The Women’s Health Network: An Evaluation of a Community-Based Initiative

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Abstract
This study is an evaluation of the Women’s Health Network (WHN) program initiative. The WHN is a grant funded project aimed at creating and maintaining health equity for women in the state of Kansas in the United States. This qualitative study explores the efficacy of a community-based initiative to build trust among community members. The WHN gathered a group of professionals and community members to serve as the board of directors. In order to assess project value, WHN conducted a series of semi-structured interviews with individual board and network members asking for their opinions and beliefs about the progress and impact of the WHN. These interviews were recorded, transcribed, and coded to create a thematic evaluation of responses. The concluding analysis found that board members believed the WHN to be necessary, highly effective, and in-line with the health care needs of underserved women in the community. This collaborative approach to community-based health equity efforts can be shared with other communities working to build trust to create health equity.

Keywords
Community initiatives, Health equity, Women’s health, Underserved populations

Introduction
Disparities in women’s healthcare continue to be prominent within our society. The World Health Organization (WHO) identifies health disparities among women being life expectancy, health coverage, and maternal/infant mortality which are based on socio-economic, geographical and race/ethnicity factors [1]. There has been a constant struggle to communicate information to guide providers and organizations to improve women’s health care [2]. For instance, access to care, existing socioeconomic status, and maintaining or obtaining health insurance are critical disparate issues [3]. Additionally, demographic characteristics such as race, age, and geographic location (rural versus urban) also impact health care for women. Rural women have higher instances of preventable conditions compared to their urban counterparts [4]. Women are also more likely to be depressed than men, with their symptoms of depression exhibited at a greater level [5].

The limited resources allocated for women’s health make it more difficult to treat women in a holistic way. The National Conference of State Legislatures states that in order to improve women’s health within their states, legislators need to create a task force to address women’s health, raise awareness, consider support institutions, and explore ways to use already existing state and federal resources [6]. There is significant data concerning women and their health outcomes, but very little resource allocation is made specifically for women. Effective partnerships are essential for advancing health equity by increasing the community’s capacity to shape outcomes [7]. The Women’s Health Initiative (WHI) focuses on women’s health at a national level with main focuses on cardiovascular disease, cancer, cardiovascular disease, and osteoporosis [8].
and osteoporotic fractures (2020) [8]. With WHI’s extension studies, strategic input is focused to prevent major causes of death and frailty in older women.

Regional initiatives in Kansas typically rely heavily on the county’s health department and non-profit organizations like Health Core Inc., and Grace Med to address disparities within the state. The Women’s Health Network (WHN) of Kansas looks in-depth at targeted health issues for women and is working to establish a safe sharing environment for women. The WHN also encourages the community, through networking involvement, to disseminate information about various health access points for women.

The Women’s Health Network (WHN) was formed in 2019 as a community-based initiative to address three key issues surrounding women’s health care including: Mental health, reproductive health, and health literacy and access to education. Group members span from young adult to older adult women, men, clinicians, and community member representatives. In Wichita, the most populous city in the state of Kansas, there is a lack of preventative screening, high infant mortality rates, and a high rate of children in single-parent households [9]. The Women’s Health Network has a mission to educate patients, community members, and providers with in-depth and patient-focused discussions. To achieve this goal, WHN prioritizes research and community engagement. The purpose of this study was to understand barriers and opportunities to health care access for women in the state of Kansas and to develop a community-based initiative to best serve the underserved.

**Methods**

This was a qualitative study that included semi-structured interviews conducted from October through December of 2019. A total of five Board of Director members and nine Network members were interviewed. The interviews were conducted in two phases with the first phase involving the Board of Director members. After obtaining informed consent, a trained research assistant administered the semi-structured interviews lasting approximately 15 minutes. Each of the interviews was conducted in English and recorded on a computer through a cell phone speaker for post-interview transcription. The second round of interviews was composed of Network member volunteers. These interviews, also approximately 15 minutes in duration, were recorded and transcribed using Panopto. All data was kept secure on password protected devices and digital information stored on a secured server network.

Both interview groups were asked the same set of questions including 5 demographic questions and 5 questions asking about health literacy and preferred sources of health information gathering. The research assistant elicited information regarding familiarity with issues of health disparities and how they affect overall health across the lifespan. To conclude the interviews, participants were asked to provide qualitative responses to 10 open-ended questions about the WHN program processes and outcomes. This study was approved by the university Institutional Review Board for human subjects protection.

**Theoretical foundation**

The study was community-based and used the Plan-Do-Check-Act (PDCA) model to ensure efficiency. The PDCA model is an iterative four-step method used to deliberately and continuously assess and improve efforts through defined actions. The model was originally used in

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**Figure 1:** Social ecological model of health for women’s health.
es were mental health, reproductive health, and health literacy and access to education. Since those concerns were identified, the WHN has made it a point to ask the Board and Network members in each survey to validate those concerns on an ongoing basis. When asked what the top 3 women’s health issues in the state of Kansas are, the semi-structured interview responses echoed those same concerns in addition to the following: reproductive health, cancer, mental health, access to health care for rural women, a lack of affordable care, necessary Medicaid expansion, women’s health in aging, violence against women, maternal mortality rates, infant mortality rates, and minority women’s health disparities.

To elicit relevant channels for health literacy distribution, WHN asked participants how they access health information in their own lives. When asked, “What sites do you use to search for health information?”, the responses varied from sites frequented by clinicians: PubMed, Epocrates, Medline Plus, and UpToDate. Community members reported more general health information site usage including: WebMD, CDC.org, sites specific to local organizations, MD Anderson Cancer Center, Mayo Clinic, and reputable search results from internet search engines, i.e., .gov, .edu, and .org sites.

Participants
A total of 14 participants were recruited from the WHN Board of Directors and Network membership. Most of the participants were White (n = 11) women (n = 13). There were (n = 3) African American participants, and one man. Twelve of the participants were community members and two were clinicians. The age groups spanned from 21-30 (n = 1), 31-40 (n = 2), 41-50 (n = 5), 51-60 (n = 4), and 61-70 (n = 2). All respondents participated on a voluntary basis. Most (n = 11) of the respondents have advanced degrees and (n = 3) reported they had completed college (Table 1).

Results
The first survey question serves as a constant touchstone for the WHN executive board. In previous focus groups, Board Members were asked to narrow down the focus of the WHN to the top 3 major health concerns for women in Kansas. The overwhelming responses were mental health, reproductive health, and health literacy and access to education. Since those concerns were identified, the WHN has made it a point to ask the Board and Network members in each survey to validate those concerns on an ongoing basis. When asked what the top 3 women’s health issues in the state of Kansas are, the semi-structured interview responses echoed those same concerns in addition to the following: reproductive health, cancer, mental health, access to health care for rural women, a lack of affordable care, necessary Medicaid expansion, women’s health in aging, violence against women, maternal mortality rates, infant mortality rates, and minority women’s health disparities.

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Each group was questioned about the progress of the WHN program and its relevance to individual missions of the Board and Network members and their respective organizations. When asked what has gone well during their WHN membership the respondents stated the following: Interesting topic discussions that are relevant to my organization, keynote series and expert panels help providers understand how to better serve clients/patients, learning about different programs and organizations in Kansas, opportunities for collaboration, sharing best practices with others, and diverse perspectives are represented.

Table 1: Participant Demographics.

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<tr>
<th>Race</th>
<th>Participants (n)</th>
<th>Percentage %</th>
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<tbody>
<tr>
<td>White/non-Hispanic</td>
<td>11</td>
<td>79%</td>
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<td>Black or African American</td>
<td>3</td>
<td>21%</td>
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<tr>
<th>Gender</th>
<th>Participants (n)</th>
<th>Percentage %</th>
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<tbody>
<tr>
<td>Female</td>
<td>13</td>
<td>93%</td>
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<tr>
<td>Male</td>
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<th>Age Range</th>
<th>Participants (n)</th>
<th>Percentage %</th>
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<tbody>
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<td>21-40</td>
<td>3</td>
<td>21%</td>
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<tr>
<td>41-50</td>
<td>5</td>
<td>36%</td>
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<td>51-60</td>
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<td>29%</td>
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<tr>
<td>61-70</td>
<td>2</td>
<td>14%</td>
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<tr>
<th>Role</th>
<th>Participants (n)</th>
<th>Percentage %</th>
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<tbody>
<tr>
<td>Clinician</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>Community member</td>
<td>12</td>
<td>86%</td>
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When asked to share their definition of health disparities participants stated their understanding to be limited access to health care services, differences in health care outcomes particularly among minority women and LGBTQIA+ groups, under-insured groups unable to seek care, and an inability to pay for health services. The health disparities specific to the state of Kansas were identified as: Geographical limitations to care - particularly in rural communities, financial barriers to preventative care, food deserts, a lack of cultural sensitivity, senior citizens who cannot access adequate care, the birth outcomes for minority babies including higher incidences of Sudden Infant Death Syndrome (SIDS) and premature births.

The respondents assessed that these health disparities affect women over the life span in the following ways: Mental health issues can be limiting in all aspects of life, poor nutrition affects both physical and mental development, disparities become cyclical and generational, worse long-term health outcomes, an inability to age in a healthy manner. Maternal mortality and infant birth outcomes affect the lifespan of both mother and child including premature babies often experiencing learning disabilities and developmental delays. Women who experience poor maternity outcomes (premature delivery, stillbirth) can experience mental and physical ramifications. These groups also tend to have a shorter lifespan due to a lack of preventative care.

The key barriers to reducing health disparities in Kansas were identified as high health care costs resulting in inaccessible quality preventative care inaccessible, healthcare professional’s views of women’s health - specifically reproductive rights, Medicaid expansion is not happening fast enough, unreliable transportation - Medicaid provided transportation is not inclusive, and improved health education programs for students is necessary. A lack of funding for outreach for underserved populations is also a barrier including the limited number of contraceptive devices available at low-income clinics.

The group’s recommendations for improving health equity for women in Kansas were governmental Medicare/Medicaid expansion, returning to a direct primary care physician model, better no and low-cost contraceptive options, and educating doctors, nurses, and lawmakers on patient care needs. Participants described the Women’s Health Network as hugely impactful to the community in the following ways: Sharing valuable resources, the Network reach spans the state, the scope of expertise at each meeting including keynote presentations, the network provides a framework for real and actual change, and WHN is facilitating community member and provider education to better serve their populations. In the interest of community engagement, respondents were asked about their willingness to disseminate WHN educational information as the project phases into community outreach and provider education. All of the participants expressed a willingness to disseminate information on a broad scale within their communities, organizations, and patients.

Discussion and Conclusion

The broader implications of this study are to determine the efficacy of the WHN processes and procedures regarding distributing health literacy information among Network members and the people they serve. The narrower focus of this study will help the WHN understand how providers and organizations working with the WHN seek their own health literacy information. By doing this the WHN better understands how to serve the communities in the state of Kansas. Based on the findings, the WHN is still on track to successfully develop and launch a helpful and accessible method of distributing health care information. The respondents indicated a preference for digital information access; however, this would be a limitation for some socioeconomically disadvantaged groups. These limitations have been identified and serve to inform the WHN that alternative means of health literacy and access to education must be provided. Other limitations of this study include a low participation pool, low minority participant numbers, and each person has a post-secondary level of education. Future focus can be placed to ensure the WHN nets a larger pool of respondents to improve generalizability of study findings, is accommodating to all minority groups, and includes varying levels of education among participant groups.

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Conflict of Interests

None to Report.

Authors Contributions

Dr. Amy K. Chesser, Dr. Nikki Keene Woods, and Inéke L. Vargas were responsible for study creation, data collection, data analysis, and manuscript writing; Courtney Bennett and Jessica Paluri were responsible for manuscript writing and data analysis; Melody McCray-Miller was responsible for study creation, study oversight, and manuscript review; Dr. Amy K. Chesser is also the principal investigator responsible for the study.

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