JASN® Journal of the American Society of Nephrology

Culturally Concordant Community-Health Workers: Building Sustainable Community-Based Interventions that Eliminate Kidney Health Disparities

Journal:	*Journal of the American Society of Nephrology*
Manuscript ID	JASN-2022-03-0319.R1
Manuscript Type:	Invited Feature
Date Submitted by the Author:	07-Apr-2022
Complete List of Authors:	Cervantes, Lilia; University of Colorado, Department of Medicine Robinson, Bruce; Arbor Research Collaborative for Health Steiner, John; Kaiser Permanente Colorado Institute for Health Research Myaskovsky, Larissa; University of New Mexico School of Medicine, Center for Healthcare Equity in Kidney Disease (CHEK-D) and Department of Internal Medicine
Keywords:	Racial and Ethnic Disparities, ethnicity, kidney disease, Ethnic minority

SCHOLARONE™ Manuscripts

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Authors: Cervantes, Lilia; Robinson, Bruce; Steiner, John; Myaskovsky, Larissa

Title: Culturally Concordant Community-Health Workers: Building Sustainable Community-Based Interventions that Eliminate Kidney Health Disparities

Running title: Community-health worker interventions

Manuscript Type: Invited Feature

Manuscript Category: Perspective

Funders: National Institute on Minority Health and Health Disparities, (Grant / Award Number: 'R01MD013752 ')
Dialysis Clinics, (Grant / Award Number: 'C-3924 ')
National Institute of Diabetes and Digestive and Kidney Diseases, (Grant / Award Number: 'K23DK117018 ')
Robert Wood Johnson Foundation, (Grant / Award Number: '77887 ')

Financial Disclosure: CUST_FINANCIAL_DISCLOSURE :No data available. L. Cervantes reports Research Funding: Retrophin; Advisory or Leadership Role: Retrophin/Travere; and Other Interests or Relationships: National Kidney Foundation. B. Robinson reports Research Funding: Principal Investigator of the DOPPS Program, which is funded by a consortium of private industry, public funders, and professional societies, all support is provided without restrictions on publications, All funds are made to Arbor Research Collaborative for Health and not directly to Dr. Robinson, The full DOPPS Program support and additional support for specific projects and countries can be found here: https://www.dopps.org/AboutUs/Support.aspx; Honoraria: received consultancy fees or travel reimbursement in the last three years from AstraZeneca, GlaxoSmithKline, Kyowa Kirin Co., and Monogram Health, all paid directly to his institution of employment; and Advisory or Leadership Role: Editorial Board of American Journal of Kidney Diseases. L. Myaskovsky reports Advisory or Leadership Role: Associate Editor for Clinical Transplantation; and Other Interests or Relationships: Director of the Center for Healthcare Equity in Kidney Disease (CHEK-D), which is funded by Dialysis Clinic Inc. (DCI), a national non-profit dialysis provider.

Study Group/Organization Name: CUST_STUDY_GROUP/ORGANIZATION_NAME :No data available.

Study Group Members' Names: CUST_STUDY_GROUP_MEMBERS :No data available.

Total number of words: 1216

Abstract: DOCUMENT_ABSTRACT :No data available.

Copyright 2022 by ASN, Published Ahead of Print on 4/26/22, Accepted/Unedited Version

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Culturally Concordant Community-Health Workers: Building Sustainable Community-Based Interventions that Eliminate Kidney Health Disparities

Lilia Cervantes, MD[1], Bruce M. Robinson, MD, MS[2], John F. Steiner, MD, MPH[3], Larissa Myaskovsky PhD, FAST[4]

[1]Department of Medicine, University of Colorado, Aurora, Colorado, [2]Arbor Research Collaborative for Health, Ann Arbor, MI, [3]Institute for Health Research, Kaiser Permanente Colorado, [4]Center for Healthcare Equity in Kidney Disease (CHEK-D) and Department of Internal Medicine, University of New Mexico School of Medicine, Albuquerque NM

Manuscript Word Count: 1000

Lilia Cervantes, MD

University of Colorado Anschutz Medical Campus

12401 E. 17th Avenue

Aurora, Co 80045

Fax: 720-848-4291

Lilia.Cervantes@cuanschutz.edu

Copyright 2022 by ASN, Published Ahead of Print on 4/26/22, Accepted/Unedited Version

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Community-Health Workers

Community-health workers (CHWs), such as patient navigators and *promotoras,* are lay non-medical individuals who are trusted and share the lived experience and characteristics of the community they serve (e.g., race and ethnicity, language, immigration status, socioeconomic challenges, medical illness).[1] CHWs typically provide support with social-and health-related challenges. CHW interventions became an important community-based strategy to address health disparities following landmark research that demonstrated their efficacy in reducing breast cancer screening and treatment disparities.[1] CHW interventions deserve consideration to reduce kidney health disparities, particularly for individuals who experience poverty, and members of racial and ethnic minority groups who face a disproportionate burden of social and structural challenges.

Characteristics and Training of Community-Health Workers

Ideally, CHWs should mirror the demographics and language characteristics of their target community and share experiences in facing social and structural challenges. A culture and language concordant CHW may more easily earn an individual's trust, serve as a source of information, and provide a bridge to healthcare clinicians and services. A CHW with personal experience with kidney disease may be valuable because they can empathize with and understand the health challenges imposed by kidney disease. The preferability of support from someone with personal experience with kidney disease was confirmed with qualitative findings that assessed the needs and preferences of Latinx individuals with kidney failure and of interdisciplinary clinicians on how to best support Latinx individuals with kidney failure.[2,3]

Copyright 2022 by ASN, Published Ahead of Print on 4/26/22, Accepted/Unedited Version

Training for CHWs should be guided by, and specific to, the target community and intended outcomes. Training may include: (1) social risk assessment and how to identify resources and support for individuals with social and structural challenges; (2) behavioral training such as motivational interviewing and patient activation; (3) basic CHW skills (e.g., professional conduct, health promotion, care coordination, healthcare system overview, electronic health record or computer training); (4) kidney specific education and experience which may include clinical shadowing of interdisciplinary clinicians treating kidney disease.[4]

Opportunities for Community-Health Workers to Reduce Kidney Health Disparities

Health disparities in use of home dialysis and receipt of kidney transplant are especially prevalent among racial and ethnic minority groups and individuals who experience poverty.[5] Challenges to increasing home dialysis and transplant include clinician factors, health-system factors, and patient-related factors. The Advancing American Kidney Health Initiative is a 2019 executive order that challenged the community to increase the number of individuals with kidney failure who receive either home dialysis or a kidney transplant.[6] In response, the Centers for Medicare and Medicaid Services (CMS) implemented the ESRD Treatment Choices (ETC) and the Kidney Care Choices (KCC) models.[7] CHWs trained in kidney replacement therapy options can provide emotional support, educate patients with low health literacy, support them in dealing with competing social challenges and language interpretation, accompany patients to key encounters such as the first transplant center visit or home-based clinician evaluation for home dialysis. CHWs can use their training in motivational interviewing and patient activation to strengthen a patient's engagement in preparing for and responding to demands related to kidney replacement therapy choice.

Copyright 2022 by ASN, Published Ahead of Print on 4/26/22, Accepted/Unedited Version

Community-health workers can also be active in: (1) supporting efforts to screen patients at risk for kidney disease to reduce the prevalence of kidney disease; (2) connecting patients with kidney disease to clinical care to reduce the progression of kidney disease to kidney failure; (3) providing support to patients with advanced kidney disease for shared decision-making regarding choice of kidney replacement therapy; and (4) improving transition to transplant or dialysis for patients with kidney failure (**Figure 1**).

Example of Community-Health Worker Intervention

We partnered with a community-advisory panel to create and pilot test a 1-arm feasibility study of a CHW intervention in response to Latinx community members indicating that socioeconomic challenges compounded by low health literacy and lack of language interpretation were the most distressing aspects of living with kidney failure.[2,8] We are now conducting a small (140 Latinx participants) randomized trial of the CHW intervention at 5 inner-city dialysis centers in Denver. The CHWs consent participants, and those randomized to the intervention receive at least 5 visits over 3 months. The CHW provides support with social challenges, language interpretation during key clinical visits, and uses motivational interviewing and patient activation to support patient-centered decision-making. Visits occur either at the dialysis center, at home, or at clinical encounters. The CHW works in partnership with social workers, who are often overwhelmed with demands in urban dialysis centers. They are also often integrated into the interdisciplinary dialysis team meetings because they can provide a deeper understanding of the social and structural challenges that may be influencing kidney care and adherence. We achieved a recruitment rate of ~80% for both studies because the CHW is not rushed, describes the study in a culturally and language concordant manner, and develops a

Copyright 2022 by ASN, Published Ahead of Print on 4/26/22, Accepted/Unedited Version

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

personalized relationship. Our preliminary findings confirm the many social challenges that participants face, and demonstrate cases in which a CHW has been crucial to improving patient-centered outcomes (i.e. outcomes that matter to and are prioritized by patients) such as support with social challenges and communication.

Building Sustainability

As we build an evidence base to demonstrate the effectiveness of CHW interventions, a key element will be research to demonstrate the cost-effectiveness of CHWs in reducing kidney health disparities. Strategic advocacy will also require a policy analysis that describes legislative options. In 2021, the National Academy for State Health Policy released a report describing state-level approaches and financing strategies across the country. The report stresses that CHWs are a 'critical segment of the community-based workforce that is increasingly central to state workforce and equity planning.'[9] As the evidence base for CHWs grows, there may be an opportunity to partner with CMS and include reimbursement for CHWs through value-based payment systems, bundled reimbursement, or alternative payment models. Additionally, as the effects of the ETC and KCC models on underserved populations are monitored, there may be an opportunity, even imperative, to integrate CHWs to further improve patient experiences and outcomes.

Conclusion

CHW interventions are a promising community-based approach to reduce kidney health disparities for racial and ethnic minorities and people that experience poverty along the kidney care continuum. Effectiveness, policy, and reimbursement considerations for CHW support must be prioritized to create sustainable change and meaningfully reduce disparities.