Homelessness, organ donation, transplantation, and a call for equity in the United States

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Summary

While social justice is a pillar that society seeks to uphold, in the area of organ transplantation, social justice, equity, and inclusion fail in the unbefriended and undomiciled population. Due to lack of social support of the homeless population, such status often renders these individuals ineligible to be organ recipients. Though it can be argued that organ donation by an unbefriended, undomciled patient benefits the greater good, there is clear inequity in the fact that homeless individuals are denied transplants due to inadequate social support. To illustrate such social breakdown, we describe two unbefriended, undomiciled patients brought to our hospitals by emergency services with diagnoses of intracerebral haemorrhage that progressed to brain death. This proposal represents a call to action to remediate the broken system: how the inherent inequity in organ donation by unbefriended, undomiciled patients would be ethically optimized if social support systems were implemented to allow for their candidacy for organ transplantation.

Keywords: Homelessness; Organ donation; Transplantation; Ethics

Organ transplantation constitutes the treatment of choice for end-stage organ disease. Transplant recipients benefit from greater survival rates as well as from improved quality of life. In some cases, it provides the only alternative to an imminent death (such as in end stage liver, heart, and lung disease)[1–4] In the case of kidney transplantation, from a public health perspective, it is more effective not only medically but also financially when compared to chronic dialysis.[5–9] Candidates on the wait list depend on the availability of organ donors.

An evaluation of the current transplantation process in the United States shows a previously unaddressed social justice, equity, and inclusion deficit negatively impacting the unbefriended and undomiciled population. These three pillars of the American society can be defined as the view that everyone deserves equal economic, political, and social rights and opportunities. Social justice should consider the vulnerability of those with special needs. Our attention to this topic is further emphasized and exemplified by our experience with two recent cases of unbefriended undomiciled patients brought to our hospitals by emergency services with diagnoses of intracranial haemorrhage that progressed to death by neurological criteria and became organ donors.

The current state of homelessness in the United States

According to the U.S. Department of Housing and Urban Development (HUD) 2020 Annual Homeless Assessment Report to Congress, "580,466 people experienced homelessness in the United States on a single night in 2020, an increase of 12,751 people, or 2.2 percent, from 2019," with almost 40% of those experiencing homelessness being Black or African American.[10] Projections estimate that homelessness among older adults will triple in 2030, with a greater incidence of "unmanaged chronic disease and limited access to healthcare."[11] As such, individuals experiencing homelessness face large health inequities across a wide range of conditions. Most health problems remain unaddressed, thus contributing to a mortality rate eight times higher than the average for men, 12 times higher for women, and death at an average age of 52 years.[12]

Organ donation and homelessness

The United States functions under an "opt-in" donor registry system, where individuals must register to become organ and tissue donors. According to the New York State Public Health Code Order of Priority, for

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individuals not on the donor registry, consent for organ and tissue donation can be obtained from the next of kin. Specifically, the consent hierarchy delineated in New York Public Health Law § 4301 is as follows: (i) health care agent; (ii) burial agent; (iii) spouse, if not legally separated, or domestic partner; (iv) adult son or daughter; (v) either parent; (vi) adult brother/sister; (vii) adult grandchildren; (viii) grandparents; (ix) guardian of the person of the decedent; or (x) any other person authorized or under obligation to dispose of the body. Therefore, when no next of kin (or guardian) is identified, as in the two cases above, consent for organ donation can be obtained from "any other person authorised or under the obligation to dispose of the body."[13,14] Under New York Public Health Law § 4201, disposition of remains for an unclaimed body is completed by the hospital public administrator.[15] Following New York state law, consent for organ donation for an unbefriended individual is therefore obtained by hospital administration. As such, in the case of the two unbefriended undomiciled patients previously mentioned that were brought to our hospitals by emergency services and progressed to death by neurological criteria, consents were obtained from hospital administrators, allowing for their organs to be procured and subsequently transplanted onto multiple wait list recipients.

Although able to donate, the lack of social support and homeless status of the two patients we described would have made them ineligible to be organ recipients (should they had required a transplant while alive). Despite there being inconsistent evidence linking social support to medication adherence and outcomes post-transplantation,[16] social support remains a major component of decision making when determining who is listed as a transplant candidate. It is estimated that on average 10% of those evaluated for transplantation are excluded due to "inadequate support." Inadequate social support often refers to individuals who have difficulty identifying caregivers who can take time away from work, and inability to self-finance home-based assistance.[16] Therefore, although the magnitude and duration of the support required to become eligible for transplantation varies among institutions and the health care practitioners conducting the assessment, unbefriended and undomiciled status is an almost guaranteed disqualification from even consideration for transplant evaluation. Interestingly, although 86% of providers used social support when making listing decisions, only 68% believed it should be used, 42% were somewhat or not at all confident, and nearly 25% thought it was unfair or were not sure.[17] Following this trend of medical decisions based on psychosocial findings, homeless prospective donors showed a trend to be considered US Public Health Service (PHS) high-risk/increased-risk donors.[18]

While it can be argued that organ donation by an unbefriended, undomiciled patient benefits the greater good, there is a very strong inequity present in the fact that individuals experiencing homelessness are denied transplants due to inadequate social support. This bias is further augmented by the fact that the incidence of end stage renal disease is significantly higher in underserved populations.[19]

Though the United Network for Organ Sharing (UNOS) lists in their National Data Report multiple categories (such as age, ethnicity, gender, circumstance of death, mechanism of death, cause of death, region, and donation service area) as descriptors of deceased organ donors, there is no mention of psychosocial status (even less of homelessness).[20,21] This makes it extremely difficult (if not impossible) to clearly establish the incidence of homeless and undomiciled deceased organ donors.

Optimisation of organ transplantation candidacy for the homeless

The perhaps "forced" (rather than "generous") act of organ donation by unbefriended, undomiciled patients in the setting of an "opt in" system (such as the one in the United States) would be ethically optimised if social support systems were implemented to also allow for their candidacy to organ transplantation. Currently, Medicaid covers the cost of hospitalisation for kidney transplantation and immunosuppressant drugs. The social support necessary to ensure adequate post-transplant care and outcomes, like ensuring adherence to the new medical regimen and frequency of post-operative medical appointments, is not covered. Additionally, post-transplant housing which would consist of a safe environment without exposure to infectious diseases and other hazard risks for immunocompromised patients, is not provided either. Without such coverage, individuals experiencing homelessness are essentially ostracised by society from receiving transplants. When compared to dialysis, kidney transplantation provides an enhanced survival, a better quality of life, and an almost 4 times greater financial benefit per quality-adjusted life year gained.[22] Part of the financial benefits associated with transplanting more individuals rather than maintaining them on chronic dialysis could be allocated to improve post-transplant support programs for all recipients, including individuals experiencing homelessness Table 1.

Conclusion

The current system of excluding the homeless is reminiscent of the period prior to the Social Security Amendments of 1972.[23] It took over a decade since the first successful treatment of end stage kidney disease with repeated haemodialysis for Congress to provide Medicare entitlement for patients with chronic kidney disease in need of dialysis or transplantation.[24] Prior to the Amendments of 1972, committees would determine

Current Medicaid/Medicare coverage	Future Medicaid/Medicare coverage necessary to optimize kidney transplant candidacy for the homeless
• Dialysis • Cost of hospitalization for kidney transplant • Cost of immunosuppressant drugs	• Post-transplant housing • Support individual to ensure patient is compliant with medical regiment and post-op appointments

Table 1: **How Medicaid/Medicare expansion can optimize kidney transplant candidacy for the homeless.**

who would have access to dialysis, providing a life extension for the selected ones and an almost guaranteed death sentence for all those who did not qualify.[25,26] We should not limit ourselves to limited and incomplete actions. Society is responsible for the unbefriended and undomiciled. Furthermore, society is also accountable (to various extents) for the fact that these individuals are unbefriended and undomiciled. Food security, mental and basic health support, should not be used as a way to exclude other components of the basic right of healthcare. It is our duty to initiate a call to action to address this inequity. While it is acknowledged that this proposal would take a prodigious share of resources, it is time to initiate the necessary changes to help this previously neglected and underserved population. Efforts to address such topic should also encompass the upcoming generations and leaders. We should try to avoid re-enacting the period prior to the Social Security Amendments of 1972. Governmental and private sector initiatives at the national, regional, and local levels should be instituted to eliminate the disparities and inequities currently affecting the unbefriended and undomiciled. Social programs should be developed to assist those in need, allowing them to become equal members of society. Transplantation provides for a prolonged survival and an enhanced quality of life. We all are created equal, and every one of us deserves the right to be considered for a treatment that provides such benefits. Young adults already in the workforce as well as in college and high school should be included in the discussions directed to reach more adequate and equitable solutions.

Contributors

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Declaration of interests

We declare no competing interests.

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