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Utilizing Group Prenatal Care to Support Underserved Pregnant Women

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Utilizing Group Prenatal Care to Support Underserved Pregnant Women

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Abstract

Background

Prenatal care is a valuable time for pregnant patients to ideally receive holistic care that considers their psychosocial and physical needs. It is a vital service that decreases morbidity and mortality.

Problem

Individual prenatal care visits may not provide enough support for patients with complex psychosocial needs. Group care offers a longer visit, and education and community for pregnant women. The Native American Health Center (NAHC) offers group visits that have not been streamlined, and due to staff turnover, have left new staff under-resourced in planning visits.

Intervention

A toolkit was provided to NAHC staff on how to provide group visits in an effort to provide best practice care that excites staff and patients.

Methods

Staff were provided a pre-toolkit survey that questioned their levels of knowledge of group care and their interest in providing it. They then received a toolkit on the benefits of group care, a sample group care plan, and resources for pregnant patients. They were given a post-toolkit survey to assess increases in knowledge of prenatal care and confidence in providing it.

Results

Staff reported increased knowledge and interest in providing group care in providing group care after receiving the toolkit. Staff reported increased understanding of Oakland resources for pregnant patients.

Conclusions

The group care toolkit offers staff a guide for how to provide group care regardless of variables such as staff turnaround, all with the goal of providing support for pregnant patients.

Key Words

Group prenatal care, minority women, health disparities

Section II: Utilizing Group Prenatal Care to Support Underserved Pregnant Women

Background

The Native American Health Center (NAHC) is a Federally Qualified Health Center (FQHC) in Oakland, California. It serves pregnant women from Alameda County who primarily utilize Medi-Cal insurance. NAHC provides individual prenatal care to patients, but also offers a 'Mommy Shower' at least annually to offer their patients a celebration of their pregnancy. This is especially significant from a social support perspective because most of these patients might not otherwise have a baby shower or the support that comes from the community. The shower was turned into a billable prenatal visit four years ago and now offers the clinic a source of income. The Mommy Shower has received positive feedback from patients and is seen as a way of building community and supporting pregnant women. This project works to streamline NAHC's shower and offer a toolkit for how to provide best-practice care.

Problem Description

Health disparities in the United States are a challenging reality in which minority populations often face higher rates of disease or adverse outcomes than Caucasians. Infant mortality rates (IMR) in the United States in 2016 were highest among African American infants, compared to Caucasian infants (CDC, 2016). The IMR for African American infants in 2016 was 11.37 per 1,000 live births, compared to the Caucasian IMR of 4.85 in 2016 (CDC, 2016). The maternal mortality rate (MMR), which is calculated as the death of women while pregnant or within one year after pregnancy, per 100,000 live births, has been highest among African American women at 40 per 100,000, while Caucasian women had an MMR of 12.4 per 100,000 (CDC, 2018).

The differences in IMR and MMR can be explained in part by inequalities in access to prenatal care for minority women, and other disparities such as healthcare quality, education access, and socioeconomic disparities which all increase stress levels (Bryant et al., 2010). Stress can induce preterm labor, alter immunity, and lead to using risk-taking behaviors as coping mechanisms (Lu and Chen, 2004). Late access to prenatal care is also a major contributor to high IMR and MMR in minority women. African American women have the highest risk of late entry into prenatal care, with only 58.4% of African American women receiving prenatal care in their first trimester compared to 76.2% of Caucasian women (Bryant et al., 2010).

Setting

This project will take place at the Native American Health Center (NAHC), which currently offers group showers for their pregnant patients as a form of group prenatal care. The mission of NAHC is to 'provide comprehensive services to improve the health and well-being of American Indians, Alaska Natives, and residents of the surrounding communities, with respect for cultural and linguistic differences' (Native American Health Center, no date). Almost all patients at NAHC are insured by MediCal or Medicare, and 80% of NAHC patients are of minority ethnicities in the United States (Latinx, African American, Pacific Islander and Native American). NAHC utilizes group showers as an opportunity to bring pregnant women in the community together. NAHC has on average four showers per year, with two in English and two in Spanish. Each shower has an average of ten to fifteen participants. At any given time, there are around one hundred pregnant patients at NAHC. NAHC's current showers were created originally to be a party for their pregnant patients, but the agency has evolved the showers into billable group visits.

Specific Aim

The primary aim of this project is to develop, implement, and evaluate a prenatal toolkit for the Native American Health Center staff by August 2021. The toolkit will include a guide for best group prenatal care practices, as well as information on the benefits of group prenatal care for at-risk women. The toolkit will include a patient evaluation to critique the group care appointments after the toolkit is implemented. Staff will receive surveys before and after receiving the toolkit measuring their confidence in providing group prenatal care, their interest in it, as well as their knowledge of best practice group care and the benefits of it. A 25% rise in interest levels, knowledge levels, and confidence in providing group prenatal care is expected. This project will work with Native American Health Center's prenatal department and work to evolve its current group shower into an evidence-based group prenatal care appointment. The primary goal of the project is to improve the current group care that Native American Health Center currently offers by making it an evidence-based shower that provides education and community for the patients. The second goal is to increase staff interest of, knowledge of, and confidence in providing group prenatal care.

Available Knowledge

PICOT Question

The goal of this project is to create a group prenatal care toolkit for FQHCs to encourage providers to offer some form of group care, even if as an addition to individual prenatal care. A PICOT question, which allows practitioners to develop research questions, was created for this project (Riva et al., 2012). The PICOT question is as follows: does providing a group prenatal care toolkit increases staff confidence and interest in providing group care at FQHCs. This was measured with confidential surveys provided to staff before and after receiving the toolkit. The surveys measured staff confidence levels in providing group prenatal care, as well as their

interest levels in doing so before and after receiving a toolkit for how to implement group prenatal care options for FQHCs.

Search Methodology

A review of evidence was completed using PubMed and the Cumulative Index of Nursing and Allied Health Literature (CINAHL). An advanced search was done on CINAHL, selecting peer-reviewed articles published within the last ten years, using search terms: 'minority women' and 'group prenatal care', or 'minority women' and 'birth disparity', yielding a maximum of 30 results. From these results, articles were selected based on their demonstration of health disparities in birth outcomes between minority and Caucasian women, as well as their ability to display group prenatal care outcomes. Articles had to be published in journals in the United States and to be included and had to demonstrate a link between IMR, MMR, stress, and prenatal care's ability to reduce stress.

An advanced PubMed search included search terms of: 'prenatal care' or 'group prenatal care' and 'minority women', or 'adverse birth outcomes' and 'minority women'. A total of 71 journals were yielded from this search. Articles selected were peer-reviewed, published in journals, and were able to demonstrate the efficacy of group prenatal care in bettering prenatal outcomes for minority women. Articles were selected based on an ability to demonstrate healthcare disparities or disparities in social determinants of health between minority and Caucasian women. Exclusion criteria included studies older than ten years. Inclusion criteria included studies done in the United States that examined prenatal care access and the influence of stress on prenatal care outcomes. Articles were appraised utilizing the Johns Hopkins Critical Appraisal Tool (Dang & Dearholdt, 2017).

Review of the Literature

Alhusen, Bower, Epstein and Sharps conducted an integrative review of 15 studies published between 2009-2015 (2016). Studies included examined racial disparities in birth outcomes. This Level III High-Quality review found that African American women experience disparities in preterm birth rates and low birth weight, and other socioeconomic disparities. One quantitative study, with 108 African American women, found that 56% had perceived racism in their prenatal care, discouraging them from returning to care. Multiple studies reiterated that stress increases adverse outcomes, and that systemic racism increases the risk of preterm birth due to stress. A case-control study in Chicago found that African American women with preterm birth reported higher exposure to racism than women who gave birth at full-term, with an odds ratio of 2.5.

Current models of prenatal care often do not take into account disparities in social determinants of health that affect many minority women. Prenatal care visits are often short and impersonal, and unable to address the complexities of social determinants of health. Edmonds et al. (2015) conducted a cohort study of 22 African American women, aiming to assess their prenatal experience. Through conducting focus groups with participants, this Level III High-Quality study found that 14 of the 22 reported a bad relationship with their provider, and that their prenatal provider was judgmental of them. Other common barriers to care included transportation issues, long appointment wait times, and little support from families/partners. Women felt unsupported by their providers, and one woman reported feeling like she was part of a 'business transaction' with her doctor. Of the participants, 14 had a desire for a more supportive relationships with their providers, and six reported a lack of compassion from their providers.

A Level III High-Quality mixed methods analysis of 34 low-income women in San Francisco who received group prenatal care found that women who received group prenatal care reported high levels of satisfaction in their care (Liu et al., 2016). Participants were asked about their care satisfaction (range of not at all satisfied to very, 0-10) which received an average rating of 9.3. The ability of group care to reduce stress (range of not at all to very, 1-5) was rated at 3.2. Women reported an appreciation for the extra support and education they received during group prenatal care.

Summary/Synthesis of the Evidence

Evidence shows that minority women are at greater risk for poor birth outcomes due to systemic racism, disparities in social determinants of health, and prenatal care that does not address these factors. Minority women are at higher risk of low-birthweight infants, late entry into prenatal care, and experiencing racism in prenatal care. Minority women also experience barriers to getting to appointments – including transportation disparities which can create challenges in getting to appointments on time. Group prenatal care offers the beginning of a solution to the issue of birth and prenatal disparities experienced by minority women (Gennaro et al., 2016). Group prenatal care offers women an opportunity to receive their prenatal care appointments in a group setting. Group care appointments combine a medical visit with prenatal education and an opportunity for women to socialize with one another. Longer group appointment times create flexibility for late arrivals, as well as time to address psychosocial needs of patients. Women who receive group care are taken out of the group for private physical exams with their provider, but otherwise remain with the other pregnant women for various activities and educational opportunities. Group care gives women an opportunity to meet with other women in similar circumstances, and to develop a sense of community and support.

Rationale

This project utilizes two theories for its theoretical framework. The first is the social support theory. The social support theory states that social support can positively impact thinking by making individuals feel less threatened, and it can also encourage coping and reduced exposure to stress (Glanz et al., 2015). The stress-buffering model, a framework developed by Sheldon Cohen in the 1980's, states that social support acts as a 'buffer' to stress, reducing negative health outcomes (Cohen & Wills, 1985). Stress is viewed as a preexisting condition that social support can mitigate the effects of in this theory. Group prenatal care offers a social support system for pregnant women who are at-risk of experiencing high levels of stress due to disparities in social determinants of health.

The second theoretical framework for this project is the community empowerment theory. The community empowerment theory advocates for engaging communities to strengthen its members (Glanz et al., 2015). Community empowerment works by educating and providing communities with tools needed for success. This theory places a heavy focus on communities being able to determine what is best for them, and to enact it themselves by increasing education and awareness of community issues. It takes into consideration that communities have specific needs that they are the most aware of, and thus are in the best position to understand their community needs. The theory calls for greater community involvement in issues of health equity, and a grassroots focus on community involvement. This project is inspired by the community engagement theory in that it works with FQHCs to increase communal advocacy, support, and education. Staff can be empowered to provide better care for the good of their community with the help of the toolkit.

Section III: Methods

Context

The Native American Health Center is a Federally Qualified Health Center in Oakland, California. The clinic created a group prenatal care visit six years ago, but has never had a written plan or layout of the visit. At the group care visit, called a 'Mommy Shower' at NAHC, invite 10-15 pregnant women to attend a group visit and party which includes lunch, games, opportunities for group sharing, and educational opportunities. The games and sharing opportunities allow the patients to share their hopes for their babies, and to discuss fears or hesitations towards becoming mothers. Educational opportunities usually involve inviting community partners to speak to the patients about nutrition, mental health, exercise, etc. The showers create a space for the patients to feel celebrated and appreciated by having decorations, lunch, games, and prizes.

The group showers provided at this clinic have not utilized evidence-based guidelines for group care, and the model for these showers was created by a temporary registered nurse at NAHC. Staff opinions regarding the showers was completed during a gap analysis at NAHC. Previous shower evaluations by the patients were also evaluated. One concern from staff members of NAHC, regarding their current showers, was that they do not have a written shower plan to make it sustainable for future staff to conduct. Prior to implementing the showers, NAHC previously utilized only individual prenatal care appointments, and had high no-show rates of patients. This highlighted gaps in the care needed for their patients – which includes longer appointment times to address psychosocial needs as well as some flexibility in the timing of appointments. Providers and nurses at NAHC mentioned the complexity of some of the pregnant patients and their psychosocial needs, and that a short appointment is barely adequate to address the patient's physical needs, and not enough time to address psychosocial needs. Pregnant

patients, in their evaluations of previous showers at NAHC, had said that the showers made them feel at home at NAHC and feel more supported.

The key stakeholders in this project are the staff at the Native American Health Center, the pregnant patients who can participate in group care, their families and infants, and community partners. As healthcare providers, if there are reasonable and feasible changes to evolve prenatal care that can reduce stress and increase adherence to care, then those changes should be implemented. Staff, as the implementers of group prenatal care, require education as to best group prenatal care practices as well as an interest in providing those services. Patients also need to take an active role in this issue - especially by attending prenatal care appointments and following recommendations from their prenatal provider to the best of their ability. Families of the patients would ideally be involved in the patient's prenatal care, and supportive during the patient's pregnancy to obtain the best outcomes possible. Community partners can also be a part of group prenatal care - such as the public health department and Women Infants and Children (WIC) program which offers breastfeeding support as well as groceries and nutritional education for low-income women who have children or who are pregnant.

Intervention

The primary intervention of this project is to provide NAHC with a toolkit for how to provide best-practice prenatal care. The toolkit includes evidence as to how group prenatal care is beneficial and how it increases communal support for pregnant women. The toolkit was designed with NAHC's patient population in mind, many of whom are low-income and members of minority groups. It also includes information on speakers in the area (Public Health Department, WIC, etc.) who could present informational sessions for the women, as well as education and games.

Based on the social support theory, the toolkit will include information on the importance of community for pregnant women. High levels of social support in pregnancy, outside of having a partner, have been tied to lower rates of fear about giving birth and higher levels of psychological well-being (Yuksel et al., 2019). High levels of social support also led to increased confidence in being able to breastfeed, and a greater sense of confidence in caring for a newborn. Social support is provided and created during group shower events at NAHC.

Showers include a certain amount of time for games and bonding activities, and community building activities, all of which will be listed in the toolkit. One example of a community building activity that NAHC has used in the past is the 'Wishes for Baby' activity in which the pregnant women are each given a paper that lists various 'wishes' – such as: 'I hope you learn….', 'I hope you love….' etc. The women are then invited to share their dreams and hopes for their newborn with the group. Another session in the toolkit creates time for women, especially first-time mothers, to state their greatest fear and excitement regarding being a new mom.

During one of the showers four years ago, a first-time mom who had grown up in the foster care system without a mother figure said that she was afraid to be a mom because she never had a model for how to be one. Other women in the group were given space to respond and encourage her that her instinct, and communal support, would guide her. These activities are designed to create space for women of similar backgrounds and who face similar challenges to experience a sense of solidarity and community, and increase social support. Per the social support stress buffering theory, this sense of support then allows them to better manage stress in their lives and pregnancy.

Educating staff as to the importance of social support for pregnant patients, and therefore empowering staff to provide the best care possible for their patients, models the community empowerment theory. The community empowerment theory reinforces the importance of community engagement in recognizing the needs that individual communities have. NAHC's patient population in East Oakland, California has different communal needs than wealthy, primarily Caucasian neighborhoods or cities that might do well with individual prenatal care. Individual prenatal care does not offer an opportunity for women of similar backgrounds to be together and encourage one another, whereas group prenatal care allows women a community of support. Providing group prenatal care, and a space for women to have solidarity with one another amidst a variety of disparities, creates community empowerment. The toolkit will begin with a brief overview of literature that highlights the benefits of group prenatal care in an effort to encourage and educate staff. The toolkit is also inspired by the community empowerment theory in that it will contain a list of resources in Oakland for pregnant women. This includes the public health department (which offers prenatal resources) and the Women, Infants and Children program which offers grocery vouchers and nutritional information.

Gap Analysis

Community health clinics, including federally qualified health centers (FQHCs), in the United States provide care to many underserved patients. Community health plays an important role in society by providing culturally conscious care, responding to community needs in some of the most vulnerable communities, and acting as a 'safety net' for those populations (Galarneau, 2016). FQHCs were created to reduce the gap in care provided to underserved communities in the United States (Xue et al., 2018). To receive the title of FQHC, a clinic must provide care to an underserved location or population (Xue et al., 2018). These populations are

defined by the Health Resources and Services Administration (HRSA), and represent areas with high amounts of low-income residents, rural areas without adequate access to care, and populations that have traditionally experienced high rates of health disparities (CDC, 2018). These clinics receive federal funding, as well as funding from other sources, and they are the largest provider of care to underserved populations (Xue et al., 2018).

Community health clinics are known for having high appointment no-show rates (Mohammadi et al., 2018). The average missed appointment rate in the United States is about 27% (Mohammadi et al., 2018). In addition, patients most at risk of having poor health outcomes are at higher risk of missing their appointments (Mohammadi et al., 2018). Missed prenatal care appointments in particular can be highly detrimental to women and their pregnancies, and contributes to the significant disparities in prenatal care outcomes that some minority women (many of whom receive care at FQHCs) experience.

The Mommy Shower offers an opportunity to engage women with prenatal care in a unique way, and potentially better retain women in prenatal care. One concern that NAHC staff mentioned when discussing clinic needs is that the 'no-show' appointment rate is higher than optimal. Missed appointments can be detrimental for patients, for clinic flow, as well as clinic finances. One gap found in prenatal care at NAHC, with the opportunity for improvement, is better retaining women in prenatal care and decreasing the no-show rate. The Mommy Shower, as a celebratory, community building event, could be an event that draws women into care and helps retain them in NAHC's services. Group prenatal care has been found to increase satisfaction in care (Tubay et al., 2019). By increasing social support, group prenatal care offers a sense of community and support for women in high stress situations (Tubay et al., 2019). Reducing stress and creating care that encourages women to attend their appointments leads to

better pregnancy outcomes, higher levels of care satisfaction, and increased attendance rates to prenatal care appointments.

In discussing the current Mommy Shower with NAHC staff, it was found that staff struggle putting the Mommy Shower on each year because of staff turnover resulting in new nurses planning and executing the shower each year. NAHC receives a temporary volunteer nurse who works for one year and plans at least two Mommy Showers during the year, but that nurse is left with no framework for how to run the Mommy Shower or teach others how to do so. Additionally, the Covid-19 pandemic has created questions as to how the Mommy Shower can be safely coordinated and executed without spreading the virus. The Mommy Shower has been on a hiatus during the pandemic, and the toolkit provided to NAHC contains suggestions for how to safely operate the Mommy Shower once staff, management, and patients feel comfortable with restarting it.

Gantt Chart

A GANTT chart provided in Appendix D displays the timeline that was used in implementing the project. Summer of 2021 is ultimately when the project was implemented and evaluated by staff at NAHC. Any changes needed in the toolkit will be able to be made and implemented in the summer of 2021, after initial implementation in early summer.

Work Breakdown Structure

The Work Breakdown Structure (Appendix E) revolves around determining the best possible practices for group prenatal care and how to adapt those to NAHC's needs. The toolkit was created by this author in collaboration with NAHC staff. It was shared with NAHC staff and critiqued by them in order to obtain feedback for a final copy of the toolkit.

Responsibility/Communication Matrix

The communication matrix (Appendix G) depicts communication between this author, contacts at NAHC, and University of San Francisco faculty. The current Covid-19 pandemic made communication challenging at times, but ultimately NAHC staff and this author have been able to stay in close contact. While NAHC was providing remote telehealth visits during the pandemic, they now have all clinical staff back at the clinic, which has also allowed for strong communication between staff and this author.

SWOT Analysis

The SWOT analysis (Appendix F) identifies one of NAHC's greatest strengths being its community focus. NAHC is deeply rooted in the Bay Area community, and invested in caring for some of its most vulnerable patients. Staff are longtime members of the community, many coming from similar backgrounds as the patients. It's a diverse community that has first-hand knowledge of the challenges the community faces. One of those challenges, or threats, is funding. As an FQHC, NAHC struggles with budgeting. An additional challenge is the fact that the disparities that the community faces lead to challenges in working with patients who have a history of trauma. Patients at times are difficult to engage or work with, largely due to mental health challenges, stress levels, or the fact that reliable transportation or phones or time off of work can be difficult to obtain for patients.

Budget and Financial Analysis

The budgeting of this project is straightforward and found in Appendix H. NAHC currently utilizes showers, and provides food and games, etc. in those showers, and as such this project will not add and deficits to the current budget. Ideally, if the shower increases revenue by bringing more women into the shower and into prenatal care, then NAHC's net gain from the

shower will be greater than it is now. In addition, having a toolkit that allows for staff to easily follow a guide will decrease the time spent planning future showers, allowing for greater staff productivity in the future. Community and staff donations have also been utilized in providing prizes and gifts for the patients that attend the showers.

Outcome Measures

The variables measured in this project are staff interest in providing group prenatal care, staff knowledge of best practices for group prenatal care, and staff knowledge of why group prenatal care is beneficial. These variables were measured by providing a survey to staff before and after receiving the toolkit and measuring the difference in interest and knowledge levels. Appendix I and J contains the evaluation tool, as well as goals for changing staff knowledge and confidence, created by this author for this project.

Data Collection Tool

Staff involved in the Mommy Shower were emailed a link to a Qualtrics pre-survey, the toolkit as a PDF, and a post-survey. These surveys were anonymous and allowed staff to provide feedback on the toolkit and any desired changes. Results of the survey were then analyzed to see if the project met the goal of increasing staff interest and knowledge in group prenatal care. Surveys can be found in appendix I and J.

Analysis

Surveys were given to staff members at NAHC over Qualtrics. The pre-survey was given to staff to fill out before the toolkit presentation, and the post-survey was given to staff for after the toolkit presentation. Questions were both qualitative and quantitative. Quantitative questions asked staff to rate their knowledge of group prenatal care practices as well as comfort levels in providing group prenatal care. An expected 25% increase in confidence and interest in providing

group prenatal care would be expected after the toolkit presentation. Qualitative questions

provided staff with an opportunity to list specific hesitations or questions towards providing

group prenatal care, as well as what excites them about group prenatal care. Qualitative

information will be grouped into themes and used to improve the toolkit if staff list deficiencies

in it.

The independent variable in this project is the group prenatal care plan, and the

dependent variable is level of group prenatal care knowledge. Pre and post survey data would be

compared using a two-sample dependent t-test to determine if there is a difference in the

knowledge levels between the group before and after receiving the group prenatal plan. The

hypothesis tested is: 'a group prenatal care plan increases staff interest and comfort in providing

group prenatal care at FQHCs by 25%'.

Ethical Considerations

This project will have no direct patient contact, thereby limiting risk of HIPPA violations.

It meets duties set forth by the American Nurses Association Code of Ethics which calls for

nurses to work to reduce health disparities among vulnerable populations in provision 8 (2015).

Mommy Showers empower pregnant patients in their care by providing them with an

opportunity to reflect on their pregnancies and the prenatal care they receive, thereby allowing

for autonomy in their care (American Nurses Association, 2015). This project also supports the

principle of distributive justice by attempting to provide support to an under resourced

population of patients (American Nurses Association, 2015). By providing staff with resources to

advocate for their patients by providing best-practice prenatal care, this project also

accomplishes the ethical principle of fidelity (American Nurses Association, 2015). The focus of

this project is to aid staff in providing high quality prenatal care that creates community and

support among pregnant women, thereby working for beneficence, and nonmaleficence, by streamlining group care so that no harm is done to patients (American Nurses Association, 2015).

The project also advocates for holistic care of pregnant women – which meets the Jesuit value of '*cura personalis'*, or care for the whole person (University of San Francisco, no date). Jesuits are also passionate about social justice, which this project embraces, by attempting to reduce health disparities and provide care for a vulnerable population (Vivanco, 2018). This project also creates space for staff to reflect on their care, and for patients to reflect on their pregnancies, which is an important piece of contemplation and reflection that the Jesuits encourage (Vivanco, 2018).

Section IV: Results

Sixty percent of staff who took the pre-toolkit survey stated that they knew 'barely anything' about the benefits of group prenatal care before going through the toolkit. In the post-toolkit survey, 100% of staff reported that they knew a great deal about group prenatal care and its benefits. 100% of staff also reported feeling more interested in providing group prenatal care in the post-toolkit survey, up from 'neutral' as the primary response. When asked what a hesitation was towards providing group prenatal care, one staff member reported the fear of not being sufficient enough in a language to host the Mommy Shower (for example the Spanish-speaking event). This could be mitigated by utilizing translator phones if needed, and NAHC also has bilingual Spanish speaking staff that could take part in the Mommy Shower. In the post-toolkit survey, one staff member asked if it was possible to shadow a Mommy Shower before implementing it. A sample Mommy Shower would be difficult to enact, but the toolkit offers a sample plan that will ideally be easy to follow and is user friendly.

In the post-toolkit survey, staff reported being most excited about creating community among pregnant women. 100% of staff reported feeling more familiar with Oakland resources for pregnant women, up from only 40% of staff feeling 'somewhat confident' in Oakland community resources for pregnant women. Half of the staff reported feeling not confident in providing group prenatal care, while the other 50% reported feeling somewhat confident in the pre-toolkit survey. In the post-toolkit survey, 50% reported feeling somewhat confident in providing group prenatal care, with the other 50% feeling very confident in providing group prenatal care.

Section V: Discussion

Summary

Staff reported at least a 25% increase in confidence and interest in providing group prenatal care. They also reported at least a 25% increase in knowledge around services offered to pregnant patients in Oakland, and in the ability to provide group prenatal care. With these results, this project met the PICOT question of raising interest and confidence in providing group prenatal care to staff by at least 25%. Staff were also able to offer suggestions in the survey as to how to improve the toolkit, which were taken into consideration before providing a final copy of the toolkit to staff.

Interpretation

Based on the post-survey results, staff are more well-equipped and prepared to provide group prenatal care. Staff also reported feeling more empowered and impassioned to provide group prenatal care, recognizing its benefits for both patient-to-patient relationships as well as patient-to-staff relationships. Providing group prenatal care will help staff strengthen relationships with patients, making them feel welcomed and celebrated and encouraging them to

attend their prenatal care visits. Increasing staff interest in group prenatal care also helps staff be the best providers that they can be, and allows staff to recognize the vulnerability of patients at FQHCs and their need for sensitive, holistic care.

Limitations

A major consideration in this project is the Sars-Cov-2 virus pandemic. Group care practices will likely not return until after a vaccine has been widely distributed, or a large enough base of herd immunity has been reached. The toolkit itself will still be applicable and does not require group visits to occur during the pandemic. An additional mitigation of this is to find a way to offer the group visits over zoom, or find a way to provide extra support to pregnant women by means of telehealth, etc. With Covid-19 vaccines becoming more easily accessible, group prenatal care has the potential to resume within the coming months.

Conclusions

The purpose of the toolkit is to ensure a sustainable, easy to implement guide to utilizing group care. At NAHC, the showers have previously been planned and implanted by temporary registered nurses who then pass the project on to the new temporary registered nurse, which creates a huge challenge for the incoming nurse. The toolkit simplifies that process by ensuring that all staff are involved, and that a guide is written and provided to any incoming staff. Educating staff on the accessibility of group care, as well as the benefits to both staff and to patient care, allows for increased participation and engagement in the Mommy Shower by staff.

This project will help support at-risk women in their pregnancies. It works to provide support and a sense of community for women who already experience disparities in other aspects of their lives. By educating and empowering staff, the toolkit emboldens the community to provide the best care possible for the pregnant patients at NAHC.

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Section VII: Appendices

Appendix A: Statement of Determination

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

Doctor of Nursing Practice

Statement of Non-Research Determination (SOD) Form

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

General Information

Last Name:	Shrader	**First Name:**	Kathleen
CWID Number:	20494722	**Semester/Year:**	Summer 2021
Course Name & Number:	DNP Project N789		
Chairperson Name:	Dr. Nancy Selix, Dr. Jo Loomis	**Advisor Name:**	Dr. Nancy Selix, formerly Dr. Wanda Borges

Project Description

1. ***Title of Project***

   Utilizing Group Prenatal Care to Support Underserved Pregnant Women

2. ***Brief Description of Project***

Clearly state the purpose of the project and the problem statement in 250 words or less.

The purpose of this project is to provide social support to low-income minority women who are pregnant. The project takes into consideration that minority women experience high rates of disparities in the United States. These disparities lead to high rates of adverse outcomes in terms of birth outcomes. The project attempts to utilize group prenatal care to provide social support and a sense of community and solidarity to pregnant minority women at a Federally Qualified Health Center (FQHC). The specific FQHC where implementation of the project will occur currently utilizes showers as a group prenatal visit for the women. This project would create an evidence-based guide for how to best provide group care to low-income minority women that FHQCs could utilize during their showers or other group care events.

3. **AIM Statement: What are you trying to accomplish?**
- What do you hope to accomplish with this project? Aims should be SMART, specific, clear, well-defined, and at a minimum describe the target population, the desired improvement, and the targeted timeframe.
- To improve (your process) from (baseline)% to (target)%, by (timeframe), among (your specific population)

Complete this statement:

To increase _knowledge of best practice group prenatal care among FQHC staff

from: _a 50% confidence level in knowledge of best prenatal care practices__

to: _a 75% confidence level in knowledge of best prenatal care practices

by: __August 2021_____

in: _Federally Qualified Health Center employees.

4 Brief Description of Intervention (150 words).

My intervention is to provide a plan/guide to healthcare providers at the Native American Health Center in Oakland, CA as to how to provide best practice group prenatal care in their Mommy Showers. The guide would be filled with evidence-based recommendations for group prenatal care, as well as special considerations for working with low-income, minority populations. To encourage staff engagement and enthusiasm in these events, evidence as to why group care benefits minority women will also be provided in the guide.

- Who is the focus of the intervention?

> The project will be implemented at the Native American Health Center (NAHC), a Federally Qualified Health Center (FQHC) in Oakland, CA. NAHC has a diverse array of patients, many of whom are from low socioeconomic status communities. NAHC has prenatal and family practice departments. Their prenatal department offers their pregnant patients a 'Mommy Shower' to provide the women with prenatal and postnatal education, as well as an opportunity to celebrate their pregnancies. As a former registered nurse with NAHC, I worked on their group shower project, and those connections have allowed me to plan for this project to be implemented at NAHC. I do not have a letter from NAHC with project approval at the moment, that was put on hold due to the coronavirus crisis (the clinic is now only offering telephone visits and essential in person visits, and is not allowing any non-essential staff into the clinic).
>
> The focus of my intervention is staff. When the group showers at NAHC first started, they were essentially a party thrown together with a few speakers. With ample evidence now showing that group prenatal care benefits at risk women, the showers are a great way to provide some form of group care. The objective of the project is to provide a guide for staff as to how to implement best practice group prenatal care practices.
>
> The primary stakeholders in this are the staff of NAHC. As a former employee, and current (pre-coronavirus, and hopefully returning in the next few months) NP student at NAHC, I have close relationships with the staff and head of the prenatal department – making communication and collaboration fairly easy. I will provide updates to the staff when I am able to go back.

- How will you inform stakeholders/participants about the project and the intervention?

5. Outcome measurements: How will you know that a change is an improvement?

- Measurement over time is essential to QI. Measures can be outcome, process, or balancing measures. Baseline or benchmark data are needed to show improvement.
- Align your measure with your problem statement and aim.
- Try to define your measure as a numerator/denominator.
  - What is the reliability and validity of the measure? Provide any tools that you will use as appendices.
  - Describe how you will protect participant confidentiality.

Staff of the Native American Health Center who run the 'Mommy Shower' will be given a survey to evaluate their knowledge of best group prenatal care practices, and their confidence in using those in practice. This survey would allow staff to rate their knowledge of group prenatal care practices, as well as their confidence in how to utilize those standards in their own practice. This baseline data would then be compared to a survey given to the team after they were presented the plan for group care visits. The second survey would ask similar questions to the first to compare if the knowledge and confidence in how to use best practice group care visits had improved by 25%. These surveys would be confidential.

The independent variable in this project is the group prenatal care plan, and the dependent variable is level of group prenatal care knowledge. I would likely use the two-sample dependent t-test to determine if there is a difference in the knowledge levels between the group before and after receiving the group prenatal plan. The hypothesis that I would be testing is 'a group prenatal care plan increases staff knowledge of and confidence in putting evidence-based group standards into practice'. The null hypothesis is that there is no relationship between reading the care plan and knowledge levels of staff. I'd use a significance level of .05, and if the data was statistically significant, then the group prenatal care plan increased staff knowledge. To

DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist*
The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

Using Group Prenatal Care to Improve Care Outcomes in Pregnant Minority Women

Mark an "X" under "Yes" or "No" for each of the following statements:	Yes	No
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and **is a part of usual care**. <u>All</u> participants will receive standard of care.	X	
The project is **not** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does **not** follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does **not** develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does **not** seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has **no** funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., **not** a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: *"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."*	X	

<u>**Answer Key**</u>:
- If the answer to <u>all</u> of these items is "Yes", the project can be considered an evidence-based activity that does <u>not</u> meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files.

- If the answer to <u>any</u> of these questions is "No", you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: http://answers.hhs.gov/ohrp/categories/1569

UNIVERSITY OF SAN FRANCISCO | **School of Nursing and Health Professions**

DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist Outcome
The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

Utilizing Group Prenatal Care to Support Underserved Pregnant Women

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). **Student may proceed with implementation.**

☐ This project involves research with human subjects and **must be submitted for IRB approval before project activity can commence.**

Comments:

Student Last Name:	Shrader	**Student First Name:**	Kathleen
CWID Number:	20494722	**Semester/ Year:**	Summer 2021
Student Signature:		**Date:**	June 20th, 2021

**Chairperson
Name:**

**Chairperson
Signature:**   **Date:**

**DNP SOD Review
Committee
Member Name:**

**DNP SOD Review
Committee
Member
Signature:**   **Date:**

Appendix B: Letter of Support

'Dear Kathleen,

I am very excited to have you implement your DNP project at the Native American Health

Center. I give you full permission to work with me on your project 'Utilizing Group Prenatal

Care to Support Underserved Pregnant Women'. You have my full support. Please include this

letter in your prospectus and final DNP project paper.

-Dr. Christopher Balkissoon, DNP, FNP'

Appendix C: Evidence Evaluation Table

Citation	Purpose of Study	Conceptual Framework	Design/ Method	Sample/ Setting	Variables Studied and Their Definitions	Measurement	Data Analysis	Findings	Appraisal Level
Liu, Chau, Jostad-Laswell, Duncan, 2016.	To study minority women's response to and appreciation of group prenatal care	None	Mixed Methods Cohort Study	34 minority, low-income women in San Francisco	DV: Group prenatal care (model used here: CenteringPregnancy) perceptions IV: Minority women	Postpartum assessment interviews of women's birth and pregnancy experiences using group care	Qualitative analysis, in addition to some quantitative responses of women rating their satisfaction with group care	Group care led to higher satisfaction with providers, reduction of stress, and women felt more educated on their pregnancy	Level III High Quality

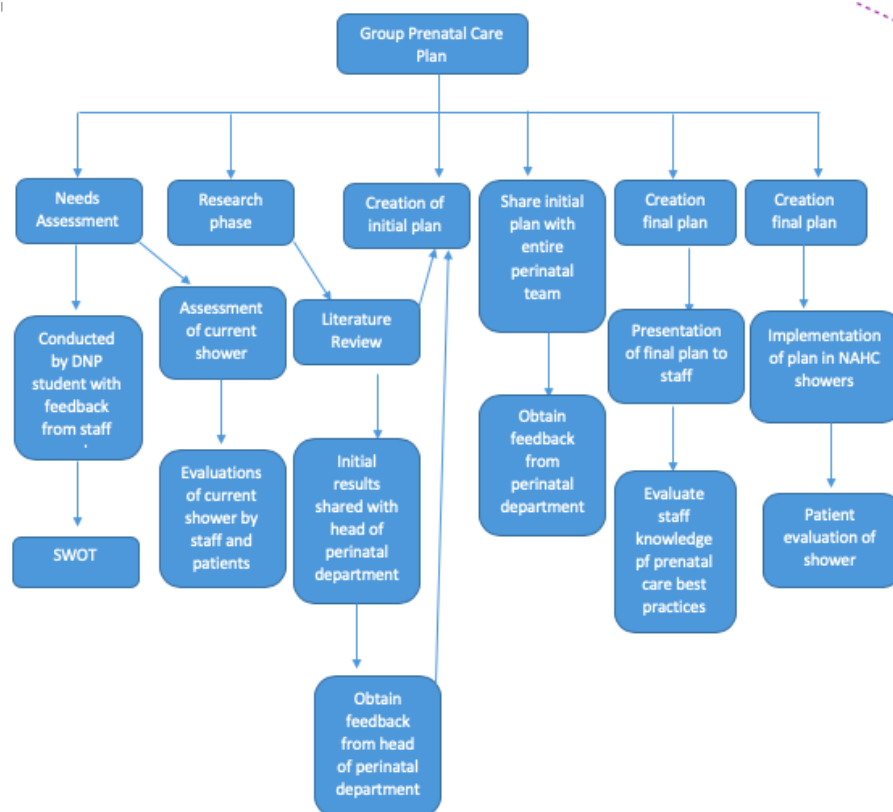| Author/Year	Purpose	Theory/Framework	Design	Sample	Variables	Measurement	Data Analysis	Findings	Level/Quality
Edmonds, Mogul, & Shea, 2015.	To study African American women's perceptions of their prenatal care, as well as factors that influence their care adherence.	Community Based Participatory Research	Qualitative cohort study	22 low-income African American women from one Philadelphia outpatient prenatal care center.	DV: Perceptions of prenatal care IV: Low-income (qualify for Medicaid), African American women	Measured perceptions of prenatal care for African American women, in addition to their perceived barriers to care.	Focus groups that compiled the barriers to care for the women, in addition to their opinions on care.	14/22 reported a bad relationship with their provider, 6/22 stated their provider had a lack of compassion/care for them. Overall, they felt that they lacked support and craved more communal relationships and support.	Level III High Quality
Alhusen, Bower, Epstein, Sharps, 2016.	To study the relationship between racism and adverse birth outcomes	Allostatic load and life course theory	Intregative review, meta analysis.	4 Qualitative studies, 11 quantitative studies – all that studied ethnic or racial minority groups' birth outcomes.	DV: Adverse birth outcomes IV: Race (defined here based on what women could select as their race, e.g. black or white or Latina)	Exploring how systematic or individual racism leads to adverse birth outcomes. Also used PRAMS data collection.	Synthesis of qualitative and quantitative studies to find measures of racism's effect on prenatal care and outcomes	There's a significant relationship between racial discrimination and low birth weight, preterm birth, and small for gestational age babies. Racial discrimination is also a barrier to prenatal care entry/access, employment opportunities, neighborhood characteristics, and incarceration rates. Preterm birth partially due to allostatic stress factors. Minority women face greater racism and stressors, equaling poor birth outcomes.	Level III High Quality

Appendix D: GANTT

Group Prenatal Care

Goal/Marker:	2020												2021											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
N794 - experience shower at NAHC		Spring																						
Pick project chair					Summer																			
N749A - Manuscript development								Fall																
N749B - Proscpectus development					Summer																			
Put group shower toolkit into practice																	Summer							
Obtain shower evaluations and work with NAHC to create improvements																	Summer							

Appendix E: Work Breakdown Structure

Appendix F: SWOT Analysis

Strengths:
1. Engagement in the community
2. Staff that is part of the community and understands community needs
3. Strong relationships with patients
4. Small perinatal staff department
5. NAHC has relationships with other organizations in Oakland as well as the Public Health Department
6. Head of perinatal department has worked there for over thirty years.

Weaknesses:
1. Budgeting challenges/the need to rely on donations from staff and the community
2. At times difficult patient population to work with/engage

Opportunities:
1. Better patient outcomes and better patient satisfaction in care
2. Stronger engagement with the public health department and other community resources
3. Greater sense of community in the clinic – inviting more patients etc.

Threats:
1. Covid-19
2. Potentially losing sources of funding based on unforeseen budget changes in the county

Appendix G: Communication Matrix

	Purpose:	Medium:	Frequency:	Audience:
Attend Mommy Showers	To get baseline information on what the Mommy Showers entail	In person	Two showers in the Spring of 2020	Patients, staff, and I at NAHC
Advisor Meetings	To check in with USF DNP advisor regarding project progression	Phone	Every two weeks	Advisor and myself
Meetings with NAHC staff	To determine needs and desires for Mommy Shower	In person	Initial meetings in early spring 2020	Head of perinatal department (NP), RN at NAHC, MAs at NAHC, and myself
Project updates and reports	To keep NAHC as well as my advisor updated on progress	Email	Every semester	Head of perinatal department, USF DNP advisor, and myself

Appendix H: Budget

Item:	Year 1:	Year 2:
Annual Nurse Practitioner Salary at an FQHC:	($75,000)	($75,000)
Annual Medical Assistant Salary at an FQHC:	($40,000)	($40,000)
Mommy Shower refreshments and games:	($800)	($800)
Annual Total Benefits (8% of salary):	($92,000)	($92,000)
Total Expenses:	($207,800)	($207,800)
Mommy Shower Encounter Revenue: ($400/encounter with 15 patients, and 4 Mommy Showers):	$24,000	$24,000
Regularly scheduled prenatal care encounters: (100 pregnant patients with 10 visits each, and $400 per encounter):	$400,000	$400,000
Total Income:	$424,000	$424,000
Total Net Revenue:	$216,200	$216,200

Appendix I : Staff Evaluation Tool – Pre-Toolkit Survey

How much do you feel you know about the benefits of group prenatal care?

○ A great deal (3)

○ A moderate amount (2)

○ Barely anything (1)

How confident do you feel about providing group prenatal care?

○ Very confident (3)

○ Somewhat confident (2)

○ Not confident at all (1)

How familiar are you with community resources for pregnant patients in the Bay Area, California?

○ Very familiar (3)

○ Slightly familiar (2)

○ Not familiar at all (1)

How interested are you in providing group prenatal care?

○ Very interested (3)

○ Neutral (2)

○ Not interested (1)

Do you have any hesitations towards providing prenatal care? If so, what are they?

Do you have any suggestions for how to reduce health disparities in pregnant minority women?

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Appendix J: Staff Evaluation Tool – Post-Toolkit Survey

After reading the toolkit, are you more interested in providing group prenatal care?

○ Yes - I am more interested (3)

○ Neutral (2)

○ No - I am not more interested (1)

What makes you most excited about group prenatal care?

[ ]

Do you have any suggestions for how to improve the toolkit?

[ ]

After reading the toolkit, how much do you feel you know about the benefits of group prenatal care?

○ A great deal (3)

○ A moderate amount (2)

○ Barely anything (1)

After reading the toolkit, do you feel more confident in providing group prenatal care?

○ Yes, I feel very confident (3)

○ I feel somewhat confident (2)

○ No, I am not confident (1)

After reading the toolkit, do you feel more familiar with community resources for pregnant patients in the Bay Area, California?

○ Yes, I feel very familiar (3)

○ Slightly familiar (2)

○ No, I am not familiar at all (1)

Appendix K: Desired Changes

Desired Change:	Implementation:
-Increased communal involvement in group prenatal care	-Including community resources in the toolkit -Inviting speakers from the community to speak at showers -Advertising showers and prenatal care in the neighborhood to draw in more patients
-Increased staff interest in group prenatal care	-Provide education to staff on the benefits of group prenatal care with an emphasis on how communal support reduces stress -Provide evidence-based research that shows the benefits of group prenatal care and its ability to reduce stress in pregnant women -Provide information in the toolkit regarding minority women's experiences of individual prenatal care and the barriers to accessing it, and how group prenatal care answers some of those barriers
-Increased staff knowledge of group prenatal care	-Provide best practice guide for group prenatal care in the toolkit -Present findings to staff -Allow staff to critique group care toolkit to ensure it meets NAHC's needs