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# Spatial barriers as moral failings: What rural distance can teach us about women's health and medical mistrust

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## ABSTRACT

Policy attention to growing rural “health care deserts” tends to identify rural distance as a primary spatial barrier to accessing care. This paper brings together geography, health policy, and ethnographic methods to instead theorize distance as an expansive and illuminating concept that highlights place-based expertise. It specifically engages rural women's interpretations of rural distance as a multifaceted dimension of accessing health care, which includes but is not limited to women's health services and maternity care. Presenting qualitative research with 51 women in a rural region of the U.S., thematic findings reveal an interpretation of barriers to rural health care as moral failings rather than as purely spatial or operational challenges, along with wide communication of negative health care experiences owing to spatially-disparate but trusted social networks. Amid or owing to the rural crisis context, medical mistrust here emerges as a meaningful but largely unrecognized barrier to rural women's ability—and willingness—to obtain health care. This underscores how a novel interpretation of distance may inform policy efforts to address rural medical deserts.

## 1. Introduction

Since 2010, 126 rural hospitals have closed in the United States, with an estimated 673 additional facilities—fully one-third of rural U.S. hospitals—vulnerable to closure in the coming years (Cecil, 2020). Critically, the pace of rural hospital closures has only accelerated owing to COVID-19 (Statz and Termuhlen, 2020). This rural health crisis has increasingly attracted wide public attention, with particular focus on growing “health care deserts” (Martin, 2019). Defined as U.S. counties without hospitals or providers, rural health care deserts result from narrowing Medicare reimbursements, large shares of patients lacking high-paying private insurance, physician shortages, health system consolidation, and demographic changes (Cullen, 2019; Weber, 2020). Some have additionally described “artificial provider deserts,” or areas where providers practice but are not included in certain insurance carrier networks. As a result, some rural residents are forced to travel 120 miles or more to reach in-network care (Haeder, 2019).

When attention specifically turns to rural women's health, the focus is primarily on maternal and obstetrical deserts. This is unsurprising. With acknowledgement of the key role of midwives and family physicians in rural maternal and birth care, it is nonetheless worth noting that

only about 6% of U.S. obstetricians/gynecologists work in rural areas (Kozhimannil and Frakt, 2019; Maron, 2017), and over half of U.S. rural counties lack obstetric services (Kozhimannil et al., 2017). As a result, less than half of rural women live within a 30-min drive of the nearest hospital offering obstetric services, and over 10% live more than 100 miles away, a reality that has contributed to growing maternal and neonatal mortality rates across the U.S. (Phelan and Wetzel, 2018). Arguably less attention is given to rural women's *other* health disparities, including the ways in which rural health care deserts impact rural women's ability to access health care more generally (Eberhardt and Pamuk, 2004; Hart et al., 2005).

Of course, even as experts endeavor to categorize these multidimensional rural health care “deserts,” the corresponding premise of “rural” remains largely undefined. This is consequential, for as Bennett et al. (2019) argue, inconsistent or inferred interpretations of rural can perpetuate or lead to inequitable distribution of resources, research bias, and inaccurate representations of rurality. In response, we rely to an extent on typologies like Frontier and Remote Area Codes (discussed below) but ultimately view “rural” expansively, namely as continuum (Pruitt et al., 2018) or index that considers the complex socio-spatial and economic factors driving a particular area's rurality (Bennette et al.,

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2019). We thus recognize that rural places differently intersect with factors such as race, class, and gender to shape a person or community's experiences while also acknowledging that particular trends concerning land, scarcity, and invisibility (Lichter and Brown, 2014) are unique to rural places and rural marginalization in the U.S. (Eisenberg, 2020).

As noted in the U.S. and in other high-income countries, rural health care deserts lead to and compound rural health inequities (Rechel et al., 2016). Rural regions exhibit comparatively higher levels of chronic disease and poorer health outcomes than urban areas (Douthit et al., 2015; O'Toole, 2011), and in the U.S. they also experience what Cosby et al. describe as an accelerating "rural mortality penalty" (2019). *Place matters*, these researchers argue, evidencing that the 2016 mortality rate for rural low-income Americans was approximately two decades behind levels observed in urban America (Cosby et al., 2019, p. 160). More specifically still, *distance* matters. Indeed, rural distance is largely the defining, if not exclusive, spatial feature of rural health care deserts (Gatz et al., 2004).

In this manuscript, we respond to the "tyranny of distance" (Blainey, 1966), or the idea of distance as an inevitable component of health care deserts and a broader barrier to rural health care, by instead regarding distance as a conceptually illuminating force. Drawing on Dalakoglou and Harvey (2012, p. 463), we recognize distance as "replete with social relations, with material histories, with regulatory forces ... [and with] the simultaneity of global circulation and local lifeworlds." Engaging this "rich concept of distance" (Simandan, 2016, p. 251), we aim to explore health policy-makers' interpretation of rural distance alongside rural women's lived experiences of distance in the urgent context of rural U.S. health care deserts. The purpose is to gain a more multidimensional understanding of the distance between a woman's community and a health care provider—including how the distance is or is not traversed—and to reveal otherwise invisible experiences of marginalized groups (Statz and Pruitt, 2019). This values place-based experiential knowledge of healthcare environments (Giesbrecht et al., 2018) while also asking, *Whose understanding of distance matters, and when?* Drawing on qualitative interviews with 51 rural women across north-eastern Minnesota, the findings of this analysis introduce new interpretations of barriers to rural health care that exceed purely spatial or operational challenges. Such knowledge has the potential to inform policy-makers and practitioners on ways to enhance access to—and, significantly, *trust in*—initiatives aimed at mitigating rural health care deserts.

### 1.1. Classifying rural distance

In public health research, distance is commonly understood as the principle structural barrier in accessing rural health care (Arcury et al., 2005, 2006; Brundisini et al., 2013; Nemet and Bailey, 2000). Professional and policy attention to rural health care deserts similarly identifies rural distance as correlated with health care utilization, and as a clear cost of patients' time, work hours, or even life, as in the case of Emergency Medical Services (Goodwin and Tobler, 2016; LaVela et al., 2004; Warshaw, 2017).

A number of scholars have importantly contextualized rural distance by considering rural designations and the types of services offered (Smith et al., 2013); by situating rural distance as relative to the health status of patients and the urgency and complexity of needed services (Buzza et al., 2011); and by highlighting "distance-related challenges" such as unavailable public transit, transportation costs, weather, and securing time off work to travel for care (Brundisini, 2013; Caldwell et al., 2005; Goodridge, 2011; King et al., 2006; Tessaro, 2005). While some research has identified positive attributes of rural place, among them strong social connectivity, these features are generally seen as an *antidote* to rural distance and isolation (Berry et al., 2009; FitzGerald et al., 2001; Utz et al., 2006).

Often, distance is understood as a counter to urban experience: rural people have to travel long distances, while urban individuals

presumably do not. Correspondingly, researchers and policy-makers typically define "rural" in terms of proximity to larger population centers. For instance, the United States Department of Agriculture utilizes Frontier and Remote Area Codes (FAR) to describe remoteness in terms of 1) distance to a more urban area and 2) low population size. FAR codes assign rurality on a scale of 1 through 4, with 4 being the most "remote," or 60 min or more from an urban area of 50,000 or more people. "FAR areas are defined in relation to the time it takes to travel by car to the edges of nearby Urban Areas (UAs)" (USDA Economic Research Service, 2020).

Health researchers also attend to distance and density when defining rurality, with the National Center for Health Statistics dividing "nonmetropolitan" counties into "micropolitan" and "noncore" (Ingram, 2012). Other prominent measures of access to care focus on provider-to-population ratios, which are used to designate Health Professional Shortage Areas (HPSA), Medically Underserved Areas (MUA) and, of course, rural health care deserts (Smith et al., 2013). Elsewhere in the world, population density and distance are typical characteristics of rurality, though scholars note that national health policy definitions of "rural" and "remote"—and even of "hospital"—vary widely by country (Rechel et al., 2016). On the one hand, these taxonomies are obvious, even common sense: Resources, and specifically health care resources, are increasingly centered in more metropolitan areas. And yet, little is known about the implications of different taxonomies of rurality on public health outcomes (Smith et al., 2013). Building on human geography, this paper interrogates the "spatial imaginary" of rural distance.

### 1.2. Imagining rural distance

Spatial imaginaries are "socially held stories," or particular ways of representing and talking about places and spaces (Said, 2003; Watkins, 2015). As human geographers have demonstrated, spatial imaginaries also reflect power-filled "otherings," or the notion that certain people and places are different and unequal (Sharp, 2009, p. 11–12). Consider, for instance, that rural or remote counties are most often categorized as "non-" or what urban areas are not: "nonmetropolitan," "noncore." Or recall the above sentence, "FAR areas are defined in relation to the time it takes to travel ... to the edges of a nearby Urban Area." There is a clear directional here: *from* rural regions to urban areas. Implicit in this could be a corresponding skepticism: Why would one travel the other way? What, if anything, is worth traveling *to* in a rural area? Especially one that's seemingly deserted, if we follow the prevailing health policy attention to rural America's "deserts?"

As geographers have demonstrated, this urbanormative (Fulkerson and Thomas, 2019) approach means that urban areas often attract more scholarly attention than the apparently "empty" spaces of the countryside (Pruitt, 2007, 2008). When geographers do engage rural space, distance is typically theorized as a primary feature of rural life. Distance is recognized as a disadvantage (Pruitt, 2013; Young, 2006) as well as a resource (Royle, 2004); it can connote defeat, failure, or being left behind (Cresswell, 2006; Morley, 2000), or it can signal a selected form of insulation (Vannini, 2011). Ultimately, rural distance is appropriately identified as *complicated*: It is at once socially constructed as well as replete with social agency (Statz and Pruitt, 2019).

As regards rural women in particular, material and social distance underscore rural women's intersectional invisibility, especially that of rural Indigenous women, rural Black women and women of color, and women lacking legal status (Purdie-Vaughns and Eibach, 2008, Statz, 2018). Compounded by distance, this policy- and institutional-level disregard speaks to the well-documented connection between structural racism and health outcomes (Bailey et al., 2017) in conjunction with place (Probst et al., 2019). A rigorous consideration of distance also accentuates the inaccessibility of health and reproductive health services, the social vulnerabilities implicit in carelessness, and the ways in which travel time—as time away from home or work—can jeopardize a

woman's confidentiality in health matters (Heller et al., 2016; Sanger, 1995). Of course, while rural distance reveals otherwise "invisible" realities of gender, it also demands a deeper recognition of place-based experiential knowledge and rural women's agency: Truly no one understands rural distance better than those who have to traverse it. As we correspondingly infer as researchers, no one is more qualified to evaluate distance amid the full extent of rural health care deserts than rural women. This study therefore seeks to engage rural women's interpretations of rural distance as a multifaceted dimension of accessing health care—which we understand as including but not limited to women's health services and maternity care—and to shed light on policy recommendations that instead regard distance as a singular or inevitable spatial barrier.

## 2. Materials and methods

### 2.1. Research design

This analysis is based upon data collected between 2017 and 2019 as part of mixed-methods and ethnographic research on rural access to justice in the upper Midwest. While not health related research in name, this study defined "injustice" as encompassing those experiences and problems participants deemed "unfair." Accordingly, we collected wide-ranging, place-based data on rural individuals' struggles to access child care, education, employment, housing, veteran's benefits, and health and mental health care. This research included 153 in-person, semi-structured interviews with residents of northeastern Minnesota and northern Wisconsin. For the purposes of this manuscript we utilize only those data collected from in-person interviews ( $n = 51$ ) with rural women across seven counties in northeastern Minnesota, a region that includes six counties with areas designated FAR Level 4, or most remote. No one refused to participate or dropped out of the study. Ethics approval for the study was obtained from the University of Minnesota Institutional Review Board.

### 2.2. Recruitment

Interviewees were recruited via a mixed-methods, non-probability sampling approach in which we employed purposive expert sampling in conjunction with respondent-driven sampling, a chain referral method that enables researchers to locate "hard-to-reach" populations or small subsets—for example, all librarians in a rural community (Palinkas et al., 2015; Tongco, 2007). Our primary inclusion criteria were: residency in northeastern Minnesota; age 18 or older; and expertise in rurality and/or access to justice. We underscored to referral sources that our definition of "expertise" was place-based, meaning that it reflected and was dynamically linked to experiences of rural space. "Expertise" likewise spanned professional training to experiential knowledge of access challenges regarding health care, housing, employment benefits and so on, whether or not these problems were identified by potential participants as "legal." During preliminary fieldwork (2015-16), the PI established relationships with a range of community stakeholders across northeastern Minnesota. Participant recruitment for this study utilized these relationships as referral sources. Potential participants were contacted via telephone and email.

### 2.3. Data collection

In-depth, one-on-one interviews were conducted by the PI in whatever site the participant specified, most often offices and community centers, and lasted between 45 and 90 min. The PI prefaced each interview by discussing her positionality and motivations for conducting the research, then gave the participant time to ask questions and discuss interview procedures and the consent form.

The PI utilized a semi-structured interview guide with open-ended questions designed to elicit participants' understandings and

experiences of injustice, deliberately framed as "problems" or "things that feel unfair." Questions also explored the socio-spatial aspects of participants' experiences, including the extent to which local geographies, social networks, norms and values compounded or helped mitigate their problems. Finally, participants were invited to describe in their own words what effect their problems had on their lives and what ideas they had for improving or creating local services and supports.

To underscore our recognition of all participants as experts regardless of social location or profession, we deliberately did not ask interviewees to provide their income or other demographic information. We did, however, ask, "If you had a legal issue, do you feel you could afford a private attorney?" We explained that this was both to gauge socioeconomic status and participant compensation as well as perceptions of access to legal advocacy. Those who answered "no" or otherwise self-identified as low-income received \$20 cash for participating. All other individuals were not compensated for their time. All informants provided written consent.

### 2.4. Data analysis and rigor

Our research team consisted of the Principal Investigator (Statz), two graduate research assistants (GRAs) trained in the social sciences, one undergraduate research assistant (URA), and three medical student research assistants (MSRAs), one of whom, Evers, is the co-author. Statz is an anthropologist (PhD) and faculty member at a medical school and has over 15 years of qualitative and mixed-methods research experience.

Data analysis for the general study was led by the PI and GRAs, with additional input from MSRAs. Each interview was audio-recorded and transcribed verbatim by a GRA or URA, then uploaded to NVivo software for data management and analysis. Field notes were occasionally made after interviews but not included in the data we analyzed. Transcribed interviews were coded iteratively by the PI and GRAs for emergent themes, which then became categories for analysis. For the purposes of this report, the two co-authors then differentiated those data collected from respondents who self-identified as female. We conducted a second wave of "semi-open" coding in conjunction with deductive coding (Fereday and Muir-Cochrane, 2006) of those interview transcripts to specifically highlight health-related phenomena. In this stage of analysis, we utilized—but also expanded upon—an *a priori* set of codes we had assembled to distinguish and evaluate relevant data (Crabtree and Miller, 1999) This included distance and transportation, as well as discussions of regional health systems; medical benefits; local, state, and federal policies; social networks; individual health concerns and experiences; and evidence of changing or precarious access to health care. Check-in conversations were frequently held to make sure we similarly defined themes and evidence supporting them. Collaborative analysis then proceeded to an interpretive phrase in which text, codes, and themes were organized in an explanatory framework that foregrounded female participants' points of view.

## 3. Results

Seventy-five interviews were conducted between September 2017 and September 2019. Our sample included representatives from the health care and mental health sectors ( $n = 12$ ); judges ( $n = 7$ ); educators and librarians ( $n = 3$ ); social service providers ( $n = 13$ ); public interest and private attorneys ( $n = 19$ ); and individuals who self-identified as low-income ( $n = 21$ ). A total of 51 interviewees self-identified as female. While participants varied by ability, age, education, race/ethnicity, and socioeconomic status, all resided in rural or remote communities in northeastern Minnesota.

Though not explicitly a study on rural medical deserts, access to health care emerged as a foremost concern among our research participants and was overwhelmingly cited when invited to reflect on phenomena that "feel unfair." This reflects our survey findings (Bredeson and Statz, 2019), where of 21 problem categories, "Access to

Healthcare” was identified as the number one challenge low-income community members faced in northern Minnesota. It also echoes national-level data on rural access to justice, which highlights access to healthcare as the most common rural legal issue (Legal Services Corporation, 2017).

Our interview data evidence barriers to care that are commonly cited in the literature on rural health disparities, including rural distance. An arguably less tangible but no less significant finding is many rural women’s reported *unwillingness* to access health care. As we analyzed our data, we realized that this unwillingness introduces other, less commonly recognized socio-spatially specific factors. To illustrate main themes and prioritize rural women’s own views, we include direct quotes in this section. We do not name participants and have likewise removed all participant ID numbers and the names and other identifying characteristics of regional hospitals and health systems.

### 3.1. Familiar barriers

If an interviewee generally mentioned health care as a problem she experienced or observed in her rural community, the PI asked if she would be willing to elaborate. In response, a number of rural women cited delays in insurance coverage, not having health insurance, and locating a rural health center that accepted medical assistance as significant barriers to care. “[You’re] stuck between a rock and a hard place,” commented one woman. “Making a little money? Boom. It all goes on insurance and medications. And then there is no money left again. You never get ahead.”

Rural women also identified long wait times to get appointments and increasingly limited services. A number of women highlighted these barriers as “the new normal” of rural health deserts. “If you want somebody who’s close by to see you for your urgent issues—” began one woman. She paused, then continued, “Cause, you know, certainly there’s less access here. I think we have a pretty good setup, but when you’re trying to see a specialist, you have to wait for the day they’re in town. And I’ve been told before, ‘Well, we *had* a specialist on staff. I’d have you see them today, but because they’re not, we’ll have to do this and that, and we won’t be able to do this.’ There’s limitations.”

Rural women also highlighted the time-consuming distance community members had to travel to access care—distances that have increased as hospitals limit services. “It is not uncommon for patients to drive 60–100 miles for a visit,” commented one individual. Yet for many, distance appeared a basic condition of rural experience. Describing her community, one woman stated, “Some of our kids are on the bus 65 miles [one way]. A lot of them catch a bus at 5:00 in the morning.” Another stated, “Distance is just distance. It means nothing. And I think that is kind of the way it is up here: ‘Well, I’m gonna go shopping, we’re gonna go to Duluth.’ Well, Duluth is an hour and a half drive away—and it’s not a big deal ... People are used to driving.”

More often, participants contextualized “distance” through the realities of rural poverty they had witnessed of friends or neighbors or had themselves experienced. These included unreliable personal transportation, a dearth of public transportation, unavailable child care, and unpredictable shift or seasonal work. “Well, one thing that stresses me out is family health issues,” commented one individual. “I had my father pass away ... And now my step-mom is also going through chemo ...” She noted the time she spent driving her step-mother to appointments. “So it’s been over a year-long of stress from that. Trying to divide my time to [take] her, and take care of my family ... I work a lot, and two kids—I don’t really have any babysitters, since I can’t afford that.”

Listing a number of small towns on northern Minnesota’s Iron Range, another participant noted, “They have to drive a long way .... So, you know, they’re really beholden on their car and that car payment and all of that stuff. [That’s] lack of access.” Multiple participants described these barriers as “stressful” and “anxiety-provoking”—so much so that individuals at times decided it was logistically and emotionally easier to forego seeking health care. “For some people,” one participant stated,

“24 miles might as well be 5000.”

### 3.2. The interpretation of barriers as a barrier itself

While these reported barriers evidence the impacts of rural socio-spatiality and rural health deserts, how rural women interpreted them was considerably more subjective. For instance, when discussing challenges around federal or state-level medical assistance, some participants expressed reluctance to use it. On the one hand, this might evidence rural community values around work and independence (Sherman, 2009): “The last thing I want to do,” stated one woman, “is be a freeloader.” At the same time, others reported feeling stigmatized and believing they had received “poor treatment” because they were on medical assistance. “I felt scared,” commented one woman when asked how the experience impacted her.

Indeed, how a rural woman *interpreted* her experiences of health care and rural health care deserts is a critical finding. Long travel times, insufficient payment models, increasingly limited services, and hurried providers may indicate the challenging reality of rural health provision, but participants overwhelmingly framed these phenomena in moral terms. This is perhaps unsurprising when we recall that these topics emerged in the broader research context of rural access to justice: To many of the women interviewed, rural health care was intrinsically unjust. It was an urgent answer to our question, “What feels unfair?”

With visible frustration, a number of women mentioned the closure of local clinics and obstetrics units. Describing an acquaintance whose newborn was transported to a Level 1 trauma hospital owing to fetal distress, one individual stated, “She’s lucky that they were able to fly the helicopter that day so they could get the baby to Duluth as fast as possible, but there’s certainly plenty of days of the year that the helicopter can’t fly ... If this had been a bigger community, they would have had a better way ...” She described the lack of services as “shameful.”

Other rural women complained that patients were “not being taken seriously” and were “not being listened to” by health care providers who appeared rushed. “The doctor’s just not taking time to assess you,” stated one woman. Another described her experience as, “In and out. It’d be nice to talk for a moment and get to the bottom of everything instead of being in a hurry.” Some women were frustrated that small regional clinics were staffed by nurse practitioners or physician assistants rather than physicians, a strategy often suggested for addressing rural physician shortages and expanding the scope of care (Heath, 2017).

Overwhelmingly, these factors contributed to a growing distrust of providers and sometimes even entire health systems. One woman stated, “I really don’t like [name of regional acquiring health system] ... especially in [my town]. I don’t think a clinic should even be there. They don’t have any real doctors. I never saw a doctor there. Ever.” Most interviewees highlighted these experiences as a reason to seek health care somewhere farther away or to avoid it altogether. Audibly resigned, one woman summarized, “Well, if you want access to good health care, you’re gonna have to leave.” Another stated, “I would rather bleed out on my way to [larger health center] than go to my own clinic.”

### 3.3. Communication and community mistrust

It is important to note that many of the experiences we documented were second-hand. In other words, a number of rural women described what a family member, friend, or neighbor reported experiencing at a regional clinic or hospital. This itself is a finding, meaningfully evidencing the significance of dense rural social networks and the consequential nature of what individuals perceive as negative health care experiences. “There is one bad experience in a hospital, and nobody wants to go,” stated one woman.

During an interview with EMS personnel, a paramedic noted, “No one in [town] wants to go to our hospital. ‘Dr. Sawbones over here doesn’t know what he’s doing.’ The whole town won’t go to [the local hospital.]”

A colleague chimed in, “It’s true. We have people tell us they want to go to [hospital 35 miles away]. More often than not, people don’t want to go with EMS because of trust. They don’t trust the system.”

These community narratives were largely viewed as collective and even conclusive evidence of an injustice, namely health systems failing rural communities. This, then, introduces an indirect but no less significant barrier that must be considered: *Trusted* social networks can powerfully engender *mistrust* toward local practitioners and systems. “In a smaller community, it’s a trust system,” stated one woman. “So if you hear from someone you trust, you believe and then you act on the belief.” According to some rural women, action included traveling or even moving to larger cities to access health care. For others it meant inaction or avoiding health care altogether. This finding is thus two-fold, illuminating the increased vulnerability and mistrust the rural health crisis has generated among rural women, as well as the speed and legitimacy with which narratives of mistrust travel across arguably “isolated” rural spaces.

#### 4. Discussion

This paper theoretically engages rural distance to illuminate the experiences and expertise of an often-invisible group, namely rural women, in the context of rural health care access. It draws on the dominant spatial imaginary of “rural distance” as maintained by health practitioners and policy-makers alongside nascent alternatives in geography literatures, and it introduces rural women’s own, and markedly moralized, interpretations of rural socio-spatial barriers to health care. Taken together, our findings present a novel interpretation of rural distance in the context of growing rural health care deserts.

Many of the women we interviewed view distance as a normal part of rural life. What makes distance *exceptional*—i.e., what makes individuals take note of distance—may be a stressful circumstance, like a sick step-mother and no childcare. Or, and of particular relevance to a medical audience, it may be the “new normal” of rural health care: health centers that won’t accept medical assistance or that exclude certain insurance networks; absent specialists or physicians; hospital closures; and rushed health care providers. In these cases, individuals have to travel longer distances to access necessary care. What likely matters more is that many rural women will travel *even farther* to access the care they trust. This complicates the correlation between rural distance and health care utilization (Awoyemi et al., 2011; Erlyana et al., 2011) by underscoring distance to provider as a “surrogate for location in a richer web of relations” (Nemet and Bailey, 2000). It likewise introduces medical mistrust as an important dimension of mitigating rural health care deserts.

With deep appreciation for the increased public attention to the rural health crisis, and, more specifically, to the complex health disparities rural women in particular confront (American College of Obstetricians and Gynecologists, 2014; Nwangwu Ike et al., 2019), we here examine a meaningful absence, namely how or if this “crisis context” has impacted rural women’s own *willingness* to seek primary health care. Despite significant evidence of health disparities by gender, little research explores how the socio-spatial expectations and experiences of women and men may differentially affect access to care (Alexander and Walker, 2015; Cepeda-Benito et al., 2018). It is still more rare to find empirical health research that prioritizes rural women’s own perspectives (Sullivan et al., 2003); calls for patients’ views in planning health policy interventions (Hansen et al., 2002; Thorne and Paterson, 2000); and/or specifically attends to the rural context in which health issues emerge (Scott, 2000; Zimmerman et al., 2015). This is significant, for as Sullivan et al. (2003) evidence, rural women not only report experiencing loneliness and isolation owing to limited health care services and long distances to access health care, but also that experiencing loneliness and isolation can in turn compound their ability to adapt to chronic illnesses and other health conditions. Ethnographically documenting rural women’s perspectives and experiences not only addresses gaps in

qualitative public health research but also lends nuance to quantitative work on women’s access to health care (Bornstein et al., 2018; Chandak et al., 2018; Onega et al., 2014).

As rural medical and obstetrical deserts widen in the U.S., the health and well-being of rural women will continue to decline, with rural Indigenous, Black and women of color bearing the greatest costs (Kozhimannil and Frakt, 2017; Singh et al., 2017). Of course, addressing rural health inequity via the current policy suggestions—new payment and supervision models, physician recruitment and retention, improved broadband connectivity and telehealth capabilities, reduced prescription drug costs, and collaborative investment in existing services and infrastructure (Centers for Medicare and Medicaid Services, 2019; James, 2019; Rebuild Rural Infrastructure Coalition, 2019; Pollack, 2019)—presumes that rural women’s health will improve.

As our findings suggest, within this “desert” context, static understandings of rural distance not only contribute to medical mistrust but also fail to capitalize on the close social distance that occurs in spite of—or perhaps because of—rural and remote spatiality. While there has rightly been meaningful attention to race-, gender-, and citizenship-based medical mistrust (Jaiswal, 2019), there remains a critical need for a more multidimensional understanding of the role of trust among socio-ethnically diverse but spatially distinct populations, such as rural women (Hall et al., 2018). Not only could this improve health care outcomes, but it might likewise inform regionally specific initiatives aimed at addressing the rural health crisis.

Our findings add critical dimension to prevailing understandings of the rural health crisis in the United States. In conjunction with the socio-spatial barriers rural women report, the interpersonal costs of physician shortages, insufficient payment models, and an increasingly stressed and limited health system create negative experiences that compound rural women’s ability and willingness to seek care. Owing to close communication across trusted social networks, these experiences can also quickly inhibit *other* women’s willingness to seek care. Rural physicians need to be aware of all of these barriers, including the subtler and arguably less studied ones we present here.

This study highlights rural women as a marginalized population that is rendered further vulnerable by growing health deserts and disparities. Notably, our research additionally evidences that efforts taken by hospitals and health systems to address these disparities, like hiring more nurse practitioners or physician assistants, can themselves *grow* rural women’s medical mistrust if not clarified or contextualized. In response, we suggest that any proposed solution to the rural health crisis must meaningfully solicit rural women’s own interpretations of and confidence in these initiatives, whether via public health research or system-led community needs assessments, *alongside* a community-relevant definition of “rural,” as discussed above (Bennet et al., 2019). As the PI’s and others’ mixed-methods research with rural community members demonstrates, health care policies and interactions that reflect distinct socio-spatial experiences not only facilitate health care acquisition but also have relevance to long-term initiatives aimed at recruiting and retaining the kinds of professionals rural women trust (Bredeson and Statz, 2019; Statz and Termuhlen, 2020; Sullivan et al., 2003; Thorne and Patterson, 2000). As we already know, the inverse of these efforts, namely continued mistrust, is associated with lower health care utilization and lower health care satisfaction (Benkert et al., 2006; LaVeist et al., 2009)—realities that are compounded in a rural “crisis context.” This, we believe, may be a more salient barrier to accessing rural healthcare than distance.

As a more positive interpretation, what we present as barriers might also be viewed as opportunities to help facilitate rural women’s access to health care. Specifically, our data signal the far-reaching potential of rural physicians and other health personnel who have a trusted community presence. One health worker we interviewed stated, “I felt like I had that connection of community ... So even if I didn’t know somebody, they’d know who I was.” She described this positive reputation as the key to successful health interventions. Thus, just as the high density

of social acquaintanceship can lead to rural women's reluctance or resistance to seek care, so also can it enable impactful *collaboration* between health care providers and patient populations—and likewise help disseminate critical information about regional efforts and initiatives to address rural health shortages.

#### 4.1. Limitations

Some limitations of this work warrant highlighting. While the individuals we interviewed offer critical, expert perspectives on access to rural health care, as with all qualitative research, their views are not generalizable beyond the participants themselves. Moreover, our data were obtained from a limited sample of participants across a wide rural region. While our research was designed to solicit in-depth views from participants, future work should explore whether these findings are consistent across larger populations of rural women. We additionally did not collect demographic information from participants, including racial or ethnic identity, age, or income. Additional research is needed to systematically assess the impacts of other diverse identities on rural health care access. Having discussed these limitations, we emphasize that our purpose was to gain urgently needed insights on how the rural health crisis has impacted rural women's experiences and willingness to seek care.

#### 4.2. Implications

Our study builds on previous research on medical mistrust and rural health disparities. It enhances current work by employing ethnographic methods to help contextualize complex—and often quickly changing—phenomena. It also responds to the nascent call for an intersectional approach to clarify the antecedents and consequences of medical mistrust (Jaiswal, 2019). Until now, the literature on medical mistrust has largely focused on specific ethnic or gender identities (Kinlock et al., 2017; Oakley et al., 2018), with relatively less attention to geography (López-Cevallos et al., 2014). Focusing on the experiences of a socio-ethnically diverse but regionally distinct population helps reveal the ways in which unique spatial phenomena, structural forces, and social realities interact to shape how rural women make decisions about their health. While existing research on medical mistrust has highlighted the significance of a caring and compassionate relationship with a provider (Berríos-Rivera et al., 2006; Jaiswal, 2019), research on rural health disparities has largely neglected the role of rural patient-provider interactions and the rural social context more generally. An exception to this is research on telemedicine (Hiratsuka et al., 2013).

Our study has implications for further research—and also for policy development. In response to the rural health crisis in the U.S., a number of professional and federal entities have launched widely publicized rural health-related initiatives (Cullen, 2019; Martin, 2019; Singh et al., 2017). These efforts largely attend to health economics and community infrastructure, with very little if any consideration of the role of trust in health care delivery. They likewise struggle to mitigate the existing biases of “structural urbanism,” namely health care that is market-oriented and differentially allocates funding toward large population centers rather than low-population and remote settings (Probst et al., 2019).

When policies address rural women's health in particular, the focus is primarily on access to maternal and obstetrical services. Arguably rarer attention to rural women's *other* health disparities identifies fewer recommended preventative screening services; a lack of mental health care; higher rates of cancers and chronic health conditions, intimate partner violence, depression, and late HIV diagnosis; a higher likelihood of being poor, lacking health insurance, or relying substantially on Medicaid and Medicare; and traveling long distances to access care. (Alexander and Walker, 2015; American College of Obstetricians and Gynecologists, 2014; Cepeda-Benito, 2018; National Rural Health Association, 2013; Nwangwu Ike et al., 2019). As described above, the

predominant policy recommendations to address these disparities tend to center on physician recruitment and retention, enhanced reimbursement programs for rural hospitals and primary care providers, and increased comprehensive health insurance coverage (American College of Obstetricians and Gynecologists, 2014; National Rural Health Association, 2013).

Significantly, none of these recommendations address the importance of building and sustaining rural women's trust in regional health care. Not only do rural women contend with increased logistical barriers to access care, but the care they do receive feels rushed and/or insufficient—and is unsurprisingly interpreted as confusing, frustrating, scary, and even shameful. In rural communities with a high density of social acquaintanceship, these experiences are communicated widely, contributing to a collective mistrust with consequential implications for health centers and systems that are already struggling. Any policies that aim to address rural women's health disparities—as well as the rural health crisis more generally—must take into consideration this socio-spatial context.

## 5. Conclusions

By theorizing distance as a clear spatial barrier as well as an expansively “rich” concept, this paper illuminates the experiences and expertise of an often-invisible group, namely rural women. Our findings importantly complicate dominant typologies of rural distance by demonstrating that women at times forego health care or travel *farther* distances to access “better” care owing to medical mistrust. Significantly, this mistrust largely emerges in response to policies that aim to mitigate rural health care deserts. This unsettles prevailing professional efforts as implicitly metrocentric, and as failing to employ a necessarily multidimensional understanding of socio-spatial barriers to rural women's health care. Our research indicates that attention to rural health care deserts must employ a new “spatial imaginary,” one that elicits the place-based knowledge of rural patients and engages existing and trusted social networks.

### Declaration of competing interest

There are no conflicts of interest to disclose. Both authors have approved the manuscript and agree with its submission to *Health & Place*.

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