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Domestic Violence and Pregnancy: A CBPR Coalition Approach to Identifying Needs and Informing Policy

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Abstract

Background: Community engagement—the collaborative process of addressing issues that impact the well-being of a community—is a strategic effort to address community issues. The Gulf States Health Policy Center (GS-HPC) formed the Hattiesburg Area Health Coalition (HAHC) in November 2014 for the purpose of addressing policies impacting the health of Forrest and Lamar counties in Mississippi.

Objectives: To chronicle the community-based participatory research (CBPR) process used by HAHC's identification of infant and maternal health as a policy area, domestic violence in pregnancy as a priority area within infant and maternal health, and a community action plan (CAP) regarding this priority area.

Methods: HAHC reviewed data and identified infant and maternal health as a priority area. They then conducted a policy scan of local prenatal health care to determine the policy area of domestic violence in pregnancy.

Results: HAHC developed a CAP identifying three goals with regard to domestic violence and pregnancy that together informed policy. Changes included the development of materials specific to resources available in the area. The materials and recommended changes will first be implemented by Southeast Mississippi Rural Health Initiative (SeMRHI) through a screening question for all pregnant patients, and the adoption of policies for providing information and referrals.

Conclusions: The lack of community-level data was a challenge to HAHC in identifying focus and priority areas, but this was overcome by shared leadership and community engagement. After completion of the CAP, 100% of expecting mothers receiving prenatal care in the area will be screened for domestic violence.

Keywords

Community-based participatory research, community health partnerships, women's health services, pregnancy complications, social change

In recognition of the need to address health disparities through multifaceted, multidisciplinary, and multisystematic approaches,[1] community engagement—the collaborative process of addressing issues that impact the well-being of a community[2]—is a strategic effort to improve quality of life and address community issues. To promote community–academic partnerships that address these health disparities, the GS-HPC established three CBPR coalition chapters in fall 2014. Among these, the Hattiesburg chapter (i.e., the HAHC) first met in November 2014 for the purpose of reviewing and improving policies impacting the health of the Hattiesburg community, broadly defined as Forrest and Lamar counties in Mississippi. The need for this approach was based on the extensive literature that demonstrates community coalitions as an effective means of fostering community engagement for the purpose of addressing a common goal,[3,4] and CBPR as an effective approach for impacting policies across communities and issues.[5–11]

CBPR, arising at the intersection of community development and social activism, challenges the positivist approach to research in its interconnected goals of research, action, and education.[12,13] The theoretical underpinnings of CBPR originate broadly from Talcott Parsons' presentation of the need to promote social progress through the promotion of the application of scientific knowledge to real-world problems.[12] This approach leads to the assumption that underlies CBPR, which is that institutional changes, often through policy, are made based on new knowledge, on education related to that knowledge, and on a self-reflective community.[12,14,15] Because most factors associated with health disparities are beyond the control of any one person, policy advocacy is needed to achieve structural changes required to eliminate these disparities.[16] The GS-HPC, thus, seeks to promote this knowledge production through coalition formation, because the coalition can then serve as the self-reflective community of individuals both interested in and having the local contextual knowledge to promote change for the purpose of improving health in their community. Specifically, the GS-HPC pursues a CBPR approach to coalition work in acknowledgement not only of the value of organizing such a self-reflective community, but in their ability to promote the collection of data that yields new knowledge and ultimately social progress through the improvement of health policies.

The HAHC, through the process described herein, identified infant and maternal health as a policy area in need of intervention for the local community. Specifically, Mississippi is ranked last in the nation in infant and maternal health outcomes.[17] Within the infant and maternal health policy area, domestic violence in pregnancy was chosen as the priority focus given its potential impact on infant and maternal health and the lack of policies regarding screening in the health care clinics of the community. Unambiguously, domestic violence is directly linked to perinatal mortality.[18–20]

Nationally, domestic violence can be physical, sexual, emotional, economic, or psychological actions or threats of actions that influence another person[21] and affects 4.5 million women annually in the United States alone.[21,22] Over a lifetime, one in three women and one in four men will experience physical abuse by an intimate partner.[21] Domestic violence is most common among women between 18 and 24 years of age.[21] Specifically, between 4% and 8% of pregnant women experience domestic violence.[18] Not only do 26% of women report that battering increased after their partner learned of the pregnancy,[23] but this violence has severe effects during pregnancy, including depression, alcohol use and abuse, tobacco use, illicit drug abuse, abortion, and weight loss.[23,24] Among women who report abuse during pregnancy, 40% also report that their pregnancy was unplanned, compared with 45% of all pregnancies being unplanned.[25] Additionally, 50% to 60% of those who experienced domestic violence before pregnancy will continue to experience it during pregnancy.[26]

In Mississippi, in 2015[1] law enforcement responded to 10,411 domestic violence calls and issued 4,000 protection orders.[21] During a survey period of 24 hours in 2014, 393 domestic violence victims sought refuge in Mississippi emergency shelters.[27] In addition to these calls, Mississippi domestic violence hotlines took 40,317 calls for assistance in 2015. In this same year, Mississippi domestic violence shelters provided housing for 2,114 women, men, and children, as well as nonresidential services to 1,593 individuals.[21] Of the women seeking services for domestic violence, 72% were of childbearing age (between 18 and 40 years). Additionally, 50% identified as White, 43% as Black or African American, and 3% as Hispanic; 58% reported an annual household income of less than $5,000, with 75% being unemployed and 24% having at least one form of disability.[21] No data are available for the prevalence of domestic violence during pregnancy that are specific to Mississippi.

This article chronicles the process used by the HAHC, the role of community engagement, and the success factors that contributed to the coalition's identification of the policy area and the focus of policy intervention, and the CAP to intervene. In doing so, the significance of the research is the documentation in the literature of a successful community effort to inform policies to address important health issues.

METHODS

The GS-HPC staff identified potential HAHC members in early fall 2014 using the Workgroup on Community Health and Development Tool Kit,[28] which called for representation from different stakeholders in the Hattiesburg community,

[1] The most recent year of data available at the time the coalition was reviewing reports on domestic violence.

including the city and state government, both local universities in Hattiesburg (e.g., The University of Southern Mississippi and William Carey University), local nonprofit and faith-based organizations, the health department, the school districts, health care providers, local businesses interested in health, and community members broadly. Since November 2014, the coalition has met monthly (with the exception of holiday interruptions) and has used CBPR methods following the model of Minkler et al.[29] There are currently 31 members of the coalition, with representation from Delta Sigma Theta, the Hattiesburg Area Habitat for Humanity, Health Help Mississippi, La Leche League of Hattiesburg, Pine Belt Mental Healthcare Resources, Mississippi Public Health Association, Mississippi State Extension, Mississippi State Health Department, Mississippi Rural Health Association, SeMRHI, The City of Hattiesburg, The University of Southern Mississippi, United Way of Southeast Mississippi, William Carey University, and the Women's Shelter.

The coalition was formed by the GS-HPC to follow a four-step CBPR process to make a policy changes in the Hattiesburg community. These steps are similar to ones used by Minkler et al,[29] which are designed to produce scientific knowledge through primary research and to use the produced knowledge to bring about health policy changes. Figure 1 provides a flow of work illustration that aligns the steps taken by the HAHC to Minkler's approach to CBPR. The first step, identify a policy area, falls in line with Minkler's "problem definition/identification" phase, and identifies key areas where the coalition can implement policy. Step two, conduct a policy scan, falls in line with the "deciding on a policy to pursue" phase. Here the coalition is to decide its primary policy goal. Steps three and four (develop a CAP, and implement a policy change), fall in line with the policy advocacy phase, where the coalition implements an action plan to see that the policy goal is successful. All coalition members played an instrumental role from the initial identification of infant and maternal health as the policy area, to the presentation of this process through this article. We present the first two steps—identification of infant and maternal health as policy focus and identification of domestic violence in pregnancy as a priority area—as the methods used, and we present the second two steps—development of a CAP and the implementation of a policy change—as the results given that the CAP is the result of the process. Although positivist or conventional research approaches would present the data as the results, in the CBPR coalition approach, the results better align with the CAP. "Unlike conventional social science,

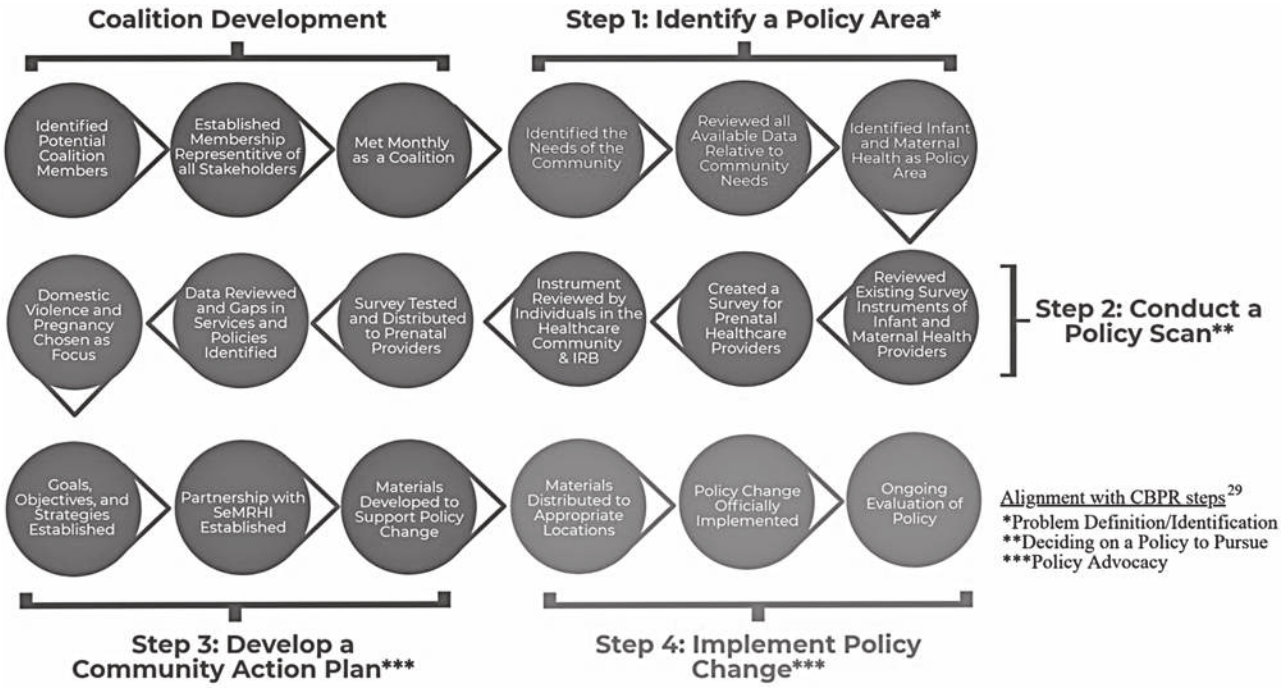

Figure 1. Flow of Work

[the purpose of CBPR] is not primarily or solely to understand social arrangements, but also to effect desired change."[30] Thus, we present the CAP as results because, although part of the CBPR process, it is the first product of the process toward producing this desired change.

We discuss these four steps together as the "process" in the final section, which will also cover challenges and successes of the HAHC.

Identification of Infant and Maternal Health

The needs of the community were reviewed and discussed at HAHC meetings from January to March 2015 (Figure 2). In addition to anecdotal evidence, the HAHC reviewed all available data for the purpose of identifying areas in which our community might be underperforming relative to other communities, counties, or states. Data reviewed included the Centers for Disease Control and Prevention (CDC) Chronic Disease State Policies, CDC High School Youth Risk Behavior Survey, CDC Smoking and Tobacco Cessation Data, CDC Insurance Coverage, CDC Births, Prenatal, and Reproductive Care, CDC Infant Mortality, CDC Medicaid, Robert Wood Johnson Foundation (RWJF) County Health Statistics, RWJF County Rankings, RWJF County Profile, RWJF Select Health Indicator Maps, RWJF Mammography Policy, Mississippi State Department of Health Forrest County Profile, U.S. Census Bureau (USCB) Mississippi Quick Facts, USCB Mississippi Social Characteristics, USCB Mississippi Economic Characteristics, USCB Mississippi Housing Characteristics, USCB Mississippi Demographics and Housing Estimates, USCB Mississippi Population Profile, and Behavioral Risk Factor Surveillance Survey Mississippi Behavioral Risk Trends. In reviewing these data reports, which were printed and provided to all HAHC members, the coalition took a Health in All Policies approach, which can be defined as "a strategy to help strengthen the link between health and other policies, and seeks to improve health while at the same time contribute to the well-being and the wealth of the [community] through structures, mechanisms and actions planned and managed mainly by sectors other than health."[31] Thus, the coalition considered any policy area that was directly or indirectly related to health in the community.

After reviewing the local data, the HAHC discussion focused on disparities surrounding workplaces' access to healthy foods, opioid addiction and Narcan adoption, and infant and maternal health. HAHC members found within the data that not only were health indicators in the area of infant and maternal health significantly poorer in Mississippi (ranked

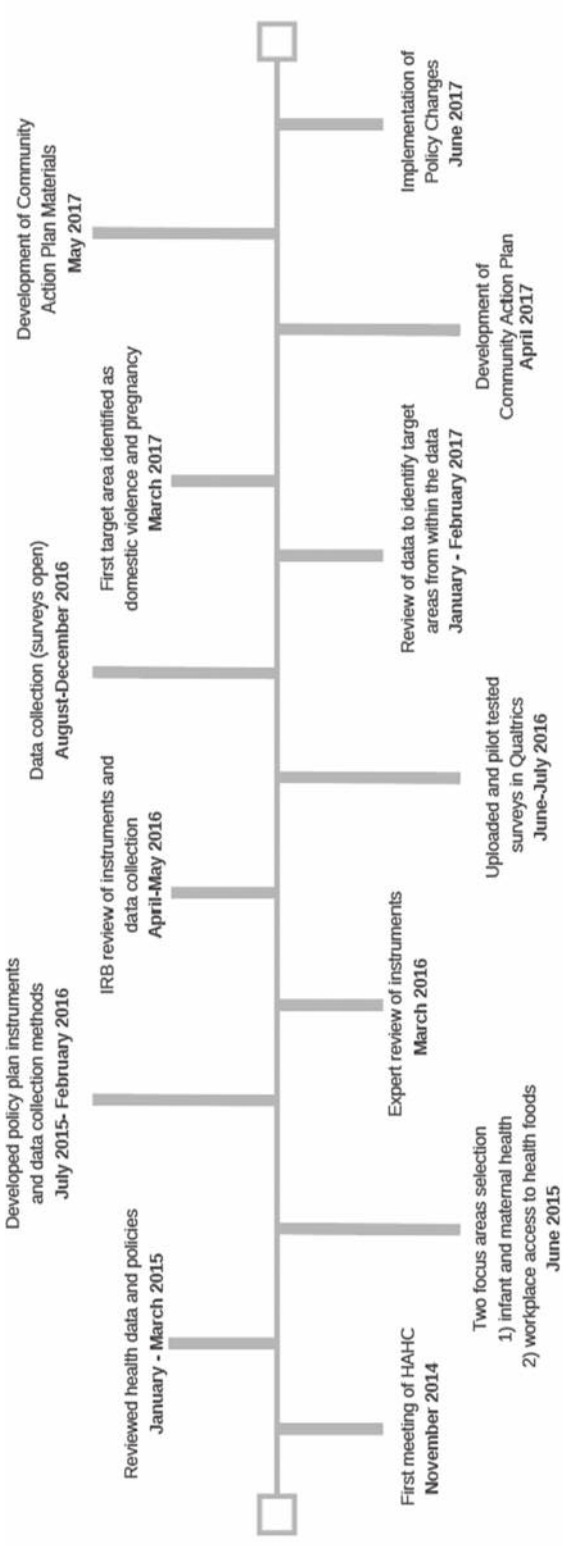

Figure 2. Coalition Timeline

last in the nation in infant mortality),[32] but also that within Mississippi there were distinct racial and income disparities (African Americans in Mississippi earn about 69% of what Whites earn at the median).[33] Through these conversations, it was revealed that many of the coalition members had an interest in, or were already working in, this area or were working specifically with this lower income and/or African American populations. Therefore, the rest of the discussion centered on the identification of available resources to expecting and new mothers and potential gaps within these resources.

To ensure that the ultimate priority area within infant and maternal health remain community focused and that it, in fact, was appropriate to the resources available in the community, we conducted a policy scan. The purpose of a policy scan is to identify any existing policies and systems related to community member needs, and more importantly, any gaps in these policies and systems.[34,35] Specifically, from July 2015 to February 2016, we drafted a survey and discussed associated methods. In this process, we reviewed other survey instruments of infant and maternal health providers. The survey instrument collected data on the policies of prenatal health care providers, including the wait time to see a physician; policies for seeing new patients without insurance coverage; policies for seeing patients with prenatal Medicaid (including pending prenatal Medicaid and referral processes for patients they are not able to see); policies for referral to perinatal high-risk programs; policies for oral health screenings and referrals to dentists; policies for screening and providing information on breastfeeding, folic acid, sudden infant death syndrome, domestic violence, co-sleeping/rollover death, alcohol abuse, drug abuse, and oral health; the provision of language and interpretation services; policies on cultural competency training; and telemedicine participation. The policy scan survey instrument was reviewed by individuals working in the health care industry and known personally by members of the HAHC, and then by the Institutional Review Board at The University of Southern Mississippi. In summer 2016, an invitation was sent to all HAHC members to test the survey and provide feedback. After the feedback was incorporated, the survey link and introduction was sent to office managers for the two Forrest County, Mississippi, prenatal providers: Hattiesburg Clinic and the SeMRHI. There are no other private practice prenatal care providers in Forrest County, Mississippi.

Identification of Domestic Violence in Pregnancy as a Priority Area

The policy scan results were presented to the HAHC at the January 2017 meeting. At that meeting, as well as the February 2017 meeting, the coalition members discussed the data in the context of community needs to identify any gaps in services or policies of the local prenatal care providers. Based on the lack of policies by both providers and on the opportunity to impact policy in this area, by March 2017 the conversation focused on domestic violence and pregnancy. Specifically, for one of the providers, domestic violence was discussed only if it is mentioned by the patient first. There was no indication of policies to discuss it routinely, and it was not indicated that information was provided by pamphlets, televisions in the waiting room, patient portals, or referrals to other services. For the other provider, it was discussed at the first prenatal visit and postpartum visit, but it was not indicated that information was provided by pamphlets, televisions in the waiting room, patient portals, or referrals to other services.

To advance the HAHC's ability to make changes in the area of domestic violence, and ensure community involvement in all stages of the research process,[36] we reviewed current statistics and resources related to this priority area at the March 2017 meeting. A coalition member and co-author conducted and presented the results of a domestic violence and pregnancy. In addition, the HAHC assessed the expertise available in the group. Although we had representation from many areas of health, we did not yet have membership from anyone working specifically in the area of domestic violence. At this point, we invited representatives from Hattiesburg's Women's Shelter to the HAHC, which satisfied the need to include community members who have specific expertise in each area essential for the project.[34]

RESULTS

At the April 2017 HAHC meeting, coalition members were provided with a blank CAP template from the Community Tool Box[3] as a guideline for conducting action research that promotes social progress through collaboration. This meeting was used to discuss the HAHC's long-term goals in the priority area of domestic violence and pregnancy, as well as annual objectives and associated strategies, target populations, action descriptions, process measures, and

resources/partners (Figure 3). The CAP emphasized the need to screen for and to have referral and information policies for domestic violence during prenatal visits. These policies, which would be formalized by the clinic, would formalize these processes to be systematically implemented by all prenatal care providers. To facilitate these policy changes on the part of local providers, we identified the role of the HAHC as the development of policy-related materials. It is essential that all partners contribute their expertise and share decision making and ownership of the project,[36] and material development was identified by HAHC as an effective tactic within its expertise.

On July 1, 2017, the policy changes outlined in the CAP were implemented at the SeMRHI, one of two clinics surveyed by the HAHC and also represented in the HAHC by three of its members. These existing relationships allowed for SeMRHI representatives to be part of the policy change conversation, which resulted in the plan to first implement the changes at SeMRHI and later implement the change at the Hattiesburg Clinic. SeMRHI has been providing health care to underserved patients since 1980 and currently operates 17 health clinics and 22 school clinics in southeast Mississippi. In 2016, SeMRHI served 36,200 patients across 101,745 visits. Of these patients, 284 were receiving prenatal care.

As part of the CAP, the HAHC developed three materials to support the policy changes: a one-page information document, a trifold information document, and a poster document. Although all three documents include information on domestic violence in pregnancy and phone numbers for accessing help in this area, each serves a different purpose. The one-page information document is housed in the SeMRHI information portal. Domestic violence was included as a screening question for all prenatal patients receiving care at SeMRHI, and if providers check in SeMRHI's Allscript computer system that this in fact was a problem for the patient, the system prints the information page developed by the HAHC. The second product, the trifold brochure, is provided in the waiting room at SeMRHI, as well as by other HAHC partners, including the Women's Shelter, the Mississippi State Health Department, United Way of Southeast Mississippi, and Le Leche League of Hattiesburg. More than 5,000 brochures have been distributed across the HAHC partners, as well as the other coalitions and stakeholders they are affiliated with, such as the Hattiesburg Homeless Coalition. Finally, the poster was developed to have perforated phone number tabs, which allows for individuals seeking help to discreetly pull the phone number to the Women's Shelter from the poster. Acknowledging that not all women would disclose abuse to their prenatal care provider, and not all women would feel comfortable taking a trifold information document,[37] the posters are displayed in bathrooms in the Hattiesburg area, including at the offices of prenatal care providers.

DISCUSSION

The CBPR efforts of the HAHC, as outlined herein, identified infant and maternal health as a policy area to further evaluate through a policy scan of prenatal care providers in the area. The HAHC further identified domestic violence in pregnancy as a priority within this focus area, developed a CAP, and implemented policy changes to address the gaps in the priority area. The results of the project included new policy changes at SeMRHI, with supporting materials developed by HAHC. To further evaluate this project, we referred to Green and Glasgow's "Evaluating the Relevance, Generalization, and Applicability of Research," which guided the remainder of this discussion.[38]

This project contributes to the academic community in further defining a process to which CBPR can be successfully accomplished to address local policies. This process took place in four steps as prescribed by the CBPR literature that systematically identified the policy area, gathered necessary evidence, and led to developing a CAP implement to policy change. Pragmatically, this project identified a problem area (domestic violence in infant and maternal health) that health practitioners can target and effectively address through simple policy changes. The materials developed by HAHC can be modified and used in other geographic areas.

One challenge for the project was a lack of available data at the community level. Most of the data analyzed in step one of the process were made available by state and national organizations such as the CDC and the Mississippi State Department of Health. Information specific to Forrest and Lamar counties was not as readily available. This, however, strengthened the need for community–academic partnerships to fill these information gaps through CBPR efforts. The HAHC effectively produced data through its policy scan that did not exist before

Gulf States Health Policy Center

Community Action Plan

Priority Area: Domestic Abuse in Pregnancy
Long term Goal
1. Increase policies to screen for domestic violence in prenatal care.
2. Increase policies for referrals to services for partners experiencing domestic violence in pregnancy.
3. Increase access of information on services available for domestic violence.

Annual Objective	Strategy	Target Population	Actions Description	Process Measures	Resources/Partners
Increase policies to screen for DV in prenatal care	Include DV questions in clinic prenatal visit screenings at SeMRHI and Hattiesburg Clinic	New and expecting mothers experiencing domestic violence	Agreement with clinic to screen for DV	Number of patients screened	SeMRHI, Hattiesburg Clinic
Increased policies for referral to services for patients experiencing domestic violence in pregnancy	Incorporate one-page printable handout for patients who indicate experience with DV	New and expecting mothers experiencing domestic violence	Agreement with clinic to provide referral information and make available in IT system	Number of patients referred	SeMRHI, Hattiesburg Clinic, printable one-page information
Increased access to information on services available for domestic violence	Provide tri-fold information in clinic waiting rooms	New and expecting mothers experiencing domestic violence	Agreement with clinic to make information available in waiting room	Number of brochures provided	SeMRHI, Hattiesburg Clinic, printable, tri-fold information

Figure 3. Community Action Plan

these efforts and was needed to advance our understanding of the priority area addressable by the coalition.

The HAHC collaborated first with SeMRHI to incorporate policy changes and anticipate working with Hattiesburg Clinic in the near future to offer prenatal health care in Forrest County, Mississippi. We estimate that through these efforts, 100% of expecting mothers at these clinics will come in contact with our intervention. If successful, we will extend the data and materials to a third clinic, Merit Health Wesley, in Lamar County, Mississippi. If all three providers implemented the policy change, we would have full screening of expecting mothers receiving prenatal care in the Hattiesburg area. This includes a significant number of expecting mothers from underserved populations, who are vulnerable to local race and income disparities. We also note that the success of this project helps our coalition partners achieve their stated objectives as well. For instance, SeMRHI addresses its primary mission to "provide access to affordable, quality, primary and preventive health care to our communities in a patient centered, safe, compassionate environment."[39] Finally, the HAHC effort allowed an opportunity also to collaborate with other community partners that may serve this community, but are not prenatal health care providers, such as law enforcement and homeless services.

This project achieved its goal of having referral and information policies for domestic violence during prenatal visits and developing supporting materials to be used at appropriate clinics. This intervention will affect quality of life for expecting mothers, as domestic violence severely decreases one's health-related quality of life and limits their physical and emotional health.[40] This success could not have been possible without community–academic partnerships throughout the process. Every step of our CBPR process was dependent on the collaborative efforts of all coalition members. Moreover, the partnership evolved from outreach and consultation to the highest level of community engagement and shared leadership.[2] As presented in the CAP, the plans will be continuously evaluated by the collection and assessment of data regarding the number of women screened, the number of women indicating the need for domestic violence resources, and the number of women accepting the resources developed by the HAHC.

We also note two additional limitations of the policy changes as implemented that the HAHC would like to address as we move forward in our assessment of policies around domestic violence and pregnancy with regard to prenatal screening policies: limitations in the screenings and limitations in language access. Regarding limitations in the screenings, there are weaknesses in the changes with regard to the detail of the policy changes. For instance, the new screening policy, at present, does not provide a protocol for screening when potential perpetrators are present in the room nor does the policy include a protocol for assisting patients in obtaining services beyond the provision of materials with contact information. Finally, there is no process in place for following up with these patients to ensure that they have received the resources and services they need. Providers may also be limited by time and, thus, reluctant to take the initiative to make these steps independent. Finally, we note the language limitations of the materials. By 2016 Census estimates, 2.8% of the Forrest County population is foreign born and 2.9% identify as Hispanic; indeed, 5.2% of the entire patient population at SeMRHI also identifies as Hispanic. Future efforts of the HAHC include the development of the materials in Spanish and Vietnamese.

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