

Housing: A Critical Contributor to Kidney Disease Disparities

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| Journal: | <i>Journal of the American Society of Nephrology</i> |
| Manuscript ID | JASN-2022-04-0424.R1 |
| Manuscript Type: | Invited Feature |
| Date Submitted by the Author: | 27-Apr-2022 |
| Complete List of Authors: | Novick, Tessa; University of Texas at Austin Dell Medical School, Division of Nephrology Baweja, Mukta; Icahn School of Medicine at Mount Sinai, Division of Nephrology, Department of Medicine |
| Keywords: | disparities, housing, socioeconomic status, racial and ethnic disparities |
| | |

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Manuscripts

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2
3 **Authors:** Novick, Tessa; Baweja, Mukta
4

5 **Title:** Housing: A Critical Contributor to Kidney Disease Disparities
6

7 **Running title:** Housing Contributes to Kidney Disease Disparities
8

9
10 **Manuscript Type:** Invited Feature
11

12 **Manuscript Category:** Perspective
13

14 **Funders:** National Institute of Diabetes and Digestive and Kidney Diseases, (Grant / Award Number:
15 'K23DK127153')
16

17 **Financial Disclosure:** CUST_FINANCIAL_DISCLOSURE :No data available. T. Novick reports Consultancy:
18 Cricket Health. M. Baweja reports Other Interests or Relationships: Young Center for Immigrant
19 Children's Rights, and Physicians for Human Rights.
20
21

22 **Study Group/Organization Name:** American Society of Nephrology Healthcare Justice Committee
23 Advocacy and Scholarship Work Group
24

25 **Study Group Members' Names:** Tessa Novick, MD, MSW, MHS; Mukta Baweja, MD; Teri Browne, PhD,
26 MSW; Stephanie J. Mahooty, APN, NP; Yue-Harn Ng, MD; Katherine Rizzolo, MD; Lisa Robinson, MD,
27 FASN; Mohamed A. Sekkarie, MD, MPH; Bessie A. Young, MD, MPH, FASN
28
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30 **Total number of words:** 1175
31

32 **Abstract:** DOCUMENT_ABSTRACT :No data available.
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Housing: A Critical Contributor to Kidney Disease Disparities

Authors: Tessa K. Novick, MD, MSW, MHS¹; Mukta Baweja, MD²; on behalf of the American Society of Nephrology Healthcare Justice Committee Advocacy and Scholarship Work Group*

Affiliations:

(1) Division of Nephrology, University of Texas at Austin, Dell Medical School, Austin, Texas

(2) Division of Nephrology, Department of Medicine, Icahn School of Medicine at Mount Sinai, New York, NY

*Members: Tessa Novick, MD, MSW, MHS; Mukta Baweja, MD; Teri Browne, PhD, MSW; Stephanie J. Mahooty, APN, NP; Yue-Harn Ng, MD; Katherine Rizzolo, MD; Lisa Robinson, MD, FASN; Mohamed A. Sekkarie, MD, MPH; Bessie A. Young, MD, MPH, FASN

Word Count Manuscript: 1175 words

Corresponding Author:

Tessa K. Novick, MD, MSW, MHS

Address: 1601 Trinity St, Bldg B, Austin, TX 78712

Phone/Fax: 512-471-0010/512-495-5839

Email address: Tessa.novick@austin.utexas.edu

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3 Housing is a critical determinant of health, and with the nationwide shortage of
4 affordable housing, job loss and wage stagnation that were exacerbated during the COVID-19
5 pandemic, those affected by kidney disease have compounded risk for consequences.¹ The
6 housing shortage particularly impacts people who have incomes that are at or below the federal
7 poverty level and minoritized populations due to decades of racist housing policies and lending
8 practices.² Kidney disease disproportionately affects the same populations; compared to people
9 who are white, the incidence of kidney failure is over 3-fold higher for people who are Black, and
10 individuals living in areas where more than 1 in 5 households have incomes below the federal
11 poverty level are 25% more likely to develop kidney failure than individuals not living in those
12 neighborhoods.³ Although the exact prevalence of unstable housing among people with kidney
13 disease is unknown, housing has become an issue that demands the attention of the kidney
14 community.
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29 Compared to housed populations, individuals experiencing homelessness face higher
30 mortality, higher acute care utilization, and higher rates of suicide, unintentional injuries,
31 infectious diseases, mental health problems, substance misuse and abuse.¹ Those with kidney
32 disease are already at increased risk for these comorbid circumstances. Housing insecurity is
33 defined as having high housing costs or living in overcrowded or unsafe living conditions.²
34 People experiencing housing insecurity are 3 times more likely to develop albuminuria, 60%
35 more likely to postpone needed medical care and less likely to achieve kidney protective
36 measures such as control of diabetes and hypertension.⁴⁻⁶
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47 Among people with kidney disease, housing issues may contribute to worse outcomes
48 by promoting progression to kidney failure and introducing barriers to healthy behaviors and
49 medical care.⁴⁻⁷ For example, people with chronic kidney disease (CKD) experiencing
50 homelessness are 30% more likely to develop kidney failure or die than people CKD who are
51 stably housed.⁷ Advanced kidney disease in turn increases vulnerability to unstable housing,
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3 since many who are already experiencing financial resource strain may suddenly be unable to
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5 work and pay for rising housing costs.
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8 A lack of housing likely results in people on dialysis or with kidney transplants being
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10 unable to store or manage complicated medication regimens. A lack of a permanent address
11
12 may result in a discontinuation of benefits or insurance. People on dialysis experiencing
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14 unstable housing might not be able to follow dietary restrictions due to lack of control over
15
16 available food, and miss dialysis sessions due to frequent moves and difficulty securing regular
17
18 transportation. Housing could significantly impede the proposed End Stage Renal Disease
19
20 Treatment Choice (ETC) payment model, a national effort to increase kidney transplantation
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22 and use of home dialysis modalities, since these treatments are not feasible when someone is
23
24 experiencing unstable housing.⁸
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27 Addressing housing with advocacy and program development may narrow
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29 socioeconomic disparities in kidney disease, as has been accomplished in other public health
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31 sectors such as infectious diseases. Stable housing has the potential to increase use of home
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33 dialysis modalities or transplantation among patients who are low-income experiencing unstable
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35 housing, which in turn could improve quality of life and mortality.⁹ Housing interventions, such as
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37 permanent supportive housing, have been used for decades for individuals experiencing chronic
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39 homelessness with disabling conditions, such as HIV and mental health problems, and should
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41 be expanded for people with kidney disease. Permanent supportive housing, which combines
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43 housing with services ranging from medical and mental health care to case management,¹⁰ has
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45 been shown to keep people housed longer, decrease acute care utilization, and increase
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47 outpatient utilization.⁹
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51 Additional housing interventions include hospital investments in rental assistance, tiny
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53 home communities, rental assistance in the form of housing vouchers for people who are
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55 extremely low income, and the conversion of hotels into transitional housing facilities, among
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3 others.¹ The kidney community should advocate for the prioritization of our patients among
4 existing programs. The success of such potential programs depends on the collaboration of the
5 housing sector with the kidney community, who should have input on intervention design to
6 ensure they meet the unique needs of kidney patients. For example, many housing
7 interventions involve shared restroom facilities, which are not conducive to home dialysis
8 modalities.
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16 The proposed ETC payment model must address individuals who receive dialysis and
17 are experiencing housing issues. For example, the first model of the ETC proposed excluding
18 potential beneficiaries who were experiencing unstable housing.⁸ The Health Equity Incentive
19 announced by Centers for Medicare & Medicaid Services in Fall of 2021 sought to rectify this
20 issue through an improved system for low-income Medicaid eligible beneficiaries referred for
21 home dialysis and transplantation.⁸ However, novel solutions, such as partnerships between
22 dialysis organizations and housing programs to combine a home with home dialysis modalities,
23 are crucial to consider to adequately care for this population.
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34 Effectively addressing housing as a determinant of kidney health requires an
35 understanding of the prevalence of housing issues among people with kidney disease, and how
36 to effectively intervene and measure intervention impact on disparities – all of which depend on
37 an advancement of housing research. Housing status is not currently tracked among people
38 with kidney disease, and the addition of housing questions to Centers for Medicare & Medicaid
39 Services 2728 forms would enable estimates of nation-wide prevalence and tracking within the
40 United States Renal Data System. Existing housing screening questions need to be validated,
41 particularly among non-English speaking populations.¹ Data from housing interventions and
42 health care systems are usually not linked, preventing assessment of the impact of housing
43 interventions on health outcomes and medical expenditures. Linkage of housing and health
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3 databases is essential to facilitate understanding of the best way to intervene and associated
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5 costs.
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8 Increased awareness and sensitivity of housing issues among health care staff is not
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10 only needed but may improve patient care. Individuals experiencing unstable housing are
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12 frequently dismissed and labeled as non-adherent, when instead the inability to meet certain
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14 metrics, such as dialysis attendance, could be used as an opportunity to probe about unstable
15
16 housing and other social challenges. A better understanding and improved awareness of
17
18 housing circumstances would also facilitate needed social work referrals and connection with
19
20 local resources. It is critical that care plans for individuals experiencing unstable housing
21
22 accommodate their ability to take and store medications, access recommended food and
23
24 refrigeration, access toilet facilities, and address life-threatening challenges like exposure to
25
26 temperature extremes and physical safety. People experiencing unstable housing repeatedly
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28 face systemic racism, discrimination, social isolation, demoralization, mental health problems
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30 and violence, and may not view medical facilities as safe. Awareness of these issues among
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32 health care staff can facilitate rapport and promote patient engagement.
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36 Stable housing is a basic human right that is tightly connected to health and outcomes
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38 among people with kidney disease. Low-income and historically minoritized populations are at
39
40 increased risk for unstable housing and being unhoused with kidney disease compromises care
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42 and increases risk for worse outcomes. Advocacy to prioritize individuals with kidney disease
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44 among existing housing interventions, and interventions specifically designed for people with
45
46 kidney disease should be considered. More research is needed to facilitate better understanding
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48 of the prevalence of unstable housing and the best way to intervene.
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3 FUNDING
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5
6 Dr. Novick is supported by the National Institute of Diabetes and Digestive and Kidney Diseases
7
8 grant K23DK12715353.
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13 DISCLOSURES
14

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16 T. Novick reports Consultancy: Cricket Health. M. Baweja reports Other Interests or
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18 Relationships: Young Center for Immigrant Children's Rights, and Physicians for Human Rights.
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24 AUTHOR CONTRIBUTIONS
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26
27 Tessa Novick: Conceptualization, Writing – original draft, Writing – review & editing
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30 Mukta Baweja: Conceptualization, Writing – review & editing
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