

Maximizing wound care treatment post discharge in patients affected by homelessness

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Abstract

Patients who are homeless regularly must overcome tremendous barriers to obtain health care post discharge from hospitalizations, surgeries, emergency departments, and urgent care clinics. Lack of health insurance and financial hardship are commonly experienced by many people in the United States living below the poverty line. Often, basic needs such as food and shelter outweigh obtaining proper healthcare. An aspect of healthcare that frequently burdens individuals who are homeless is proper wound care. With many homeless individuals experiencing multiple health comorbidities leading to chronic wounds (diabetic ulcers, chronic ulcers, venous insufficiency, lack of properly fitting shoes, needle injuries, injuries from the environment, mental illness, post-surgical incisions), it appears imperative that we must do a better job at implementing effective wound care strategies when working with this specific population. This review prompts a current analysis of what the standard for wound care is in our homeless population in addition to what means this population has to obtain proper materials and education for wound healing. We propose a call to action for emergency departments, free clinics, and shelters to offer additional education and supplies for chronic wounds seen in patients experiencing homelessness.

Introduction

- Homelessness is often multifactorial and involves much more than simply the lack of shelter or a place to live. Many homeless individuals suffer from poor health and premature death due to lack of accessible healthcare.
- Homeless individuals often experience more social exclusion and health inequities than other vulnerable groups¹. A lack of appropriate healthcare resources may be attributed to lack of transportation, limited free clinics, financial constraints, mental illness, and distrust in the healthcare system, amongst other reasons.
- Poor health outcomes and homelessness are closely related^{2,3}.
- Homelessness is associated with hepatitis C, heart disease, epilepsy, HIV infection, and tuberculosis with death rates eight times higher than in the general population⁴. The life expectancy of homeless persons is 30 years less than those with homes⁵.
- Homeless individuals have a much higher risk of adverse health outcomes, acute and chronic wounds, and low adherence or lack of resources to obtaining pharmacological therapies and treatments.
- Individuals coping with homelessness are facing a multidimensional and complex problem that has a direct impact on overall health status, healthcare accessibility, and resource shortages within the community.
- Self-wound care initiatives are crucial for individuals living without a home, and health policy makers, legislators, and public health officials' actions and initiatives are indispensable in any attempts to improve access to accessible wound care and related resources for people experiencing homelessness.



Image 1

Discussion

Homelessness in the United States: A Call to Action for Comprehensive Solutions and Community Support

- Homelessness continues to be a significant social problem in the United States. The leading causes of homelessness are substance abuse, domestic violence, and mental illness⁶.
- In the United States, homelessness has become increasingly prevalent during the past decade. From 2007 to 2019, over half a million homeless people were living on the streets every night⁷. Worldwide, an estimated 100 million people are homeless⁸.
- Individuals living without homes or shelter are at risk of hunger, poor health, and lack of access to clean water, sanitation, and education. The deprivation of basic human needs continues to contribute to inequalities and a deficit in social sustainability.

Acute and Chronic Wounds Commonly Identified in Homeless Individuals

- Common wound etiologies in the homeless population include trauma, injection drug use, chronic disease, and infestations^{9,10,11,12}.
- Acute wounds are most commonly attributed to trauma, lacerations, stab wounds, head trauma, blunt trauma, gunshot wounds, burns, frostbite, and puncture wounds¹³.
- Common chronic wounds in the homeless population include venous stasis ulcers, diabetic foot ulcers, and intravenous drug use puncture and injection site infections.

Simplified and Accessible Wound Care for the Homeless

- It is important to assess the patient's capacity for caring for the wound. We must ask these patients if they have access to basic care, such as clean towels, clean water, cleaning agents, proper bandages, antimicrobial medications, Vaseline, and other wound care products that may help them after their wound is properly dressed.
- Wound care must be made simple in order for the individual to be able to carry out the instructions with the materials they are provided to change the dressings and keep the wound clean.
- Newer bandages with agents containing silver or iodine would benefit the homeless population, but they are more expensive than traditional gauze and saline¹³. The silver and iodine helps reduce infection and expedites the healing process.

Emergency Department Utilization for Homeless Individuals: Stigma, Barriers, and Complex Healthcare Needs

- Homeless patients have a hard time accessing healthcare and end up utilizing the emergency department (ED) more than housed patients¹⁴.
- Homeless patients can encounter stigma from providers, and these negative prior experiences can also result in delays in seeking care resulting in a more critical presentation.
- Studies have shown that homeless persons visit the ED anywhere from .72 to 5.8 times per year with drug, alcohol and injury-related presentations as the most prevalent complaints¹⁵. They often have chronic complex problems including unsafe living conditions, limited access to support, mental illness and substance abuse which can lead to significant challenges in treatment of acute and chronic wounds¹⁶.

Complex Wound Care for Homeless Patients: Barriers in Etiology, Treatment, and Follow-Up Protocols

- Homeless patients have relatively high rates of septic arthritis, osteomyelitis, necrotizing fasciitis and drug resistant bacterial infections¹⁷. Patients with diabetic ulcers have a high risk of serious complications including amputation and death¹⁸.
- Even if patients are referred to partner homeless health clinics or respite centers, these patients may be lost to follow up at a higher rate due to mental illness, substance abuse, lack of support/transportation¹⁹.
- Currently, there are around 133 medical respite programs across 38 states and territories. Research shows around 50% of homeless patients without respite care are re-hospitalized in one week and 75% within two weeks¹⁹.
- Medical respite care has emerged as a solution to safely bridge homeless people from hospitalization back to a shelter or the street; however, the requirements to enter these respite facilities vary and many communities do not have respite care²¹.

Reduced Life Expectancy and the Burden of Chronic Wounds: Healthcare Disparities and Economic Impact

- Homeless individuals have a lower life expectancy and higher prevalence of numerous diseases with an average life expectancy between 42 and 52 years¹⁹.
- It is estimated that the USA spends \$25 billion per year treating chronic wounds²⁰.

Examining the Role of Health Care for the Homeless (HCH) Services

- In response to the complex healthcare needs of homeless patients, health care for the homeless (HCH) services were developed which became part of the federal health care system and is administered by the Health Resources and Services Administration²².
- The HCH Clinicians Network seeks to improve upon shelter-based health care programs. Their research has shown that the care available is dependent on resources the shelter has available. For example, the McKinney Homeless Program at Southwest Community Health Center in Bridgeport, Connecticut provides comprehensive care including longitudinal care to shelters in the area¹⁹.

Addressing Challenges in Education, Follow-Up, and the Role of Street Medicine Programs

- A challenge to monitoring the success of treatments, supplies, and wound care offered to the homeless population is that follow up can be very difficult to obtain if patients are only seen once or twice in an outpatient setting.
- Providers have begun offering street medicine programs to increase access to health care in an attempt to limit the downstream detrimental health impacts of homelessness²³.
- Street medicine provides healthcare to unsheltered and homeless individuals directly where they currently reside. Street medicine has its own set of medical, legal, and safety risks²³.

Creative Approaches to Wound Care: Leveraging Street-Side Wound Care, Mobile Clinics, and Non-Profit Initiatives for Unsheltered Individuals

- Free clinics, mobile clinics, and non-profit drop-off organizations can all provide tremendous utility to unsheltered individuals with acute or chronic wounds.
- It is imperative to make sure that the instruction and education provided to the individual is written or spoken in a way that the person can understand and repeat back.
- Wound cleansers that providers may avoid in hospital or office-based medicine due to potential cytotoxicity, such as chlorhexidine or bleach, may be recommended in the homeless population for infection prevention.
- The risk of poor or no follow-up outweighs the potential for delayed wound healing from any side effects of cytotoxicity²³. Gauze, gauze pads, baby wipes, infant diapers, and female sanitary napkins can all be used street-side for urgent wound care.



Image 2

- Using products that people are familiar with may increase the chances they will continue to care for the wound after it has been initially cleaned and bandaged.

Direct Provision of Wound Care Packages and Community Resource Education

- Directly providing homeless individuals with wound care packages with clean wound supplies can also help bridge care gaps until the patient is able to be seen by a physician or obtain more wound care supplies.
- Wound care packages that are helpful to patients in the community often include antiseptic wipes, gauze, gauze wraps, bandages of varying sizes, Vaseline, Neosporin, antimicrobial ointment, Ace bandage wraps, and alcohol swabs.
- Proper instruction on wound hygiene should be included along with the wound care package in order to ensure the patient knows how to successfully clean, change, and redress their wound.
- If severe cases are identified in street-side practice, referrals and transportation should be made to social programs or free clinics for additional care and increased level of care.

Fostering Partnerships, Public Health Policies, and Community Programs to Improve Access and Quality of Care

- Healthcare professionals, free clinics, shelters, emergency departments, mobile clinics, clinicians, and volunteers must work together to provide adequate resources, education, instruction, and materials for homeless individuals to properly clean and care for their acute and chronic wounds.
- State governments, policy makers, public health commissioners, public hospital systems, community agencies, and volunteers must create programs and avenues towards proper wound care in the homeless population. Public health policies allowing patients access to simple education and supplies within the community can have a significant impact on overall health, wound healing, and quality of life.

“Walk-Up Wound Care”

- Founder of “Walk-Up Wound Care” in New York and Connecticut
- Recognized by the NY State Commissioner of Public Health and the NY State Commissioner of Behavioral & Community Health
- Collected funds to organize wound care kits that included Telfa pads, gauze, gauze rolls, Ace bandage wraps, bandages, antiseptic cloths, Vaseline, antiseptic wash clothes for homeless individuals within our community
- Donated over 5,000 wound care kits throughout NY and CT to individuals that cannot afford wound care and have chronic wounds, diabetic foot ulcers, needle stick injuries, amongst other acute and chronic wounds
- Recruited volunteers to expand “Walk-Up Wound Care” to also include start-up sites and donation centers both nationally and internationally
- We are starting up additional chapters within the US and actively looking for chapter leaders. Please fill out our Google Form if you are interested in bringing Walk-Up Wound Care to your community!



Image 3



Image 4



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