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

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Abstract

Objective: Youth homelessness is a poorly-understood and complex social phenomenon. In this paper, the authors address the risk factors for homelessness among transition-aged young adults and underscore the unique mental health concerns that so often perpetuate the cycle of poverty and housing instability among these high-risk youths. The authors also discuss the gaps that exist in mental health treatment and identify potential solutions to addressing the existing barriers to care.

Methods: A review of the existing literature was conducted to evaluate the existing research on youth homelessness.

Results: Previous studies have demonstrated high rates of trauma and subsequent mental health problems in this population. Intervention studies are challenging to conduct and often have high attrition rates. The authors' work suggests that homeless youths desire mental health services, and are especially enthusiastic about programs that address interpersonal difficulties and emotion regulation. Clinical outcome data suggest that future interventions should address trauma more directly in this population. Technology-based interventions are one potential avenue by which these needs can be addressed, and through which access to care can be maximized among homeless youths.

Conclusions: Because youths strongly prefer technology-based platforms, the authors conclude that future research should integrate these platforms to better address the mental health needs

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identified as most salient by homeless youths. Proposed policy changes at local, state, and federal levels designed to better facilitate the uptake of this proposed strategy are discussed as well.

Identifying and Defining the Issue

Homelessness is a serious and poorly-addressed social problem. It is estimated that 552,830 people experienced homelessness on any given night in 2018, and 7% were youths under the age of 25 (1). While the United States Department of Housing and Urban Development (HUD) reports that overall rates of homelessness have been decreasing in the last decade, this decrease has been occurring much more slowly among youths, who often experience significantly higher rates of mental health problems 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. The authors conducted a literature review with a medical librarian, focused searches, and the authors' expert knowledge. This process was initiated for a policy paper written for the National Association of State Mental Health Program Directors (see Disclosures). This paper summarizes key literature on the mental health needs of homeless youths and the interventions developed to-date, highlights novel approaches to increasing access to mental health services in 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-Aged Youths

Understanding risk factors for the onset and prolongation of homelessness is critical among transition-age youths, roughly ages 16 through 25. During this pivotal developmental time point, 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 mental health needs and homelessness (4, 5). Because homeless youths are often more likely to lack familial and/or financial resources as compared to youths with stable housing (6), many struggle to navigate this transition and about half continue experiencing 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., "aging out") without any reliable social, educational, financial, employment, or housing opportunities are at especially high risk for homelessness (8, 9). Because homelessness stemming from "aging out" occurs as a result of the breakdown of multiple supportive systems in the youth's life all at once, 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.

Studies conducted with youths transitioning from the foster care system have found that over 25% of youths spend their first night "out of the [foster] system" in a shelter or on the street (10, 11). Courtney 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 (12). Similarly, Fowler & Toro found that 17% of a sample of 264 former foster youths experienced homelessness for an average of two months within the first four years of leaving the system (13). Within this same time period, one-third of former foster youths were unstably housed and reported having to couch surf with friends or "double up" an average of 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% to 46% of youths having experienced at least one episode of homelessness before the age of 26 (14).

Former justice-involved youths 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). While a thorough discussion of these variables is certainly 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 perhaps illegal behaviors that contribute to an ongoing cycle of residential instability (for an overview of "Strain Theory," *see* Agnew, 1992; 17). In addition to these risk factors, formerly justice-involved youths also have high rates of untreated mental health problems, including posttraumatic stress disorder and substance use disorders (18, 19).

Mental Health and Substance Use Disorders Among Homeless Youths

Severe and/or persistent traumatic experiences, especially in early childhood, not only increase the risk of posttraumatic stress disorder (PTSD), but also correlate to increased risk for psychopathology (20). Other 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).

Homeless youths experience disproportionately high rates of trauma, both leading up to and while experiencing homelessness. Not surprisingly, the lifetime prevalence of psychiatric disorders is estimated to be twice as high for homeless youths than their housed peers (25). In a large study of homeless youths from several major cities in the United States, 57% of the 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 between the ages of 14 and 25 and as many as 77% of homeless youths reported experiencing physical abuse, sexual abuse, or both (27, 28). Females 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, homeless youths 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 be diagnosed with externalizing disorders than their stably housed peers (*i.e.,* Conduct Disorder, Attention Deficit Hyperactivity Disorder; 32, 33). Externalizing behavior problems are especially problematic in this population because aggression and impulsivity can impact youths' abilities to remain in the shelter system (and therefore have access to some sort of case management and mental health support) and increase the likelihood that these youths will be routinely "street homeless." Often comorbid with both internalizing and externalizing symptomatology are substance use disorders, which are also unsurprisingly high in this population. For example, Baer and colleagues (2003) found that in a study of 198 youths, 94.3% endorsed at least some symptoms consistent with DSM-IV definitions of abuse or dependence (34). Alcohol and marijuana are generally the most commonly abused substances, though club drug use was also high, ranging from 75–77 percent (35). These trends have been observed across several large metropolitan areas including New York City, Los Angeles, and San Francisco (36, 37, 38).

Existing Behavioral and Mental Health Interventions for Homeless Youths

It is important to explore the benefit of empirically supported treatments in this population so that future recommendations for intervention are thoroughly supported by psychological theory and rigorous examination. One area of intervention for homeless youths prioritizes engagement of the family system. To date, six clinically effective family-based interventions supported by randomized controlled trial data have been identified, including: 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: 1) providing the services within the home, 2) offering clinical services in conjunction with parent training, 3) the inclusion of multiple, intensive sessions, and 4) 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, though the specific intervention targets have varied. 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/or 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, despite its success in the treatment of substance use disorders in traditional clinical settings, two evaluations of brief motivational interviewing suggest it is not necessarily the most effective strategy for reducing substance use in this population (40). Peterson and colleagues found that, while there were initial reductions in illicit drug use between treatment and control groups following participation in a brief, three-session motivational interviewing intervention, this outcome did not persist at a three-month follow-up (41). There were also no reductions in marijuana and alcohol use, two of the most frequently used substances in this population (42). A slight modification of this program, which included an additional treatment session, did result in decreased alcohol and marijuana use, but there was no significant difference between the treatment and control groups (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 relied on principles of operant conditioning to increase social rewards for sober activities, Slesnick and colleagues found that twelve sessions of CRA, coupled with four sessions of HIV education and skill practice, led to self-reported reductions in the number of days of usage and in the number of drugs used (44). The addition of case management to CRA yielded significant decreases in 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, but long-term success has not been determined (46). Others have found that, when health resources and skills training are included in traditional shelter-based care, females are more likely than males to show reductions in substance misuse (47). This moderating effect of gender has been suggested in the literature on interventions for risky sexual behavior as well, with an emphasis on developing gender-specific interventions for high-risk populations of homeless youths (48).

However, it appears that simply providing youths with access to treatment services through shelter systems does not yield long-term reductions in high-risk behavior (49, 50). In fact, when traditional drop-in center access was paired with vocational training, supportive mentorship, and clinical services, youths showed improvements in self-reported mental health outcomes, but also increases in risky behaviors *(i.e.,* drug use and number of sex 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) seen as secondary outcomes. In addition, very limited research has been done within the last 10 years on addressing mental health disparities in homeless youths and it is difficult to draw comparisons across studies given the wide variability in both methodology and theoretical underpinnings of the intervention frameworks being evaluated (52, 53). A further limitation of these interventions is the high participant attrition rate, which makes

longitudinal assessment challenging. But again, these treatment models are still complicated by low retention and, in some cases, differences between control and treatment groups have not been observed at all (54, 55, 56). Finally, when longitudinal follow-up is possible, long-term sustainability of these interventions becomes questionable, further highlighting the need to find novel approaches to dissemination of services in this population.

New Findings or Knowledge

New Directions in Clinical Research with Homeless Youths

Clinical data from a shelter-based clinic studied by the authors confirms that there is a significant need for mental health services in this population, and that some youths are motivated to return for care (57). The authors' team developed a psychotherapy clinic in a youth homeless shelter. Clinical outcome data suggest that youths attended an average of 3.03 therapy sessions, but a sharp decline was observed in the number of youths who attended more than one session (*i.e.,* 49.4 percent of youths only attended the intake session, whereas attendance in the second session dropped to 13 percent).

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, the authors explored the effectiveness of technology-based interventions. In one study, 35 sheltered homeless youths were provided with a cellular phone that came preloaded with mental health mobile applications (58) and one month of prepaid data. A daily survey tracking mood and sleep and a daily tip, covering a range of topics including self-care and goal setting, were pushed to the phones over the course of the study. 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 an average of 15 texts to their therapist during the one-month study period.

Although improvements in clinical indicators (*i.e.,* depression, anxiety, PTSD, and emotion regulation) were not statistically or clinically significant, an encouraging finding is that 52% of participants indicated they were very or extremely satisfied with the intervention, 48% found the skills they learned in coaching sessions to be beneficial, and 43% reported 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 percent were most enthusiastic about the daily tips pushed to their phone. Despite the participants' positive ratings of several aspects of the study, one of the most significant limitations was that participants and therapists struggled to identify times that worked for the phone coaching sessions.

In an effort to address this logistical concern while retaining elements of the intervention that study participants found to be most helpful, a fully automated intervention for the population was developed (59). A total of 100 shelter-based homeless youths across the Chicago area again received a cellular phone with data/talk/text for a maximum of six months. Assessments were completed at baseline, three-month midpoint, and six-month follow-up. Of those who completed the midpoint and endpoint assessments, 62.5% and 68.4%, respectively, reported benefitting from the intervention.

As in the first phase of this study, participants reported benefitting 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 in 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. In addition, it appears that future interventions need to focus on both trauma and emotion-regulatory difficulties often self-reported in this population. Nevertheless, and consistent with existing research in this area (see Parker, 2018 and Anderson-Lewis, 2018 for reviews of the literature; 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 from our team has demonstrated the significant impact that community-based work can have on reductions in trauma symptomatology among runaway adolescents who have been victims of sexual violence in the past. 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 be low-threshold, 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 non-responders at treatment onset to help improve retention and impact clinically meaningful change (63). Biological and psychological factors may interact to influence 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 mental health treatment 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 co-location, 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 homeless youths often presents a series of challenges to these systems of care. First, homeless youths tend to be more 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 are apt to drive adults to routine medical care. Third, 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 novel strategies to address some of these challenges. First, many homeless-serving organizations have adopted Housing First models (64), which place the act of giving shelter as the primary act prior to consideration of other services including mental health treatment. Housing First recognizes that providing housing is an intervention in and of itself that may lead to stability of many social and psychological problems. These models have shown consistent impact in adults, with increased stability and improved engagement with services. Kozloff and colleagues' trial, which randomly assigned youths to "Housing First" with social and mental health supports or treatment as usual. They found that housing first models were also associated with long-term housing stability among youths. Youths in particular have benefited from programming based off the Foyer model (65), which not only provides accommodation, but also resources for education and vocational training. Collectively, these studies show that, although important, a more systemic approach to targeting homelessness (housing, mental health, education) leads to the most lasting outcomes. Second, providers have used co-location of services to try to better engage youths in programmatic contexts that increase the likelihood of engagement. Finally, assertive community treatment (ACT) models have been deployed with success for homeless youths. The structure, intensive nature, and low caseload of these models generally allow case managers and providers to better support youths who have multiple vulnerabilities and complex social needs.

In addition to further advancing these proven models, we see two areas of potential innovation to better address the needs of homeless youths. As outlined earlier in this paper, initial trials of using mobile devices to engage homeless youths are showing some promise. These devices can also serve to transmit data using wearable elements, a basis from which to

explore mobile applications that may have mental health capabilities. A challenge resides in doing this research while maintaining a sound ethical framework (66) and a pragmatic approach to engagement.

Another avenue that merits research is the potential of using peer opinion leaders (POLs) as a vehicle for intervention. Many homeless youths have had poor interactions with healthcare providers in the past and may therefore be mistrustful of the healthcare system and of adults in general (25), but they may be more responsive to 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 (67) or from adaptations of the "friendship bench" framework (68) that has shown promise in creatively re-allocating mental health resources in low-and-middle-income countries by training layperson mental health providers. Questions remain as to the best modality to train peers and what can be done to support effective interventions.

Policy Implications

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

Suggestions for Governmental Influence on Research with Homeless Youths

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. It follows that state and federal laws would benefit from greater consistency in definitions of homelessness and age of majority decision-making, which vary dramatically by state. Technology interventions would also benefit from consistency of laws across state lines. For example, tele-mental health laws and policies also vary dramatically, and restrictions on interstate practice create hurdles to working with homeless youths who may cross state lines at regular intervals.

Conclusion

Youth homelessness is a serious, multifactorial problem that can only be adequately addressed through joint clinical and research endeavors, as well as through comprehensive reform at all levels of government. While 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 homeless youths.

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Highlights:

- Youth homelessness is a serious social problem with numerous intersecting risk factors.
- Interventions for homeless youths have not adequately addressed the root causes of homelessness, most notably trauma and related mental health problems.
- Collectively, past and current research all support the importance of developing short-term and targeted interventions that harness technology to reach a wider network of young people.