

UCLA

UCLA Previously Published Works

Title

Community-Partnered Development of a Digital Mental Health Resource Website to Support Diverse Communities During the COVID-19 Pandemic.

Permalink

<https://escholarship.org/uc/item/5tr7405g>

Journal

Journal of Health Care for the Poor and Underserved, 33(1)

ISSN

1049-2089

Authors

Goodsmith, Nichole

Moore, Elizabeth M

Siddiq, Hafifa

et al.

Publication Date

2022

DOI

10.1353/hpu.2022.0039

Peer reviewed



HHS Public Access

Author manuscript

J Health Care Poor Underserved. Author manuscript; available in PMC 2023 March 23.

Published in final edited form as:

J Health Care Poor Underserved. 2022 ; 33(1): 506–516. doi:10.1353/hpu.2022.0039.

Community-Partnered Development of a Digital Mental Health Resource Website to Support Diverse Communities During the COVID-19 Pandemic

Nichole Goodsmith, MD, PhD*,

VA Greater Los Angeles Healthcare System and the University of California Los Angeles (UCLA)
National Clinician Scholars Program, Los Angeles, CA

Elizabeth M. Moore, MD, MSHPM*,

VA Greater Los Angeles Healthcare System and the University of California Los Angeles (UCLA)
National Clinician Scholars Program, Los Angeles, CA

Hafifa Siddiq, PhD, RN,

UCLA National Clinician Scholars Program

Nicolás E. Barceló, MD,

UCLA National Clinician Scholars Program

Estrella Ulloa-Flores, BA,

Global Center for Children and Families, UCLA

Gustavo Loera, EdD,

Center for Reducing Health Disparities, University of California Davis

Felica Jones, AA,

Healthy African American Families II, Los Angeles, CA

Sergio Aguilar-Gaxiola, MD, PhD,

Center for Reducing Health Disparities and the Clinical and Translational Science Center
Community Engagement Program, University of California Davis Health

Kenneth Wells, MD, MPH,

UCLA Center for Health Services and Society at the Semel Institute for Neuroscience and Human Behavior, and the VA Greater Los Angeles Healthcare System

Armen Arevian, MD, PhD

Department of Psychiatry, UCLA

Summary:

A state-academic-community partnership formed in response to the mental health needs fueled by the COVID-19 pandemic and the disproportionate effects on marginalized communities. Taking a

Please address correspondence to Kenneth Wells, 10920 Wilshire Blvd, Suite 300, Los Angeles, CA 90095; kwells@mednet.ucla.edu.
*These authors contributed equally to this work.

Disclosures: AA is founder of Chorus Innovations, Inc., Arevian Technologies, and Open Science Initiative. The authors report no conflicts of interest.

community-partnered approach and using a health equity lens, the partnership developed a website to guide users through digital mental health resources, prioritizing accessibility, engagement, and community needs.

Keywords

Community partnership; digital health; COVID-19; mental health

The COVID-19 pandemic has heightened awareness of mental health as a primary public health concern. In addition to physical impact of COVID-19 infection, this public health crisis has significant mental health consequences. Social isolation due to stay-at-home orders, physical distancing, and business and school closures, as well as unemployment and financial loss have fueled depression, anxiety, and substance use.^{1,2} Beyond individual stressors, community-wide impacts of the pandemic include concerns of widespread health and economic consequences. These adverse outcomes disproportionately affect the same communities already burdened by multiple structural barriers to health including a shortage of affordable housing, a fractured health care environment for the publicly insured, and a scarcity of entry-level work opportunities that offer a livable wage.³ In each of these ways, we see the COVID-19 pandemic contributing to a broadening of disparities across multiple domains all with direct association to mental health outcomes.⁴ Large-scale public efforts to provide basic services or to alleviate the mental health consequences of the pandemic remain limited in the United States.

Stay-at-home orders and social distancing have promoted the use of digital platforms for delivery of formal mental health services, with rapid adoption and implementation of telehealth services.⁵ The use of technology in mental health, however, goes beyond telehealth. Over the past decade, mental health care has been increasingly supplemented by self-directed digital tools, such as mobile mental health applications and internet-based resources.⁶ Dozens of digital mental health and emotional resilience tools are available, ranging from meditation and mindfulness apps, to symptom diaries, to self-management tools using modalities such as cognitive behavioral therapy (CBT) to help individuals cope with depression, anxiety, or addiction.

Studies have demonstrated that depression can be successfully treated with self-directed CBT and behavioral activation over the internet.^{7,8} However, evidence for many commercially available apps is limited, and it is often unclear how closely they are informed by evidence-based therapeutic techniques.^{9,10} Furthermore, little is known about the acceptability and relevance of these tools for different ethnic/racial and socioeconomic groups and at different life stages.¹¹ Thus, while such tools may have potential to improve mental health during the COVID-19 crisis, it is unclear whether that potential will be realized.

There has been limited attention to tailoring of digital mental health resources for marginalized and under-resourced communities of color.^{12,13} Prior research has mostly focused on assessing feasibility, acceptability, and cultural tailoring using a top-down approach, and only a limited number of studies take community-partnered participatory

approaches to development. For example, Burns and colleagues sought the input of sexual minority men to inform the culturally appropriate design of an application that assists with the management of generalized anxiety disorder and major depression.¹⁴ Fleming and colleagues used a co-design process for creating digital mental health tools for New Zealand youth and sought to define preferences of different groups of users to increase engagement with digital-based therapies.¹⁵ These studies demonstrate the value of exploring end-user needs and preferences to inform intervention design. To realize the potential of digital mental health tools for diverse groups, community involvement is essential.^{16,17} This Report from the Field describes community-partnered processes used to develop a website of digital mental health tools for use by a diverse audience, in response to the growing need for mental health support during the COVID-19 pandemic.

Project Initiation

In March 2020, as the COVID-19 pandemic worsened and stay-at-home orders became widespread, California state policymakers predicted an increase in need for both formal and informal mental health resources. As local agencies shifted rapidly to telehealth and worked to expand services, leadership at the California Department of Health Care Services Behavioral Health Division and the California Mental Health Services Oversight and Accountability Commission (MHSOAC) began brainstorming additional ways to provide informal preventative and early-intervention resources, such as digital mental health tools, to communities.

These agencies initiated a partnership with California-based community organizations and the University of California Los Angeles (UCLA) to rapidly develop a website of curated digital mental health resources for potential use by diverse communities across the state. A COVID-19 Mental Health Advocacy Working Group was developed with the shared goal of building a website that would be stakeholder-informed, highly usable, and relevant, particularly to under-resourced communities. Uniquely in this class of websites, this website was designed using a community-partnered approach with diverse community, policy, and academic stakeholders.

Our approach to website development was grounded in principles of community-partnered participatory research (CPPR) and participatory design, with a health equity lens. In CPPR, researchers and communities work as equal partners in each stage of the research process, recognizing the value of each other's expertise and perspectives.¹⁸ This approach is used to create solutions that are driven by, and relevant to, the communities and populations being studied.¹⁹ Similarly, participatory design approaches development from the standpoint of both moral and pragmatic imperatives to include end-users in the design process.²⁰

Stakeholder Engagement Process

Community stakeholders were brought together via email invitation and Zoom teleconference to develop a joint understanding of the issue being addressed, and to ensure the usefulness and acceptability of the mental health resource webpage. Participating groups included those representing mental health consumers, parents, immigrant health, LGBTQ+,

veterans, service providers, and Latinx, Asian American (Hmong and Vietnamese), and African American communities. These groups included prior contacts from UCLA community-partnered research projects as well as community groups working with the MHSOAC.

The process of adapting stakeholder feedback and engagement was based on interactive and functional participation in focus groups and participation by consultation.²¹ To facilitate a semi-structured discussion in the initial meetings, a focus group question guide was developed collaboratively by community and academic partners from UCLA, University of California Davis, and Healthy African American Families (a community organization based in Los Angeles).

Two initial focus groups were held over Zoom videoconference, one conducted in English and one in Spanish. Focus groups explored perceptions of mental illness and current access to mental health services in marginalized communities, priority issues related to community mental health and wellness in the context of the pandemic, perceptions of digital mental health resources, and how to disseminate digital mental health resources most effectively. Subsequent meetings were loosely structured and based on particular themes and project needs. Individual meeting topics included website content and design that would be relevant and acceptable to diverse community groups. Several meetings specifically focused on Latinx and African American communities. In total, participants included approximately 35 community stakeholders and 20 academic partners from over a dozen organizations and institutions throughout California.

Development of Website Concept, Content, and Design

At meetings, stakeholders worked collaboratively with academic partners and website designers to review website mock-ups and offer feedback and suggestions. Elements of the website ranging from design, to user interface, to language were modified iteratively based on stakeholders' impressions of ease of use, validity, and representation. The final website, "Together for Wellness" (<https://calhope.semel.ucla.edu/>), was launched in October of 2020.

To develop a summary of key principles and decisions arising from this collaborative process, four team members performed an initial review of meeting notes and discussed their own memories and reflections. This summary was reviewed for consensus and revision by additional team members, similarly to the approach used by Jones and colleagues,²² and is presented below.

Priority Areas for Website Content

The main website content areas discussed in the initial focus groups were stress and anxiety related to the health-related, financial, and social impacts of the pandemic. Stakeholders also suggested including content related to grief over the death of loved ones, and tools to support caregivers with children who were home with limited physical activity and social engagement. While major mental health challenges were discussed, resilience and existing coping strategies were emphasized.

The final five website domains included: Learn about COVID-19; Soothe Anxiety and Stress; Keep the Kids Active; Cope with a Recent Loss; and Build Community and Support People. In addition, a separate Call for Help section was included to provide emergency resources. Stakeholders reviewed publicly available digital mental health resources, developing a curated list of resources to meet target needs in each domain (Box 1). Implicit in the search and inclusion of resources was that they also provide basic psychoeducation for users with varying levels of familiarity with the topics. Content not included in the initial website launch, but prioritized for subsequent versions of the website, included experience of discrimination, immigration-related concerns when accessing health care during the pandemic, and remote learning challenges for children.

Accessibility

Many stakeholders, especially those representing Spanish- and Indigenous-speaking populations, emphasized the importance of translation of the website and linked apps, videos, and documents. They highlighted potential translation challenges that could arise, suggesting changes to language to improve translatability. Stakeholders also discussed the importance of inclusivity, with a goal to expand translation to languages beyond English and Spanish following the initial launch.

Stakeholders expressed concerns about accessibility of websites, noting that some community members do not use the internet but do engage with service agencies in person. They suggested that the website feature some easily printable resources that service providers could share directly with members of the community. Rather than exclusive text content, stakeholders encouraged the use of multimedia strategies, including educational videos styled in the form of *novelas* or dynamic graphics embedded into the site as a means of engaging people with multiple learning styles and levels of literacy.

The accessibility of smartphone apps was discussed. To increase acceptability and access, only free apps were included, and an effort was made to include apps available in multiple languages whenever possible. Finally, stakeholders reviewed all copy on the website, providing suggestions on length, complexity, and phrasing.

Engagement

Stakeholders advised being sensitive to the stigma around mental illness in many communities, suggesting using neutral, non-clinical language such as “stress” rather than “depression.” In related discussions, stakeholders agreed on a non-clinical title for the website: “Together for Wellness.” Website language was chosen with the goal of normalization of experiences such as stress, anxiety, and grief.

Singularly, stakeholders suggested using characters to guide users through the site. The role of these guides would mimic that of the community health worker: facilitating the uptake of new information by building trust and decreasing stigma.²³ Additionally, narrative content from a source received as familiar might help increase meaningful use of digital resources. In response, website developers drew mock-ups of characters representing a range of racial/ethnic backgrounds, ages, and family structures. These were presented to stakeholders for feedback and modified in an iterative process. In the final website landing page, the user

selects one of nine sets of characters to serve as their guide and introduce them to the site's resources (Figure 1); users are informed that all guides give the same tour.

Discussion

The health, financial, and social strain of the COVID-19 pandemic introduced new mental health challenges for all, with a particularly heavy burden on communities of color whose physical and mental health were already affected by the consequences of structural racism across institutions, agencies, employment sectors, and even health care organizations.⁴ In anticipation of a widespread increase in need, the state of California sought to develop a website to provide a curated selection of accessible, effective, and representative digital mental health resources. The website was developed with active stakeholder engagement and was launched in October 2020; its evaluation is currently underway. Continued research is needed to rigorously evaluate feasibility, effectiveness, and consideration of potential risks of using digital resources for mental health concerns, while determining how such resources support early intervention and prevention efforts across diverse and under-resourced communities.

While we hope that this website will provide guidance in selecting trusted, appropriate digital resources for mental health support, it is important to acknowledge that such resources are not intended to replace traditional mental health care. Nor do they lessen urgent, basic needs such as food security, housing stability, employment, and health care services that can be accessed without fear of financial or immigration-related consequences—needs repeatedly identified in our work by stakeholders representing marginalized groups.

Acknowledgments

The authors express their gratitude to the participating community organizations, which include NAMI California, United Parents, the African Coalition, Healthy African American Families II, Boat People SOS, ACCESS California, the Health Education Council, Vision y Compromiso, the Mixteco/Indigena Community Organizing Project (MICOP), California Health Care Association, and Mental Health of America California. The authors also wish to thank leadership at the California Department of Health Care Services Behavioral Health Division and the California Mental Health Services Oversight and Accountability Commission (MHSOAC) for supporting this work. This project was funded by the MHSOAC and the California Healthcare Foundation. Dr. Siddiq received support from the UCLA Resource Centers for Minority Aging Research Center for Health Improvement of Minority Elderly (RCMAR/CHIME) under NIH/NIA Grant P30-AG021684, and from the UCLA CTSI under NIH/NCRR/NCATS Grant Number UL1TR001881. Drs. Goodsmith and Moore were supported by the VA Office of Academic Affiliations through the UCLA National Clinician Scholars Program. The contents represent the views of the authors and not necessarily those of the VA, the United States government, the NIH, or affiliated institutions.

References

1. Pfefferbaum B, North CS. Mental health and the Covid-19 Pandemic. *N Engl J Med*. 2020 Aug 6;383(6):510–2. Epub 2020 Apr 13. 10.1056/NEJMp2008017 [PubMed: 32283003]
2. Galea S, Merchant RM, Lurie N. The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention. *JAMA Intern Med*. 2020 Jun 1;180(6):817–8. 10.1001/jamainternmed.2020.1562 [PubMed: 32275292]
3. Braveman P, Egerter S, Williams DR. The social determinants of health: coming of age. *Annu Rev Public Health*. 2011;32:381–98. 10.1146/annurev-publhealth-031210-101218 [PubMed: 21091195]
4. Purtle J COVID-19 and mental health equity in the United States. *Soc Psychiatry Psychiatr Epidemiol*. 2020 Aug;55(8):969–71. Epub 2020 Jun 17. 10.1007/s00127-020-01896-8 [PubMed: 32556376]

5. Arevian AC, Jones F, Moore EM, et al. Mental Health community and health system issues in COVID-19: lessons from academic, community, provider and policy stakeholders. *Ethn Dis*. 2020 Sep 24;30(4):695–700. 10.18865/ed.30.4.695 [PubMed: 32989370]
6. Torous J, Jän Myrick K, Rauseo-Ricupero N, et al. Digital mental health and COVID-19: using technology today to accelerate the curve on access and quality tomorrow. *JMIR Ment Health*. 2020 Mar 26;7(3):e18848. 10.2196/18848 [PubMed: 32213476]
7. Van't Hof E, Cuijpers P, Stein DJ. Self-help and Internet-guided interventions in depression and anxiety disorders: a systematic review of meta-analyses. *CNS Spectr*. 2009 Feb;14(2 Suppl 3):34–40. 10.1017/S1092852900027279 [PubMed: 19238128]
8. Moss K, Scogin F, Di Napoli E, et al. A self-help behavioral activation treatment for geriatric depressive symptoms. *Aging Ment Health*. 2012;16(5):625–35. Epub 2012 Feb 3. 10.1080/13607863.2011.651435 [PubMed: 22304676]
9. Huguet A, Rao S, McGrath PJ, et al. A systematic review of cognitive behavioral therapy and behavioral activation apps for depression. *PLoS One*. 2016;11(5):e0154248. 10.1371/journal.pone.0154248 [PubMed: 27135410]
10. Torous J, Haim A. Dichotomies in the development and implementation of digital mental health tools. *Psychiatr Serv*. 2018 Dec 1;69(12):1204–6. Epub 2018 Sep 26. 10.1176/appi.ps.201800193 [PubMed: 30256182]
11. Figueroa CA, Aguilera A. The need for a mental health technology revolution in the COVID-19 pandemic. *Front Psychiatry*. 2020 Jun 3;11:523. 10.3389/fpsy.2020.00523 [PubMed: 32581891]
12. Schueller SM, Hunter JF, Figueroa C, et al. Use of digital mental health for marginalized and underserved populations. *Curr Treat Options Psychiatry*. 2019 Sep 1;6(3):243–55. 10.1007/s40501-019-00181-z
13. Brewer LC, Fortuna KL, Jones C, et al. Back to the future: achieving health equity through health informatics and digital health. *JMIR Mhealth Uhealth*. 2020 Jan 14;8(1):e14512. 10.2196/14512 [PubMed: 31934874]
14. Burns MN, Montague E, Mohr DC. Initial design of culturally informed behavioral intervention technologies: developing an mHealth intervention for young sexual minority men with generalized anxiety disorder and major depression. *J Med Internet Res*. 2013 Dec 5;15(12):e271. 10.2196/jmir.2826 [PubMed: 24311444]
15. Fleming T, Merry S, Stasiak K, et al. The importance of user segmentation for designing digital therapy for adolescent mental health: findings from scoping processes. *JMIR Ment Health*. 2019 May 8;6(5):e12656. 10.2196/12656 [PubMed: 31066705]
16. Smedley BD, Syme SL, Committee on Capitalizing on Social Science and Behavioral Research to Improve the Public's Health. Promoting health: intervention strategies from social and behavioral research. *Am J Health Promot*. 2001 Jan–Feb;15(3):149–66. 10.4278/0890-1171-15.3.149 [PubMed: 11265579]
17. Thomas SB, Quinn SC, Butler J, et al. Toward a fourth generation of disparities research to achieve health equity. *Annu Rev Public Health*. 2011;32:399–416. 10.1146/annurev-publhealth-031210-101136 [PubMed: 21219164]
18. Jones L, Wells K. Strategies for academic and clinician engagement in community-participatory partnered research. *JAMA*. 2007 Jan 24;297(4):407–10. 10.1001/jama.297.4.407 [PubMed: 17244838]
19. Olshansky E The use of community-based participatory research to understand and work with vulnerable populations. In: de Chesnay M, Anderson BA, editors *Caring for the vulnerable: Perspectives in nursing theory, practice and research*. Burlington, MA: Jones & Bartlett Learning, 2012;305–12.
20. Carroll JM, Rosson MB. Participatory design in community informatics. *Des Stud*. 2007 May;28(3):243–61. 10.1016/j.destud.2007.02.007
21. Conde C, Lonsdale K. Engaging Stakeholders in the Adaptation Process. Burton I, Malone E, Huq S Lim Bo, Spanger-Siegfried E, eds. *Adaptation policy frameworks for climate change: developing strategies, policies and measures*. New York, NY: Cambridge University Press, 2005;48–66.

22. Jones D, Franklin C, Butler BT, Williams P, Wells KB, Rodríguez MA. The Building Wellness project: a case history of partnership, power sharing, and compromise. *Ethn Dis.* 2006 Winter;16(1 Suppl 1):S54–66. [PubMed: 16681129]
23. Barnett ML, Gonzalez A, Miranda J, et al. Mobilizing community health workers to address mental health disparities for underserved populations: a systematic review. *Adm Policy Ment Health.* 2018 Mar;45(2):195–211. 10.1007/s10488-017-0815-0 [PubMed: 28730278]

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

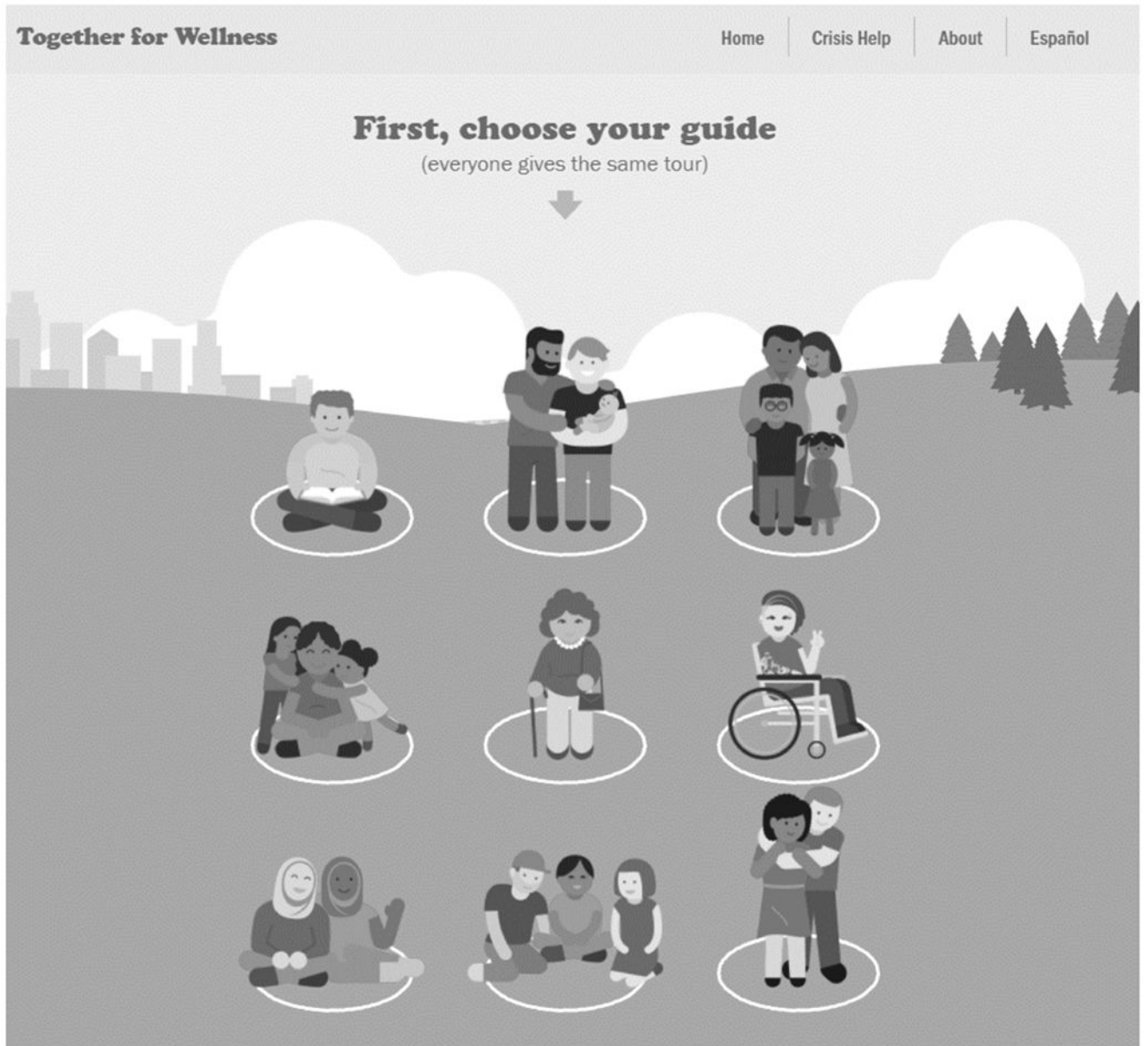


Figure 1.
Website landing page

Box 1.**DIGITAL MENTAL HEALTH RESOURCES SELECTED FOR THE WEBSITE**

Category	Tool	Description	Evidence Base
Learn About Covid-19	TranslateCOVID.org	Site of COVID-19 information and videos in 40 languages	Evidence-based
Soothe Anxiety and Stress	Deep Breathing for Beginners	Youtube video demonstrating deep breathing for physiologic relaxation and stress reduction	Evidence-informed
Soothe Anxiety and Stress	6 Easy Tips for Dealing with COVID-19 Stress	Short video reviewing sources of stress during the COVID-19 pandemic; offers tips for coping loosely based on CBT (limiting problematic behaviors)	Evidence-informed
Soothe Anxiety and Stress	UCLA Mindfulness App	App developed to build mindfulness through meditations and informative podcasts	Evidence-informed
Soothe Anxiety and Stress	Mindshift App	App based on cognitive behavioral therapy	Evidence-informed
Soothe Anxiety and Stress	The Safe Place: An App for Black Mental Health	App for the Black community offering meditations, breathing and exercise tips, and coping strategies for dealing with police brutality	Evidence-informed
Soothe Anxiety and Stress	Stress Busters	Chart from California's Office of the Surgeon General of activities to help manage stress and feel better	Evidence-informed
Soothe Anxiety and Stress	Happify	App that facilitates activities based on CBT, mindfulness, and positive psychology	Evidence-informed
Soothe Anxiety and Stress	5 Ways to Manage Worry, Loneliness, and Financial Anxiety	Video with strategies to cope with anxiety, financial insecurity, and loneliness due to COVID-19. Emphasizes help-seeking behaviors and limiting problematic behaviors	Evidence-informed
Keep the Kids Active	Child Stress During the COVID 19 Pandemic	Video offering tips for helping children manage their anxiety during this time, with tips for caregivers as well	Evidence-informed
Keep the Kids Active	First Aid for Feelings	Book of activities for children that provide emotional support and resilience skills	Evidence-informed
Keep the Kids Active	Dav Pilkey at Home	Children can read, draw, create, and watch videos with Dav Pilkey, author of Captain Underpants	Not evidence-based
Cope with a Recent Loss	Apart of Me	Game designed by grief experts to accept loss and connect to sources of wisdom	Informed by expert opinion
Cope with a Recent Loss	Healing After Death	App offering guided meditations on coping with the loss of a loved one	Not evidence-based
Cope with a Recent Loss	VA Dealing with Loss Guide	Guide on building support after a loss	Evidence- and expert opinion-informed
Build Community and Connect with People	Nod	App with strategies to stay in touch with others and connecting virtually	Evidence-informed