homeless Youths: A Review of the Literature

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Homelessness among youths is a poorly understood and complex social phenomenon. The authors examined the risk factors for homelessness among transition-age young adults, including the unique mental health concerns that often perpetuate the cycle of poverty and housing instability among these youths. The authors discuss the treatment gaps for mental health conditions in this population and identify potential solutions for reducing existing barriers to care. A literature review revealed that many studies report high rates of trauma and subsequent mental health problems among homeless youths. Intervention studies are challenging to conduct with this population and often have high attrition rates. Youths who are homeless desire mental health services and are especially enthusiastic about programs that address interpersonal difficulties and emotion regulation. Clinical data suggest that future interventions should address trauma more directly in this population. Technology-based interventions may help address the needs of homeless youths and may maximize their access to care. Because youths strongly prefer technology-based platforms, future research should integrate these platforms to better address the mental health needs identified as most salient by homeless youths. The authors discuss proposed policy changes at local, state, and federal levels to improve uptake of this proposed strategy.

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Homelessness is a serious and poorly addressed social problem. It is estimated that in the United States, 552,830 people experienced homelessness on any given night in 2018, of whom 7% were youths ages <25 years (1). Although the U.S. Department of Housing and Urban Development reports that homelessness rates overall have been decreasing in the past decade, this decrease has been much slower among youths, who often experience significantly higher rates of mental disorders that contribute to unremitting homelessness (1, 2).

Efforts to address homelessness require modifications to existing treatment frameworks to improve access but also policy changes at the individual, local, state, and federal levels. We conducted a literature review in consultation with a medical librarian, performed focused searches, and drew on our own expert knowledge. This process was initiated for a policy paper written for the National Association of State Mental Health Program Directors. This article summarizes key literature on the mental health needs of youths who are homeless and the interventions developed to date, highlights novel approaches to increasing access to mental health services for this population, and suggests policy changes that may help to facilitate the dissemination of these therapeutic approaches.

CURRENT KNOWLEDGE AND ITS LIMITS

Risk Factors for Homelessness Among At-Risk Transition-Age Youths

It is critical to understand the risk factors for the onset and prolongation of homelessness among transition-age youths, ages approximately 16 through 25 years. During this pivotal developmental period, young people are expected to begin taking the financial and social steps necessary to transition from dependent to independent living (3). This leads to additional challenges for youths struggling with complex

HIGHLIGHTS

- Homelessness among youths is a serious social problem with numerous intersecting risk factors.
- Most interventions for youths who are homeless have not adequately addressed the root causes of homelessness, most notably, trauma and related mental health problems.
- Existing research supports the importance of developing short-term and targeted interventions that harness technology to reach a wider network of young people to better address their mental health needs.

mental health needs and homelessness (4, 5). Because youths who are homeless are often more likely to lack familial or financial resources, compared with youths with stable housing (6), many struggle to navigate this transition, and about half continue to experience homelessness as adults (7). Youths in the juvenile justice and foster care systems who are about to formally transition out of these systems (i.e., "age out") without any reliable social, educational, financial, employment, or housing opportunities are at especially high risk for homelessness (8, 9). Because homelessness due to aging out occurs as a result of the simultaneous breakdown of multiple supportive systems in the youth's life, the most appropriate solution to mitigate this occurrence would be a case management response that helps youths begin the process of securing housing, education, and other social supports while they are still involved with the juvenile justice or foster care systems.

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Studies conducted with youths transitioning from the foster care system have found that >25% of them spend their first night out of the foster system in a shelter or on the street (10, 11). Courtney et al. (12) found that 12% of a sample of 141 youths leaving foster care had been homeless for at least one night within the first year of aging out. Similarly, Fowler and colleagues (13) found that 17% of a sample of 264 former foster youths experienced homelessness on average for 2 months within the first 4 years of leaving the system. Within this same period, one-third of former foster youths were unstably housed and reported having to couch surf with friends or "double up" on average 2.8 times over a 13-month period. Notably, youths who experienced homelessness after leaving the foster care system reported greater levels of psychological distress, higher rates of victimization, and more frequent risky behavior than those who did not become homeless until later in life. Likewise, in the largest longitudinal evaluation of former foster care youths, youths with histories of physical abuse, those who engaged in delinquent behaviors, and those who presented with mental illness were identified as being at greater risk for experiencing homelessness after transitioning out of the foster care system, with 31%–46% of youths having experienced at least one homelessness episode before the age of 26 (14).

Youths who were formerly involved in the juvenile justice system and are transitioning to adulthood are also at high risk. They are less likely to receive housing or financial assistance from their families and may struggle to find affordable housing because most existing housing policies bar individuals who have committed certain offenses from qualifying for or receiving public housing or Section 8 rental housing assistance (15, 16). Although a thorough discussion of these variables is beyond the scope of this review, it is important to recognize how job scarcity and dire financial limitations, housing insecurity, and circumscribed social support have the potential to pressure these youths to engage in risky and sometimes illegal behaviors that contribute to an ongoing cycle of residential instability (for an overview of "strain theory," see Agnew's 1992 article [17]). In addition to these risk factors, youths formerly in the juvenile justice system have high rates of untreated mental health problems, including posttraumatic stress disorder (PTSD) and substance use disorders (18, 19).

Mental Health and Substance Use Disorders Among Homeless Youths

Severe and persistent traumatic experiences, especially in early childhood, not only increase the risk for PTSD but also correlate with increased risk for psychopathology (20). Research has suggested that social adversity leads to mental health problems across the lifespan via specific epigenetic modifications that alter the body's stress response system, thereby making youths more reactive to stressful experiences (21–24).

Youths who are homeless experience disproportionately high rates of trauma, both before and while experiencing homelessness. Not surprisingly, the lifetime prevalence of psychiatric disorders is estimated to be twice as high for these youths than for their housed peers (25). In a large study of homeless youths from several major cities in the United States, 57% of 146 participants experienced a traumatic event, and 24% met *DSM-IV* criteria for PTSD (26). Trauma was identified as the most common risk factor for psychopathology among 35 homeless youths ages 14–25, and as many as 77% of homeless youths reported experiencing physical abuse, sexual abuse, or both (27, 28). Female youths, in particular, are often targeted by sexual exploiters or may be forced to resort to trading sex for survival, which only further intensifies the traumatic experiences that often led to homelessness in the first place (29).

In addition to being at greater risk for traumatic stress disorders, youths who are homeless are also at elevated risk for other mental and behavioral health problems. They have high rates of depression, anxiety, substance use, and psychosis (30), as well as a greater number of suicide attempts (2, 31). Homeless youths are also more likely to have a diagnosis of externalizing disorders (i.e., conduct disorder and attention-deficit hyperactivity disorder) than their stably housed peers (32, 33). Externalizing behavior problems are especially problematic in this population, because aggression and impulsivity can affect youths' abilities to remain in the shelter system (and, therefore, have access to some sort of case management and mental health support), increasing the likelihood that these youths will be routinely "street homeless." Often comorbid with internalizing and

externalizing symptomatology are substance use disorders, which are also high in this population. For example, Baer and colleagues (34) found that, in a study of 198 youths, 94% endorsed at least some symptoms consistent with *DSM-IV* definitions of abuse or dependence. Alcohol and marijuana are generally the most commonly abused substances, although the use of club drugs was also high, ranging from 75% to 77% (35). These trends have been observed across several large metropolitan areas, including New York City, Los Angeles, and San Francisco (36–38).

EXISTING BEHAVIORAL AND MENTAL HEALTH INTERVENTIONS FOR HOMELESS YOUTHS

It is important to explore the benefits of empirically supported treatments for the population of youths who are homeless so that future recommendations for intervention are thoroughly supported by psychological theory and rigorous examination. One area of intervention for youths who are homeless prioritizes engagement of the family system. To date, six clinically effective family-based interventions supported by randomized controlled trial data have been identified: ecologically based family therapy (EBFT), functional family therapy (FFT), multidimensional family therapy (MFT), multisystemic therapy (MST), Treatment Foster Care Oregon (TFCO), and support to reunite, involve, and value each other (STRIVE) (39). Each intervention includes four core components that are likely essential to their efficacy: providing the services within the home; offering clinical services in conjunction with parent training; the inclusion of multiple, intensive sessions; and the use of graduate-level therapists.

Evaluations of these trauma-informed family interventions suggest that they show promise in reducing risk behaviors among homeless youths, although the specific intervention targets have varied (39). For instance, EBFT, FFT, and STRIVE have focused on family functioning, with specific emphasis on strengthening positive family interactions through communication and problem-solving skills. In contrast, MFT, MST, and TFCO target specific populations and risk behaviors: adolescent substance use, delinquency, and foster families, respectively. Overall, studies evaluating family-based interventions in this population suggest that multisystemic approaches yield positive behavioral outcomes in homeless youths.

Because family-based interventions are not always feasible, individual-level interventions have been developed, but clinical outcome data on these latter interventions are much more varied. For example, although brief motivational interviewing has shown success in the treatment of substance use disorders in traditional clinical settings, two evaluations of this intervention suggest that it is not the most effective for reducing substance use among homeless youths (40). Peterson et al. (41) found that although illicit drug use was reduced after homeless youths participated in a brief, three-session motivational interviewing intervention, compared with a control group of homeless youths not receiving this intervention, this outcome did not persist at a 3-month follow-up. Uses of marijuana and alcohol, two of the most frequently used substances in this population, were also not reduced (42). A slight modification of this program, which included an additional treatment session, did result in decreased alcohol and marijuana use, but no significant difference between the treatment and control groups was detected (43).

Behaviorally focused approaches appear to yield better long-term clinical outcomes as measured by self-reported reductions in substance use. Using a community reinforcement approach (CRA), which relies on principles of operant conditioning to increase social rewards for sober activities, Slesnick and colleagues (44) found that 12 CRA sessions, coupled with four sessions of HIV education and skill practice, led to self-reported reductions in the number of days of drug use and of drugs used among youths residing in shelters. The addition of case management to CRA significantly decreased drug and alcohol use at 12 months (45), but the number of sessions did not predict the rate of behavioral change. Furthermore, the effectiveness of these models has been challenging to gauge, given the numerous confounding factors that are difficult to control in the designs. In one study, daily drug screening and intensive individual counseling resulted in a large drop in drug dependence among homeless youths, but the long-term success of this approach has not been determined (46). Others have found that, when health resources and skills training are included in traditional shelter-based care, female youths are more likely than male youths to have reduced substance misuse (47). The literature on interventions for risky sexual behavior has suggested a similar moderating effect of gender, suggesting an emphasis on developing gender-specific interventions for high-risk populations of homeless youths (48).

However, simply providing youths with access to treatment services through shelter systems does not appear to reduce high-risk behavior long term (49, 50). In fact, when traditional drop-in center access was paired with vocational training, supportive mentorship, and clinical services, youths exhibited improvements in self-reported mental health outcomes but also increases in risky behaviors (i.e., drug use and number of sexual partners) (51).

Despite the wide range of psychopathology seen in this population, most research has focused on risky sex and drug use, with mental health sequalae (e.g., depression and anxiety symptoms) regarded as secondary outcomes. In addition, very limited research has been conducted within the past 10 years on addressing mental health disparities in homeless youths, and it is difficult to draw comparisons across studies given a wide variability in both the methodology and theoretical underpinnings of the evaluated intervention frameworks (52, 53). A further limitation of these interventions is the high participant attrition rate, which makes longitudinal assessment challenging. Again, however, these treatment models are still complicated by low

retention, and, in some cases, no differences between control and treatment groups were observed (54–56). Finally, even when longitudinal follow-up is done as part of the intervention, these program components are difficult and often costly to sustain. This further highlights the need to find novel approaches for dissemination and implementation of services for this population.

NEW FINDINGS OR KNOWLEDGE

New Directions in Clinical Research With Homeless Youths

Our team has developed a mental health treatment clinic in a shelter for homeless youths in an urban area of Chicago. Outcome data from a study we conducted in this clinic confirmed a significant need for mental health services for youths who are homeless and indicated that some youths are motivated to return to our clinic after their initial intake appointment (57). Our clinical data suggest that youths attended on average three therapy sessions, but we observed a sharp decline in the number of youths who attended more than one session (i.e., 49% of youths attended only the intake session, and attendance of the second session dropped to 13%). Most youths were rated as moderately to severely ill at intake by doctoral-level clinicians providing care in this clinic, and the most common clinical concerns for which youths returned to treatment were depression and trauma. Future individual interviews and focus groups are planned with these youths, but, at present, anecdotal evidence suggests that poor past experiences with the mental health system, as well as restrictive school and work schedules, are interfering with establishing sustained care.

To address these logistical barriers, our team explored the effectiveness of technology-based interventions. In one study, 35 sheltered homeless youths were provided with a cellular phone preloaded with mental health mobile applications (58) and 1 month of prepaid data. A daily survey that tracked mood and sleep and a daily tip, covering a range of topics, including self-care and goal setting, were pushed to the phones during the 1-month study period. Study participants could also engage in three phone "coaching" sessions with a doctoral-level psychologist. A large proportion of the youths (57%) participated in these phone sessions and engaged outside of these scheduled sessions by sending on average 15 texts to their therapist during the study period. Although improvements in clinical indicators (i.e., depression, anxiety, PTSD, and emotion regulation) were not statistically or clinically significant, an encouraging finding was that 52% of the participants indicated that they were very or extremely satisfied with the intervention, 48% found the skills they learned in coaching sessions to be beneficial, and 43% reported that they regularly integrated the new skills learned in the coaching sessions. Notably, when given the opportunity to rate the helpfulness of various components of the study, 64% were most enthusiastic about the daily tips provided via their phone. Despite the participants' positive ratings of several aspects of the study, one significant limitation was that participants and therapists struggled to identify times for the phone-based coaching sessions.

In an effort to address this logistical concern while retaining elements of the intervention that study participants found most helpful, a fully automated intervention for the population was developed (59). In total, 100 shelter-based homeless youths across the Chicago area again received a cellular phone with a data-talk-text plan for a maximum of 6 months. Clinical assessments were completed at baseline, 3-month midpoint, and 6-month follow-up. Of those who completed the midpoint and endpoint assessments, 63% and 68%, respectively, reported benefiting from the intervention. As in the first phase of this study, participants reported benefiting most from features that were fully automated, (e.g., the daily tips and surveys that were delivered via a push notification). Despite the high acceptability and self-reported usefulness of the mental health mobile applications, retention in this study was low. Of the 100 youths originally recruited for the study, 48% completed the midpoint assessment, and only 19% completed the endpoint assessment.

The main takeaways from our work with this population are that youths desire and are willing to engage with services and that mobile platforms show promise in reducing mental health disparities in this group (59). Moreover, it appears that future interventions need to focus on both trauma and emotion-regulatory difficulties that are often self-reported in this population. Nevertheless, and consistent with existing research in this area (for reviews of the literature, see 60, 61), competing demands (e.g., securing longer-term stable housing and employment) often conflict with their availability for traditional outpatient care. Although more research is needed to develop effective and targeted clinical interventions for homeless youths, it is clear that the most effective treatments in this population will be flexible and meet youths where they are. Recent research of our team has demonstrated the significant effect that community-based work can have on reductions in trauma symptomatology among runaway adolescents who have been victims of sexual violence. For example, nurse practitioner–facilitated community visits and empowerment groups contribute to reductions in trauma responses among youths (62).

An additional consideration is the allocation of resources to the development of single–time point interventions designed to have low barriers to use, be easy to access, have small behavioral targets, and require limited or no follow-up or continuity. In addition, because behavioral outcomes in this population are not necessarily "dose dependent" (45), the development of brief, problem-focused, and skills-based interventions should take priority.

Related to the development of targeted interventions is the notion of discerning responders from nonresponders at treatment onset to help improve retention and bring about clinically meaningful change (63). Biological and psychological factors may interact in treatment outcomes, and a

careful consideration of these factors might help clinicians tailor interventions more appropriately to clients. Although this guideline can and should be applied to treatment of mental health conditions more broadly, it is especially salient in high-risk populations with complex mental health needs for whom traditional mental health approaches are not consistently effective.

Adapting Mental Health Services to Reach Homeless Youths

The results of these more recent studies can inform future iterations of mental health services for homeless youths. Traditional structures for mental health care delivery focus on two major settings: inpatient services and outpatient services. Inpatient mental health care generally includes acute hospitalization but may also include residential, partial hospitalization, and other programs that reduce intensity in steps within the cluster of inpatient services. In contrast, outpatient mental health services include traditional ambulatory care services in either primary care or outpatient mental health clinics. The addition of these broad outpatient interventions to primary care clinics, including colocation and integrative and collaborative care models, has been rather recent and due, in some measure, to the recognition that patients generally access primary care more easily than mental health care.

Working with youths who are homeless often presents a series of challenges to these systems of care. First, homeless youths tend to be mobile and less likely to obtain care at a single location or medical home. Second, homeless youths often do not have the chronic medical conditions that may prompt adults to seek routine medical care. Third, the stigma and fear of institutional care often prevent homeless youths from seeking care in traditional settings. Many homeless youths age out of the foster care system, and the experience of these prior systems of care can create a negative perception of care providers that may prevent them from engaging in services more readily.

Providers and organizations that work with homeless youths have developed strategies to address some of these challenges. First, many organizations that serve homeless individuals have adopted Housing First models (64), which prioritize providing shelter before considering other services, including treatment for mental health conditions. Housing First recognizes that providing housing is an intervention in and of itself that may lead to stability required for addressing many social and psychological problems. These models have yielded consistently positive effects among adults, increasing stability and improving engagement with services. Kozloff and colleagues's trial (64, 65) randomly assigned youths to Housing First with social and mental health supports or treatment as usual. The authors found that Housing First models were associated with long-term housing stability among youths. Youths in particular have benefited from programming that is based on the foyer model (66), which provides not only accommodation but also resources for education and vocational training. Collectively, these studies show that a more systematic approach (67) to targeting homelessness (also targeting, e.g., housing, mental health, and education) leads to the most stable outcomes. Second, providers have used colocation of services to better engage youths in programmatic contexts that increase the likelihood of engagement. Finally, assertive community treatment models have been deployed with success for homeless youths. The structure, intensive nature, and low caseload of these models generally enable case managers and providers to better support youths who have multiple vulnerabilities and complex social needs.

In addition to further advancement of these proven models, we see two areas of potential innovation to better address the needs of homeless youths. As outlined earlier, initial trials of using mobile devices to engage homeless youths are showing some promise. These devices can also transmit data using wearable elements, a basis from which to explore mobile applications that may have capabilities for addressing mental health conditions. A challenge resides in doing this research while maintaining a sound ethical framework (68) and a pragmatic approach to engagement. Another avenue that merits additional research is the potential of using peer opinion leaders as a vehicle for intervention. Many homeless youths have had poor interactions with health care providers in the past and, therefore, may be mistrustful of the health care system and of adults in general (25), but they may be more responsive to engage with treatments that are introduced to them by peers. To understand these phenomena, research on homeless youths might benefit from recent advancements in HIV research and interventions (69) or from adaptations of the Friendship Bench framework (70) that has shown promise in creatively reallocating mental health resources in low- and middle-income countries by training laypersons as mental health providers. Questions remain as to the best modality for training peers and what can be done to support effective interventions.

POLICY IMPLICATIONS AND SUGGESTIONS FOR GOVERNMENTAL INFLUENCE ON RESEARCH THAT CONCERNS HOMELESS YOUTHS

The research and interventions outlined here have significant policy implications. Much has been learned regarding the challenges of providing services to youths who are homeless, and there is certainly more to learn. The following discussion highlights several critical areas that should be addressed through policy-level approaches at each government branch.

Local governments have generally focused on creating shelter spaces for homeless youths. This priority should remain, with the modification that local governments should be discouraged from using vagrancy laws to drive homeless individuals out of communities. In tandem with these

approaches, local governments could encourage peer-driven interventions and provide services that engage homeless youths to better support one another.

State and federal governments provide the major share of funding to support interventions for homeless youths. Therefore, state and federal laws would benefit from greater consistency in the definition of homelessness and the age of majority for decision making, both of which vary dramatically by state. Technology interventions would also benefit from consistency of laws across state lines. For example, telehealth laws and policies also vary dramatically by state, and restrictions on interstate practice create hurdles to working with homeless youths who may regularly cross state lines.

CONCLUSIONS

Homelessness among youths is a serious, multifactorial problem that can be adequately addressed only through joint clinical and research endeavors, as well as through comprehensive reform at all levels of government. As homeless youths experience disproportionate amounts of stress and trauma, their access to reliable and empirically supported care is often thwarted by various structural barriers outside their control. Research with homeless youths is often complicated by high attrition rates, making it difficult to develop interventions specifically for this population. Technology-based interventions, as well as programs that mobilize youths to take charge of their own care, should be prioritized as new iterations of mental health services are developed for underserved populations, particularly for youths who are homeless.

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Submissions Invited for Culture & Mental Health Services Column

A new column in *Psychiatric Services,* Culture & Mental Health Services, edited by Roberto Lewis-Fernández, M.D., aims to clarify the ways that culture shapes the utilization, delivery, and organization of mental health services. Submissions may examine the influence of culture at the level of the individual seeking care (e.g., the impact of a person's cultural views of illness on treatment choice and level of engagement), the provider (e.g., the role of implicit racial-ethnic biases on service recommendations), the program (e.g., how local socioeconomic and organizational factors influence the package of services offered at a clinic), or the mental health system (e.g., how political forces affect reimbursement structures that determine availability of services). Dr. Lewis-Fernández welcomes papers that focus on aspects of culture related to interpretation (meaning making), social group identity (e.g., race-ethnicity, language, and sexual orientation), and social structures and systems. The goal of the column is to make visible the social-contextual frameworks that shape care. Papers, limited to 2,400 words, may be submitted online as columns via ScholarOne Manuscripts at mc.manuscriptcentral.com/appi-ps. The cover letter should specify that the submission is for the Culture & Mental Health Services column.