


Health Risks and Outcomes of Homelessness in School-Age Children and Youth: A Scoping Review of the Literature

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Abstract

Despite reports that over 1.3 million school-age children (ages 5–18) were homeless in 2019, little is known about the effects of homelessness on their overall health and well-being. To better understand where gaps exist, a scoping review of the literature was conducted to identify studies of the physical, mental, and behavioral health risks and outcomes of school-age children experiencing homelessness or housing instability. Following the Joanna Briggs Institute framework and Preferred Reporting Items (PRISMA) guidelines, seven electronic databases were searched using key words: homelessness, children, health, and well-being. Of the 4,372 records, 23 articles met inclusion criteria. Most examined mental health and high-risk activities or behavioral risks related to school achievement. Few studies tracked the long-term health outcomes of homeless school-age children. Findings have implications for school nurses who have contact with children experiencing homelessness and are in position to intervene to prevent negative health sequelae in this vulnerable population.

Keywords

homeless, school-age children, homeless youth, health outcomes, school nurse

In 2019, the National Center for Homeless Education (NCHE) identified over 1.35 million children and youth (ages 5–18) as homeless during the 2016–2017 school year (NCHE, 2019). Using the Department of Housing and Urban Development's (U.S. Department of Housing and Urban Development [HUD], 2011) definition of homelessness as the "lack of a fixed, regular, and adequate nighttime residence," NCHE identified children and youth, either living with families or on their own, as unsheltered (3.7%; i.e., living in cars or abandoned buildings) or sheltered and residing in homeless shelters or transitional settings, including awaiting foster care (14.3%); doubled up with family and friends (75.8%); or staying temporarily in hotels or motels (6.6%; NCHE, 2019). Of the total number of children experiencing homelessness, 34% (462,765) were in kindergarten to third grade; 23% (307,098) were in grades 4–6; 13.4% (178,065) were in grades 7 and 8; and 27% (360,814) were in high school (NCHE, 2019).

It has long been known that housing stability, quality, safety, and affordability all affect health and that poor-quality housing is associated with negative health sequela (Institute of Medicine, 1988). The loss of stable housing is also accompanied by a loss of possessions, changes in family or friend relations (such as overstaying a welcome when

seeking temporary shelter), and alterations in daily routines. These changes may be especially impactful for school-age children, who are moving through stages of growth and development, attaining milestones, learning social roles, and developing relationships outside of the family (Grant, Gracy, Goldsmith, Shapiro, & Redlener, 2013). As a result, children experiencing homelessness may be at greater risk of poorer health as well as diminished social and educational outcomes compared to their housed peers.

Indeed, early studies of children experiencing homelessness have shown them to have higher rates of malnutrition, vaccine-preventable infectious diseases, higher blood lead levels, asthma, and obesity (Alperstein, Rappaport, & Flanagan, 1988; Miller & Lin, 1988; Parker et al., 1991;

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Weinreb, Goldberg, Bassuk, & Perloff, 1998; Wood, Valdez, Hayashi, & Shen, 1990). More recent research has linked poverty to the health of children experiencing homelessness as both a contributor to increased morbidity and mortality risk and loss of housing (Auerswald, Lin, & Parriott, 2016; Pascoe, Wood, Duffee, & Kuo, 2016). In their analysis of cross-sectional survey data from 5,147 fifth-grade students in three U.S. cities, for example, Coker and colleagues (2009) found a positive association between a history of family homelessness and emotional, developmental, and behavioral problems. Substandard housing conditions and communal living associated with shelter entry provide additional negative influences on the health of homeless children and youth (Kerker et al., 2011). Bassuk, Richard, and Tsertsvadze (2015) found that the proportion of homeless school-age children with mental health problems was 2–4 times higher than poor children who were stably housed. Children who experienced homelessness whose mothers suffered mental illness were themselves at higher risk of mental health problems (Harpaz-Rotem, Rosenheck, & Desai, 2006). Complicating the mental health challenges faced by children experiencing homelessness was the general absence of available mental health services (Gerwitz, Hart-Shegos, & Medhanie, 2008; Grant et al., 2007; Karim, Tischler, Gregory, & Vostanis, 2006; Weinreb et al., 2002). Many of these children also suffer adverse childhood events (e.g., trauma, victimization, neglect) and toxic stress that contribute to chronic health conditions and chronic homelessness as adults (Cutuli, Ahumada, Herbers, Lafavor, Masten, & Oberg, 2017; Lee et al., 2017; Tsai, Edens, & Rosenheck, 2011).

Studies of homeless youth tend to focus on a narrow spectrum of health behaviors and outcomes such as sexual risk behaviors, mental health, and substance use (Bannon et al., 2012; Cauce et al., 2000; Medlow, Klineberg, & Steinbeck, 2014). Adolescents who identify as lesbian, gay, bisexual, transgender, or queer/questioning (LGBTQ) are at particularly high risk of homelessness, increased victimization, and increased HIV risk behaviors (Gaetz, 2004; Powell, Ellasante, Korchmaros, Haverly, & Stevens, 2016). Many studies also tend to cluster adolescents and young adults up to the age of 24 into a single population, blurring the distinct developmental differences between adolescents and emerging adults (Auerswald et al., 2016; Mackelprang, Qiu, & Rivara, 2015; Powell et al., 2016).

Homelessness in childhood affects the health, education, and overall well-being of thousands of children across the United States. The intergenerational transmission of health and homelessness risks between childhood and adulthood further suggests that a greater understanding of these risks may have the potential to prevent cycles of future housing instability and poor health. Unfortunately, evidence of the health and housing connection in children is lesser known than it is among adults experiencing homeless and housing instability. The purpose of this scoping review of the

literature, therefore, was to determine what is currently known about health risks and outcomes in school-age children and youth experiencing homelessness. Literature from the past 15 years (2005–2019) from multidisciplinary databases was used. The question guiding the search asked: What are the physical, mental, and behavioral health risks and outcomes in school-aged children and youth (ages 5–18) who experience homelessness and/or housing instability?

Method

The literature search was guided by a health sciences library specialist (E.G.) and followed the Joanna Briggs Institute (2015) framework for conducting scoping reviews, along with Preferred Reporting Items (PRISMA) guidelines (Moher, Liberati, Tetzlaff, Altman, & the PRISMA Group, 2009). The overall process and outcomes of the review are outlined in Figure 1. To be eligible for inclusion, studies needed to include (1) school-age children between the ages of 5 and 18, (2) runaway youth if homeless, (3) data-based, (4) homelessness leading to health risks or health outcomes, (5) data collected in the United States, and (6) publication date 2005 or later. We chose publications between 2005 and 2019 to reflect a period of time prior to the 2008 U.S. recession, when there was an uptick in the number of families experiencing homelessness, and which spans later federal legislative efforts to expand homeless services to meet their needs.

The definition of homeless children and youth for the scoping review included those who were homeless with their families as well as those who were unaccompanied minors. Quantitative and qualitative studies were included. Studies were excluded if they defined children as homeless who returned to their homes within 24 hr of a runaway event or if they focused specifically on children who were homeless while involved in the foster care system. Systematic reviews, review articles, clinical guidelines, editorials, letters, opinions, and commentaries were excluded as were articles not written in English or published prior to 2005.

Search Methods to Identify Studies

Seven databases were searched to capture a wide of array of studies across disciplines: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, Violence & Abuse Abstracts, Family and Society Studies Worldwide, Urban Studies Abstracts, Women's Studies International, and PsycINFO. Gray literature was also assessed for relevant articles as were the reference lists of screened papers. The structured search strategies included the text words *homelessness*, *children*, *health* and *well-being*, and *longitudinal* or *prospective* study designs. A limit was added to remove articles that mentioned *global* without also mentioning *United States* so that the focus remained on studies conducted with U.S. populations. As an example, the full search

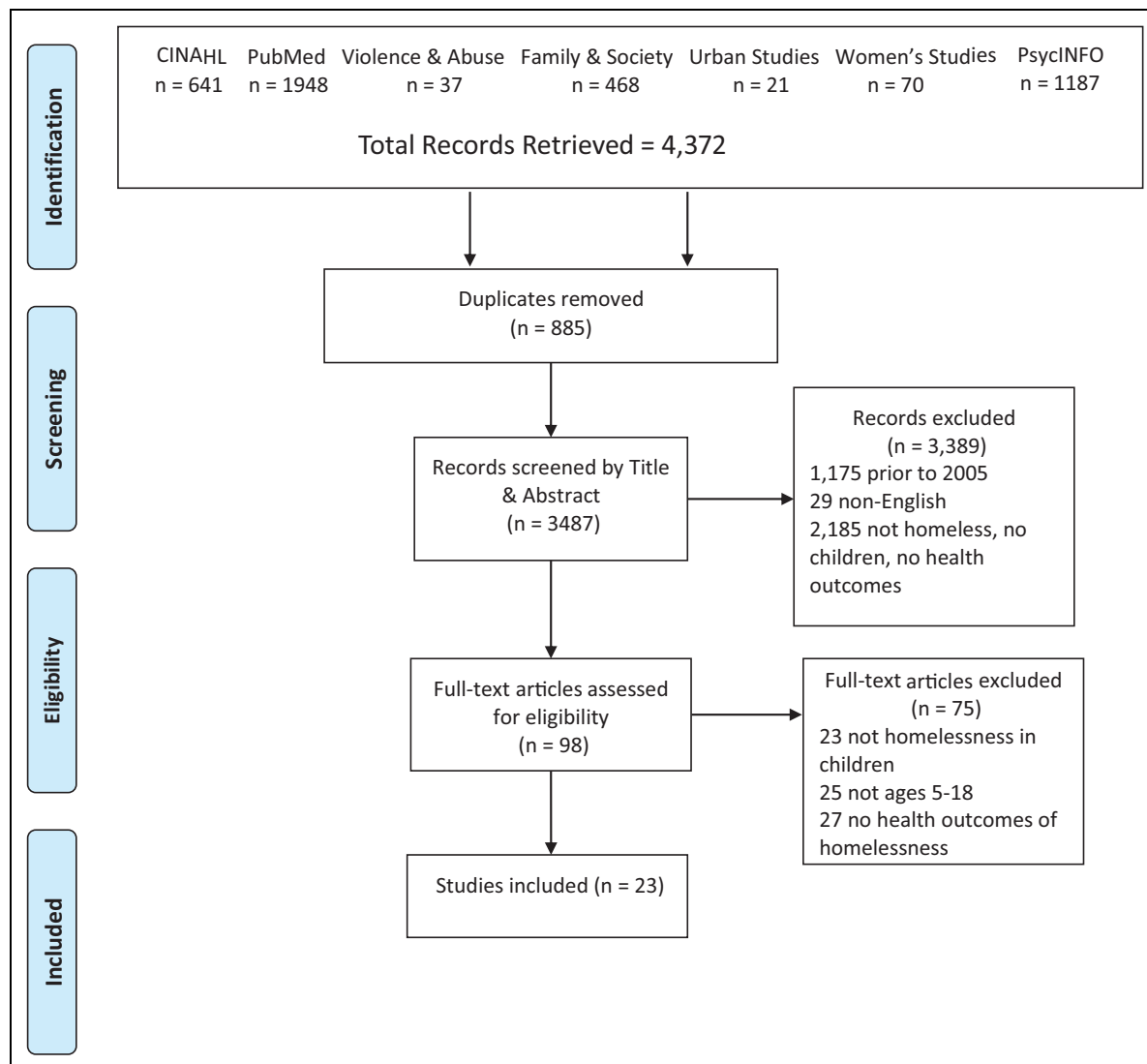


Figure 1. PRISMA diagram. Source: Adapted from Moher, Liberati, Tetzlaff, Altman, and the PRISMA Group (2009).

strategy for CINAHL is shown in Supplemental Table S1. All databases were last accessed in March 2019.

Study Selection, Data Extraction, and Analysis

As shown in the PRISMA diagram (Figure 1), 3,487 journal articles were identified after eliminating duplicates ($n = 885$). The title and abstracts of these articles were divided among the study team to review independently in groups of two. Applying the inclusion and exclusion criteria to this body, 3,389 articles were excluded, leaving 98 articles for full-text review. These were then independently reviewed by all study team members and discussed to meet consensus. Through this process, another 75 articles were excluded based on participant age ($n = 25$), that children were not homeless ($n = 23$), or that health outcomes were not identified in children who were homeless

($n = 26$). A final sample of 23 articles remained that met inclusion criteria.

Information from each study was then independently extracted by two members of the research team (authors #1 and #2) and compared; if discrepancy occurred in the extracted information, it was resolved through discussion with the larger group to reach consensus. Reviewers then assembled data into an electronic data extraction form obtaining information from each study, where possible: source, study purpose, population/sample, research design, outcomes, and results.

Results

Study and Population Characteristics

Most of the 23 studies included in the final analysis were descriptive and nonexperimental. Twelve were reports from

longitudinal cohort studies (10 of which used data from two different established longitudinal studies), one was quasi-experimental, six were secondary analyses of existing data sets, one was a retrospective analysis of Medicaid data, and one was a review of electronic medical records. There were no randomized controlled trials in the sample. Fifteen of the 23 studies exclusively examined adolescents (Alleyne-Green, Kulick, Osuji, Beharie, & Sealy, 2018; Berdahl, Hoyt, & Whitbeck, 2005; Crawford, Trotter, Hartshorn, & Whitbeck, 2011; Eastwood & Birnbaum, 2007; Johnson, Whitbeck, & Hoyt, 2005; Milburn, Liang, Lee, & Rotheram-Borus, 2009; Park, Metraux, Culhane, & Mandell, 2012; Rosenthal, Rotheram-Borus, et al., 2007; Rosenthal, Mallett, Gurrin, Milburn, & Rotheram-Borus, 2007; Rosenthal, Mallett, Miburn, & Rotheram-Borus, 2008; Solorio et al., 2008; Thompson, Bender, Lewis, & Watkins, 2008; Tyler, Whitbeck, Chen, & Johnson, 2007; Whitbeck, Chen, & Johnson, 2006; Whitbeck, Hoyt, Johnson, & Chen, 2007), four specifically addressed elementary school children (Barnes et al., 2017; Brumley, Fantuzzo, Perlman, & Zager, 2015; Cutuli et al., 2017; Fantuzzo, LeBoeuf, Brumley, & Perlman, 2013), one followed children from elementary school through mid-high school (Jetelina et al., 2016), one assessed the family's youngest child (mean age 9 years; Harpaz-Rotem et al., 2006), and two included children from birth to age 18 years (DiMarco, Ludington, & Menke, 2010; Grant et al., 2007; Supplemental Table S2).

Studies defined "homeless youth" by varying age parameters including individuals from 16–19, 12–20, or 12–24 years old. Thirteen studies examined children or youth living in Philadelphia, Los Angeles, or New York City (Alleyne-Green et al., 2018; Brumley et al., 2015; Cutuli et al., 2017; DiMarco et al., 2010; Eastwood & Birnbaum, 2007; Fantuzzo et al., 2013; Grant et al., 2007; Milburn et al., 2009; Park et al., 2012; Rosenthal et al., 2008; Rosenthal, Rotheram-Borus, et al., 2007; Rosenthal, Mallett et al., 2007; Solorio et al., 2008). Six studies utilized data from the Midwest Longitudinal Study of Homeless Adolescents that included individuals between the ages of 16 and 19 years living in Iowa, Nebraska, Missouri, and Kansas (Berdahl et al., 2005; Crawford et al., 2011; Johnson et al., 2005; Tyler et al., 2007; Whitbeck et al., 2006; Whitbeck et al., 2007), while two studies assessed other Midwestern urban populations (Crawford et al., 2011; DiMarco et al., 2010) and one utilized a national sample (Thompson et al., 2008). Only one study compared samples of children living across different cities in the United States in the southeast (Birmingham, AL), southwest (Houston, TX), and west (Los Angeles, CA; Jetelina et al., 2016; Supplemental Table S2).

Health Risks in Children and Youth Living With Adult Family Members

As per inclusion criteria, studies in the review examined various health and behavioral outcomes in children and

youth who were homeless or housing unstable. Among school-aged children, however, much of the focus was on behavioral performance and school outcomes. For example, in two studies of first and third graders (ages 5–9 years), physical health risks such as exposure to lead, low infant birth weight, and prematurity were linked to academic performance, with early exposure to homelessness associated with arrested grade progression and increased risk of social isolation and bullying (Brumley et al., 2015; Fantuzzo et al., 2013). In their longitudinal study of behaviors among 5th, 7th, and 10th graders who had experienced homelessness, Jetelina and colleagues (2016) found homeless children more likely than their same age housing-stable peers to be victimized by peers and to be physically aggressive themselves. Homeless children in the study demonstrated both aggressive and victim-aggressor type behaviors, with aggression increasing significantly in 10th grade (Jetelina et al., 2016).

Poor physical health was also described in young homeless children. Cutuli and colleagues (2017), examining two cohorts of children aged 4–7 years, found higher rates of asthma, respiratory infections, severe allergies, and ear infections (27.9% and 21.0%) when compared to national rates among peers (10–14%). They also examined the impact of stressful life events on health and reported that a greater number of stressful life events during the early years of life were related to worse health conditions, emergency health-care utilization, and hospitalizations. Barnes and colleagues (2017) reported that 70% of the children in their study, ages 9–11 years, had at least one chronic health condition, with vision problems being the most prevalent followed by chronic respiratory conditions. Care for these chronic conditions, such as asthma, is often disrupted when housing is lost, and shelter conditions may have multiple asthma triggers (Grant et al., 2007).

Dental health and developmental well-being were also found to be impacted by homelessness in young children. In their study of 124 families with 236 children between birth and 18 years of age, DiMarco, Ludington, and Menke (2010) reported that 41.5% of the homeless children had untreated dental caries and were more likely to have multiple health problems. Developmental and mental health problems are also more prevalent among homeless children. These conditions may jeopardize life successes. Young children experiencing homelessness were also more likely to be especially vulnerable to exposure to high stress when compared to their low-income, housed peers, or the general population as well as being at risk of developmental problems (Barnes et al., 2017; Cutuli et al., 2017).

Health Risks in Unaccompanied Children and Youth

Fourteen studies in the scoping review focused on children and youth who were not part of a family or who were not accompanied by other individuals while sheltered (U.S.

Department of Housing and Urban Development [HUD], 2011). These adolescents were at greater risk of food insecurity, pregnancy, miscarriage, and unprotected and unsafe sex (Crawford et al., 2011; Solorio et al., 2008; Thompson et al., 2008; Tyler et al., 2007; Whitbeck et al., 2006). Four studies specifically examined HIV/Sexually Transmitted Infections (STI) risk among homeless adolescents and demonstrated that increased length of homelessness increased the likelihood that youth would engage in harmful sexual risk behaviors, including trading sex (“survival sex”) for safety, shelter, food, clothing, and drugs (Eastwood & Birnbaum, 2007; Milburn et al., 2009; Rosenthal, Mallett, et al., 2007; Solorio et al., 2008; Tyler et al., 2007). Survival sex was found to increase risk of HIV/STI and drug-seeking behaviors in these youth who, like sexually active HIV positive youth, were less likely to access treatment when homeless or unstably housed (Eastwood & Birnbaum, 2007; Tyler et al., 2007).

Nine studies focused on the mental health of runaway and homeless youth. In their secondary analysis of 165,821 Medicaid recipient children in Philadelphia, Park, Metraux, Culhane, and Mandell (2012) found that children experiencing homelessness required more inpatient mental health services than housed peers. Rosenthal, Rotheram-Borus, and colleagues (2007) reported that homeless youth demonstrated greater incidence of mental illness and worsening of mental illness symptoms with increased length of homelessness. The associations between mental health, substance abuse, and victimization were particularly strong. Girls experiencing homelessness were at greater risk than male peers for depression and symptoms of posttraumatic stress disorder and were more likely to experience sexual abuse and victimization and become involved in the criminal justice system (Alleyne-Green et al., 2018; Crawford et al., 2011; Eastwood & Birnbaum, 2007; Johnson et al., 2005; Thompson et al., 2008; Whitbeck et al., 2007). Homeless children and youth who identified as lesbian, gay, bisexual, transsexual, or queer (LGBTQ); who were mentally ill; or who abused drugs and alcohol were at greater risk of ongoing unstable housing and homelessness (Rosenthal, Rotheram-Borus, et al., 2007; Rosenthal et al., 2008; Thompson et al., 2008; Whitbeck et al., 2006).

In summary, the majority of studies in the scoping review focused on the physical, mental, and behavioral health risks and outcomes of homeless adolescents who are either runaway youth or lived independently from families. Studies of younger school-age children (ages 5–11) living with families were infrequent and focused primarily on the association between homelessness, school or educational outcomes, and social behaviors within school environments. Variations in age ranges across studies limit full interpretation of support services provided across childhood or within various systems such as schools, health facilities, or shelters. Many of these studies were concentrated in a few cities in the United States and examined risks for youth homelessness (i.e., child

maltreatment, substance abuse, untreated mental illness) or health risks associated with being homeless (i.e., increased pregnancy or STI risk, increased symptoms of PTSD, survival sex).

Discussion

This scoping review of the literature found that homelessness in children and youth is associated with multiple negative physical, mental, and behavioral health outcomes. It was also shown that length of homelessness compounds and increases the risks of poor health outcomes. Still, no studies measured the effects of prevention or early intervention in children experiencing homelessness. Hence, there is a gap in the development and testing of interventions in early childhood (preschool) that might mitigate effects that occur in early school-age children and continue through adolescence and adulthood. That many adolescents are also runaway or independent from families also raises questions regarding the mitigating effects that parenthood and family cohesion may have on risks for poor health in homeless children and youth. Thus, there is a need for more longitudinal studies that focus specifically on the association between health and housing over time and within the developmental context of the child and his or her family.

The generalizability of study findings is also limited by the fact that many studies reported secondary analyses of the same databases or of children and youth living in similar geographic locations. Many of these databases are now decades old and may not be relevant in today’s environment. Since sociopolitical and environmental factors (i.e., in resource-poor compared to high-resource communities) may influence findings across communities, moreover health outcomes in one community or among children in one setting may differ significantly from those in another community or setting. Studies that compare health outcomes in children and youth across communities and settings may fill this research gap.

Additionally, few of the studies reviewed used a developmental theme or assessment tool when evaluating health outcomes in children and adolescents, often relying on parental reports of child behavior or health. The lack of assessment of childhood milestones as well as the influence of homelessness on milestone attainment makes it difficult to identify factors associated with delays or developmental regression, which can be observed when children and youth are in stressful situations such as being homeless. Child-specific measures of physical, behavioral, and mental health and self-reported symptoms may shed new understanding of the association of health and housing in this population. For example, there may be specific risk points that could be targeted for children living in family shelters or in facilities for unaccompanied youth that could be measured for their long-term efficacy and

help service providers and others understand when children are most vulnerable. This would be particularly informative to teachers and school nurses who are in contact with school-age children experiencing homelessness or housing instability.

Implications for School Nurses

The American Academy of Pediatrics 2013 policy statement on providing care for children facing homelessness and housing insecurity encourages pediatricians and providers to recognize the antecedents of homelessness and how homelessness can contribute to adverse health outcomes (Briggs et al., 2013). School nurses are expected to protect and promote student health and to prevent health problems that challenge academic achievement to facilitate optimal development while providing care coordination and advocacy for quality student-centered care (National Association of School Nurses, 2017). The McKinney-Vento Act requires a local homeless education liaison in each school district to ensure that schoolchildren who are experiencing homelessness are identified and given resources to support their well-being (United States Congress, 2015). It is increasingly important that school nurses and educational liaisons communicate so that students with housing instability and homelessness receive the care and services they need. School nurses can also ask students about their housing, risk-taking activities and behaviors, or emotional concerns during office visits to increase the identification and need for health intervention in these vulnerable children.

School nurses, as well as nurses in primary care and hospital settings, are in key positions to influence the health of students and their families experiencing homelessness. Children who are homeless or unstably housed will most likely need more support and resources along with interventions to keep them healthy. For example, knowing the availability of local resources and programs, such as behavioral health services, speech, language, and physical therapies, and oral and primary health care is important. Keeping an up-to-date list of clinics and clinicians who are insurance-based, low fee, or free can be useful for any nurse or provider who works with this population.

School nurses also have the opportunity to incorporate components of health promotion (prevention/education and intervention) into the school's curriculum by working with interprofessional teams on screening for vulnerable children and families who may be demonstrating high-risk behaviors. Identifying students with housing issues early in the school year gives a school nurse more time to promote health and reduce risk-taking throughout the academic year. Working with nurses and professionals in other schools, such as with elementary, middle school, and high school, to identify siblings who also have health needs due to homelessness or housing instability has

the potential to protect children as they age through the school system. Nurses across all specialties who provide care to homeless children, adolescents, and families have an opportunity to broaden approaches in the coordination of care by providing linkages to essential community services.

Conclusions

As this review suggests, many children and youth experiencing homelessness require services to address their physical, mental, and behavioral health needs and issues. Given the therapeutic relationship that exists between school nurses and children, nurses are in a prime position to identify homelessness, seek education for themselves, and intervene early to improve health outcomes. More attention, however, must be placed on preventive services that build on child and family strengths and reduce both the incidence of homelessness and the life events that contribute to housing instability for youth and their families. What these specific services should be, how they need to be tailored to meet individual needs, where and when they are best delivered, and their short- and long-term effects need further research to provide evidence for responsive practices and policies.

Author Contributions

Laura E. Gultekin, Barbara L. Brush, Emily Ginier, and Elizabeth B. Dowdell were involved in the conception of the article. All authors contributed to the acquisition and analysis of data and in drafting of the article. Laura E. Gultekin, Barbara L. Brush, Emily Ginier, and Elizabeth B. Dowdell were also involved in the critical revisions of the article and gave final approval on the text. All authors agreed to be accountable for all aspects of work ensuring integrity and accuracy.

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Supplemental Material

Supplemental material for this article is available online.

References

- Alleyne-Green, B., Kulick, A., Osuji, H., Beharie, N., & Sealy, Y. (2018). The impact of shelter environment, parental communication, and supervision on depression outcomes among an urban sample of adolescent first-time shelter users in New York City.

- Journal of Family Issues*, 39, 3075–3095. doi:10.1177/0192513X18770224
- Alperstein, G., Rappaport, C., & Flanigan, J. M. (1988). Health problems of homeless children in New York City. *American Journal of Public Health*, 78, 1232–1233.
- Auerswald, C. L., Lin, J. S., & Parriott, A. (2016). Six-year mortality in a street-recruited cohort of homeless youth in San Francisco, California. *PeerJ*, 4, e1909. doi:10.7717/peerj.1909
- Bannon, W. M., Beharie, N., Olshtain-Mann, O., McKay, M. M., Goldstein, L., Cavaleri, M. A., . . . Lawrence, R. (2012). Youth substance use in a context of family homelessness. *Children and Youth Services Review*, 34, 1–7. doi:10.1016/j.chilyouth.2010.12.002
- Barnes, A. J., Lafavor, T. L., Cutuli, J. J., Zhang, L., Oberg, C. N., & Masten, A. S. (2017). Health and self-regulation among school-age children experiencing family homelessness. *Children*, 4, 1–11. doi:10.3390/children4080070
- Bassuk, E. L., Richard, M. K., & Tsertsvadze, A. (2015). The prevalence of mental illness in homeless children: A systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54, 86–96. doi:10.1016/j.jaac.2014.11.008
- Berdahl, T. A., Hoyt, D. R., & Whitbeck, L. B. (2005). Predictors of first mental health service utilization among homeless and runaway adolescents. *Journal of Adolescent Health*, 37, 145–154. doi:10.1016/j.jadohealth.2004.08.030
- Briggs, M. A., Granado-Villar, D. C., Gitterman, B. A., Brown, J. M., Chilton, L. A., Cotton, W. H., . . . Paz-Soldan, G. J. (2013). Providing care for children and adolescents facing homelessness and housing insecurity. *Pediatrics*, 131, 1206–1210.
- Brumley, B., Fantuzzo, J., Perlman, S., & Zager, M. L. (2015). The unique relations between early homelessness and educational well-being: An empirical test of the continuum of risk hypothesis. *Child and Youth Services Review*, 48, 31–37. doi:10.1016/j.chilyouth.2014.11.012
- Cauce, A. M., Paradise, M., Ginzler, J. A., Embry, L., Morgan, C. J., Lohr, Y., & Theofelis, J. (2000). The characteristics and mental health of homeless adolescents' age and gender differences. *Journal of Emotional and Behavioral Disorders*, 8, 230–239. doi:10.1177/106342660000800403
- Coker, T. R., Elliot, M. N., Kanouse, D. E., Grunbaum, J. A., Gilliland, M. J., Tortolero, S. R., . . . Schuster, M. A. (2009). Prevalence, characteristics, and associated health and health care of family homelessness among fifth-grade students. *American Journal of Public Health*, 99, 1446–1452. doi:10.2106/AJPH2008.147785
- Crawford, D. M., Trotter, E. C., Sittner Hartshorn, K. J., & Whitbeck, L. B. (2011). Pregnancy and mental health of young homeless women. *American Journal of Orthopsychiatry*, 11, 173–183. doi:10.1111/j.1939-0025.2011.01086.x
- Cutuli, J. J., Ahumada, S. M., Herbers, J. E., Lafavor, T. L., Masten, A. S., & Oberg, C. N. (2017). Adversity and children experiencing family homelessness: Implications for health. *Journal of Children and Poverty*, 23, 41–55. doi:10.1080/10796126.2016.1198753
- DiMarco, M. A., Ludington, S. M., & Menke, E. M. (2010). Access to and utilization of oral health care by homeless children/families. *Journal of Health Care for the Poor and Underserved*, 21, 67–81. doi:10.1352/hpu.0.0277
- Eastwood, E. A., & Birnbaum, J. M. (2007). Physical and sexual abuse and unstable housing among adolescents with HIV. *AIDS and Behavior*, 11, S116–S127. doi:10.1007/s10461-007-9236-5
- Fantuzzo, J., LeBoeuf, W., Brumley, B., & Perlman, S. (2013). A population-based inquiry of homeless episode characteristics and early educational well-being. *Child and Youth Services Review*, 35, 966–972. doi:10.1016/j.chilyouth.2013.02.016
- Gaetz, S. (2004). Safe streets for whom? Homeless youth, social exclusion, and criminal victimization. *Canadian Journal of Criminology and Criminal Justice*, 46, 423–455. doi:10.3138/cjccj.46.4.423
- Gerwitz, A., Hart-Shegos, E., & Medhanie, A. (2008). Psychosocial status of homeless children and youth in family supportive housing. *Journal of Family Psychology*, 29, 810–823.
- Grant, R., Gracy, D., Goldsmith, G., Shapiro, A., & Redlener, I. E. (2013). Twenty-five years of child and family homelessness: Where are we now? *American Journal of Public Health*, 103, e1–e10. doi:10.2105/AJPH.2013.301618
- Grant, R., Shapiro, A., Joseph, S., Goldsmith, S., Rigual-Lynch, L., & Redlener, I. (2007). The health of homeless children revisited. *Advanced Pediatrics*, 54, 173–187. doi:10.1016/j.yapd.2007.03.010
- Harpaz-Rotem, I., Rosenheck, R. A., & Desai, R. (2006). The mental health of children exposed to maternal mental illness and homelessness. *Community Mental Health Journal*, 42, 437–448. doi:10.1007/s10597-005-9013-8
- Institute of Medicine. (1988). *Homelessness, health, and human needs*. Washington, DC: National Academies Press.
- Jetelina, K. K., Reingle Gonzalez, J. M., Cuccaro, P. M., Peskin, M. F., Elliott, M. N., Coker, T. R., . . . Schuster, M. A. (2016). The association between familial homelessness, aggression, and victimization among children. *Journal of Adolescent Health*, 59, 688–695. doi:10.1016/j.jadohealth.2016.07.014
- Joanna Briggs Institute. (2015). *The Joanna Briggs Institute Reviewers' Manual 2015: Methodology for JBI reviews*. Retrieved from http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual_Methodology-for-JBI-Scoping-Reviews_2015_v2.pdf
- Johnson, K. D., Whitbeck, L. B., & Hoyt, D. R. (2005). Substance abuse disorders among homeless and runaway adolescents. *Journal of Drug Issues*, 35, 799–816.
- Karim, K., Tischler, V., Gregory, P., & Vostanis, P. (2006). Homeless children and parents: Short-term mental health outcomes. *International Journal of Social Psychiatry*, 52, 448–458. doi:10.1177/00207640060666830
- Kerker, B. D., Bainbridge, J., Kennedy, J., Bennani, Y., Agerton, T., Marder, D., . . . Thorpe, L. E. (2011). A population-based assessment of the health of homeless families in New York City, 2001–2003. *American Journal of Public Health*, 101, 546–553. doi:10.2105/AJPH.2010.193102

- Lee, C. M., Mangurian, C., Tieu, L., Ponath, C., Guzman, D., & Kushel, M. (2017). Childhood adversities associated with poor adult mental health outcomes in older homeless adults: Results for the HOPE HOME study. *American Journal of Geriatric Psychiatry, 25*, 107–117.
- Mackelprang, J. L., Qiu, Q., & Rivara, F. P. (2015). Predictors of emergency department visits and inpatient admissions among homeless and unstably housed adolescents and young adults. *Medical Care, 53*, 1010–1017. doi:10.1097/MLR.0000000000000436
- Medlow, S., Klineberg, E., & Steinbeck, K. (2014). The health diagnosis of homeless adolescents: A systematic review of the literature. *Journal of Adolescence, 37*, 531–542. doi:10.1016/j.adolescence.2014.04.003
- Milburn, N. G., Liang, L. J., Lee, S. J., & Rotheram-Borus, M. J. (2009). Trajectories of risk behaviors and exiting homelessness among newly homeless adolescents. *Vulnerable Child and Youth Studies, 4*, 346–352. doi:10.1080/1745012902884068
- Miller, D. S., & Lin, E. H. B. (1988). Children in sheltered homeless families: Reported health status and use of health services. *Pediatrics, 81*, 668–673.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G., & the PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine, 6*, e1000097. doi:10.1371/journal.pmed.1000097
- National Association of School Nurses. (2017). *Home page: Mission and definition*. Retrieved from <https://www.nasn.org/about-nasn/about>
- National Center for Homeless Education. (2019). *Federal data summary: School years 2014-15 to 2016-2017*. Retrieved May 12, 2019, from <http://nche.ed.gov/wp-content/uploads/2019/02/Federal-Data-Summary-SY-14.15-to16.17-Final-Published-2.12.19.pdf>
- Park, J. M., Metraux, S., Culhane, D. P., & Mandell, D. S. (2012). Homelessness and children's use of mental health services: A population-based study. *Child and Youth Services Review, 34*, 261–265. doi:10.1016/j.childyouth.2011.10.022
- Parker, R. M., Rescorla, L. A., Finkelstein, J. A., Barnes, N., Holmes, J. H., & Stolley, P. D. (1991). A survey of the health of homeless children in Philadelphia shelters. *American Journal of Diseases of Children, 145*, 520–526.
- Pascoe, J. M., Wood, D. L., Duffee, J. H., & Kuo, A., Committee on Psychosocial Aspects of Child & Family Health, & Council on Community Pediatrics. (2016). Mediators and adverse effects of child poverty in the United States. *Pediatrics, 137*, e1–e17. doi:10.1542/peds.2016-0340
- Powell, C., Ellasante, I., Korchmaros, J. D., Haverly, K., & Stevens, S. (2016). iTeam: Outcomes of an affirming system of care serving LGBTQ youth experiencing homelessness. *Families in Society: The Journal of Contemporary Social Services, 97*, 181–190. doi:10.1606/1044-3894.2016.97.24
- Rosenthal, D., Mallett, S., Gurrin, L., Milburn, N. G., & Rotheram-Borus, M. J. (2007). Changes over time among homeless young people in drug dependency, mental illness and their comorbidity. *Psychology, Health, and Medicine, 12*, 70–80. doi:10.1080/13548500600622758
- Rosenthal, D., Mallett, S., Milburn, N. G., & Rotheram-Borus, M. J. (2008). Drug use among homeless young people in Los Angeles and Melbourne. *Journal of Adolescent Health, 43*, 296–305. doi:10.1016/j.jadohealth.2008.06.002
- Rosenthal, D., Rotheram-Borus, M. J., Batterham, P., Mallett, S., Rice, E., & Milburn, N. G. (2007). Housing stability over two years and HIV risk among newly homeless youth. *AIDS and Behavior, 11*, 831–841. doi:10.1007/s10461-007-9235-6
- Solorio, M. R., Rosenthal, D., Milburn, N. G., Weiss, R. E., Batterham, P. J., Gandara, M., & Rotheram-Borus, M. J. (2008). Predictors of sexual risk behaviors among newly homeless youth: A longitudinal study. *Journal of Adolescent Health, 42*, 401–409. doi:10.1016/j.jadohealth.2007.09.023
- Thompson, S. J., Bender, K. A., Lewis, C. M., & Watkins, R. (2008). Runaway and pregnant: Risk factors associated with pregnancy in a national sample of runaway/homeless female adolescents. *Journal of Adolescent Health, 43*, 125–132. doi:10.1016/j.jadohealth.2007.12.015
- Tsai, J., Edens, E. L., & Rosenheck, R. A. (2011). A typology of childhood problems among chronically homeless adults and its association with housing and clinical outcomes. *Journal of Health Care for the Poor and Underserved, 22*, 853–870.
- Tyler, K. A., Whitbeck, L. B., Chen, X., & Johnson, K. (2007). Sexual health of homeless youth: Prevalence and correlates of sexually transmissible infections. *Sexual Health, 4*, 57–61. doi:10.1007/SH06045
- United States Congress. (2015). *Title 42, Chapter 119, Subchapter VI, Part B—Education for homeless children and youths*. Retrieved August 3, 2019, from <https://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter119/subchapter6/partB&edition=prelim>
- U.S. Department of Housing and Urban Development. (2011). *Homeless emergency assistance and rapid transition to housing [HEARTH]: Defining "homelessness," Final rule*. Retrieved May 11, 2019, from https://files.hudexchange.info/resources/documents/HEARTH_HomelessDefinition_FinalRule.pdf
- Weinreb, L., Goldberg, R., Bassuk, E., & Perloff, J. (1998). Determinants of health and service use patterns in homeless and low-income housed children. *Pediatrics, 102*, 554–562.
- Weinreb, L., Wehler, C., Perloff, J., Scott, R., Hosmer, D., Sagor, L., & Gunderson, C. (2002). Hunger: Its impact on children's health and mental health. *Pediatrics, 110*, e41. doi:10.1542/peds.110.4.e41
- Whitbeck, L. B., Chen, X., & Johnson, K. D. (2006). Food insecurity among homeless and runaway adolescents. *Public Health Nutrition, 9*, 47–52. doi:10.1079/PHN2005764
- Whitbeck, L. B., Hoyt, D. R., Johnson, K. D., & Chen, X. (2007). Victimization and posttraumatic stress disorder among runaway and homeless adolescents. *Violence and Victims, 22*, 721–734. doi:10.1097/00004583-200403000-00015
- Wood, D. L., Valdez, R. B., Hayashi, T., & Shen, A. (1990). Health of homeless children and housed, poor children. *Pediatrics, 86*, 858–866.

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