Improving Postpartum Follow-Up Through Enhanced Prenatal Education and Concurrent Scheduling with a One-Month Well Baby Visit

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Abstract

Stress of transitioning to parenthood, hormonal fluctuations as well as physical changes, and complications during postpartum could be addressed at the routine postpartum follow-up visit to avoid long-term adverse effects. While emphasis on preconception and prenatal care has increased nationwide, attendance at this important visit is on the decline. The purpose of this project was to investigate how enhanced prenatal education and concurrent scheduling of a well-baby visit at four weeks, instead of the traditional six weeks, could increase adherence to recommended follow-up care at a federally qualified health clinic in the Southwestern United States. The Theory of Reasoned Action guided the intervention while Rosswurum and Larrabee's evidence-based practice model was used to develop the project. The pre-existing weekly prenatal education program was enhanced with information regarding the importance of a four-week postpartum follow-up visit. Front desk schedulers were educated to offer same day appointments for the postpartum care visit and one-month well-baby appointment. Data collection took place for three months after implementation of the project and was compared to adherence rates during the three months prior to the intervention. Providers and scheduling staff members participated in a short post-intervention interview. Prenatal education and convenience of concurrent scheduling increased the percentage of adherence to follow-up visits over a three-month period. Providers and clinic staff recommend continuing with the process changes to increase patient's access to family centered care.

Keywords: postpartum, postnatal, pregnancy, well-baby, concurrent appointments, contraception, depression, pediatrics

Adherence is key: Improving postpartum follow-up through enhanced prenatal education and concurrent scheduling with a one-month well baby visit

Introduction

Background and Significance

The postpartum or postnatal period is defined as the time period from one hour after birth to eight weeks following birth. During this time, new mothers are experiencing many physical and emotional changes, such as potential complications from childbirth for mothers and infants. Many of these concerns can be addressed during an appropriately timed postpartum care follow-up appointment; however, current research reveals that many women do not attend a provider visit during the postnatal period. The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) encourage women to return to their prenatal provider approximately four to six weeks after childbirth for a routine postpartum care (PPC) visit (ACOG, 2016). The visit should incorporate resolution of the pregnancy, delivery and postpartum period, evaluating emotional status, educating about and initiating contraception methods, introducing well woman care and health promotion, and performing a physical exam when necessary (ACOG, 2016, Haran, van Driel, Mitchell, & Brodribb, 2014; Thiel de Bocanegra, Chang, Menz, Howell & Darney, 2013; Suplee, Gardner, & Borucki, 2014). Low rates of adherence to postpartum follow-up appointments have generated significant concern from providers, as well as from state and national organizations. Healthcare Effectiveness Data and Information Set (HEDIS) includes a measure to assess the number of women who attend a postpartum visit between 21-56 days after childbirth (National Committee for Quality Assurance [NCQA], 2015). Centers for Medicare & Medicaid Service (CMS) has begun looking at care for

women after childbirth and established two Maternal and Infant Health Quality goals, which align with Healthy People 2020 objectives (CMS, 2015; Office of Disease Prevention and Health Promotion, 2017). One proposes an increase by 10% in the rate of postpartum visits by women utilizing Medicaid in at least 20 states over a three-year period (CMS, 2015). In 2014, only 61% of women on Medicaid and only 68-76% of women with commercial insurance attended a postpartum visit between 21 and 56 days after childbirth (NCQA, 2015).

Evidence suggests that prenatal education by the provider positively influences a woman's knowledge, preparation, and adherence to recommended postpartum care. During interviews with postpartum women many confirmed that they obtained the majority of their education and advisement from their prenatal provider and felt prepared for pregnancy and childbirth throughout the many prenatal visits. (Aber, Weiss, & Fawcett, 2013; Declercq, Sakala, Corry, Applebaum & Herrlich, 2014; DiBari, Yu, Chao, & Lu, 2014; Martin, Horowitz, Balbierz, & Howell, 2014). Moreover, frequent prenatal clinic visits were determined to be a prime opportunity for discussion about what to expect in the postpartum period, offering opportunity for providers to discuss the importance of the follow-up visit and reasons to be seen earlier should complications arise (Martin et al., 2014). Lack of access to contraception in the immediate postpartum period has been linked increased unplanned and short interval (less than 18 months between births), both of which can have adverse effects for both mothers and infants (Theil de Bocanegra et al., 2013).

Many women that do not attend a PPC appointment continue to seek care for their newborn or other children, in a sense putting the needs of the children above their own healthcare needs (DiBari et al., 2014; Martin et al, 2014). In an effort to increase access to care, attempts have been made to offer women screening for depression and health behaviors as well

as contraception during a child's appointment with their pediatric provider (Henderson et al., 2016; Liberto, 2012; Walker, Im, & Tyler, 2013). While women reported more interactions with pediatric providers during the postpartum period and less transportation barriers with joint visits, they preferred to discuss such matters with their prenatal or obstetric provider (Henderson et al., 2016; Liberto, 2012; Walker, Im, & Tyler, 2013). Co-location of care when available was seen as a possibility to provide increase access to care for women as well as infants (Liberto, 2012).

Purpose Statement

The purpose of this project is to increase adherence rates to the PPC visit by enhancing prenatal education and scheduling the PPC visit four weeks after childbirth along with the four-week well-baby visit. By increasing adherence to the postpartum visit, providers can review the course of the pregnancy and shift focus to well-woman care with the overarching goal of impacting the continuing health of the patient. The following PICOT question was used to evaluate the intervention: "How does enhanced prenatal education and co-scheduling the postpartum and four-week well-baby check compare with routine prenatal education and standard postpartum visit scheduling in completion of postpartum visits?"

Search Strategy

In order to address this question the following three databases were thoroughly searched: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Database, and PubMed. Searches were conducted using keywords and Boolean connectors: *postpartum, postnatal, pregnancy* AND *appointment adherence; postpartum, postnatal, pregnancy* AND *appointment barriers; postpartum, pregnancy* AND *contraception* AND *depression; appointment* AND *pediatric, well baby* AND *contraception* AND *postpartum* AND *depression*. The search was further refined to those in the English language published within the past five

years. An ancestry search was done on chosen articles to enhance the evidence.

Synthesis of Evidence

Ten studies were chosen for final inclusion with level of evidence (LOE) ranging from I-VI. The intention of this review was to determine the reasons for lack of adherence to the PPC visit; therefore, half of the studies chosen were qualitative in nature. Despite qualitative studies incorporating a lower level of evidence, they are necessary in determining the needs of the population. The four major themes that emerged were:

- Women believed that prenatal visits were an excellent time to begin postpartum education. Even after attending all recommended prenatal appointments and education they remained unprepared for the postpartum experience and unaware of the importance of follow-up.
- There was a disconnection from their providers in the six weeks before the follow-up visit and any issues or concerns they had were dealt with prior to the return visit timeframe.
- When they did seek care, they had more interactions with pediatric providers. When offered screening and discussions on symptoms and contraception options they preferred speaking with their obstetric provider.
- Barriers to mothers seeking care included transportation, lack of knowledge, and putting the needs of the baby above their own.

Therefore, it is clear from the evidence that this project's intervention, enhanced prenatal education and concurrent scheduling, will address the issue of women participating in this very important postpartum appointment.

Theoretical Framework

Fishbien and Ajzen's (1975) Theory of Reasoned Action (TRA) provided the theoretical framework for this project. The TRA is used to predict how individuals will behave based on their pre-existing attitudes and behavior intentions. An individual's basic motivation to perform an action is based on their attitudes and the influence of those they look to for guidance or the subjective norm. The new mother has been exposed to frequent cues during prenatal education about her health and the recommendations for future visits. This subjective norm or message from an authoritative source (prenatal education instructor) presented the PPC visit as something that is important and recommended by the caregiver and is an expected behavior. Concurrently scheduling the PPC visit with the well-baby visit enhances convenience and decreases barriers to care. This also demonstrates the caregiver's commitment to the importance of the PPC visit. The change in belief will lead to change in the behavior intention, therefore, a change in the behavior itself and will result in increasing adherence to the visit (Fishbien & Ajzen, 1975).

Evidence Based Practice Model

Rosswurm and Larrabee's (1999) Evidence Based Practice model was chosen as a guide for implementation of this project. This model describes the process of changing current practice to evidence-based practice through six steps. The steps include assess, link, synthesize, design, implement and evaluate, and integrate and maintain. In the initial step, an assessment was performed at the clinic. During this assessment, current practice was evaluated and lack of attendance to follow-up visits was noted to be a problem. Step two links the problem of lack of visit attendance to potential interventions including prenatal education and co-scheduling. Synthesis of the best evidence was performed through literature review. Research findings suggest that women do not attend a PPC because of transportation barriers, lack of knowledge,

and forgoing their personal needs. Increased information and communication could be useful in addressing these barriers. Step four included working with clinic staff to develop a change in prenatal education and scheduling to address convenience issues. Step five involved training the staff and providers and implementing the project with clinic support. Evaluation of the entirety of the project occurred during the three-month intervention timeframe as well as two weeks following its completion when staff and providers were interviewed. With reassuring results and positive feedback, step six will be attained, as the clinic staff was able to sustain the process change during the three months and into the future. This leaves the clinic with a sustainable practice change (Rosswurum & Larrabee, 1999).

Methods

Setting and Participants

The setting was a Federally Qualified Health Clinic (FQHC) in a large metropolitan area of the Southwest United States. The clinic has two site locations but currently only one site provides prenatal care. As a FQHC, the clinic provides family practice care to underinsured and self-pay patients. The population consists of primarily Hispanic, monolingual Spanish-speaking families. Women seeking pregnancy related care are entered into a prenatal program. This program includes: prenatal visits, a six-week postpartum visit, an initial newborn visit after discharge from hospital, and a 14-topic weekly prenatal education class taught and coordinated by a medical assistant (MA) with training in adult learning strategies and developmentally appropriate curriculum development for pregnant women. Participants in the project included on the MA in charge of the prenatal classes, as well as four providers who were family practice nurse practitioners and physicians that provided both women's health and child health care, and four front desk staff.

Intervention Design

The project received exempt approval from Arizona State University Institutional Review Board and approval from the clinic's Medical Director in December 2016. Participants agreed to enhance the prenatal education, changing the scheduling of the PPC, as well as a 15-20 minute post-intervention interview with the project manager. The project manager informed all clinic staff and providers of the project with a presentation at a monthly staff meeting and with individual meetings for those who were not able to attend the staff meeting. After assessing the prenatal education and scheduling process, the project manager and MA worked to develop a PowerPoint slide focused on the PPC visit, which was added to each week of education. In addition to informing patients about the benefits of PPC, the slide also announced the change to a four-week appointment, which could be made on the same day as a one-month well-baby visit. Front desk staff members were given written and verbal instructions to schedule any PPC visits at four weeks after childbirth and offer to make a one-month well-baby appointment for the same day. The process for scheduling the appointments was not changed; patients were still required to make their own appointments. The intervention was in place for three months during which time the project manager was available by cell phone and email for questions or concerns. To maintain visibility and to perform project progress assessments, the project manager also made regular site visits.

The primary outcome measure was adherence to a routine PPC after attending at least one enhanced prenatal education class through the prenatal program and being offered a concurrent one-month well-baby appointment. Prior to the project, the MA tracked attendance at prenatal visits, education classes, delivery date, and birth statistics for all patients in the prenatal program. However, there was no process for tracking postpartum or well-baby follow-ups. Pre-

intervention data consisted of the number of women in the prenatal program who delivered and returned for a routine PPC visit three months prior to the project start date. The MA collected pre-intervention data and attendance rates at a routine PPC visit were added to the data collection already in place. It was discovered that it was not possible to track newborn visits in relation to PPC visits since there was not a record of the newborn medical record number or official name located in the mother's electronic healthcare record.

Data Collection and Analysis

De-identified frequency data was obtained both pre- and post-intervention. Pre-intervention data consisted of the number of women enrolled in the prenatal program who delivered their baby between September 14-November 2, 2016 and the number of those women who returned for a routine PPC visit before December 16, 2016. Post-intervention data included the number of women enrolled in the prenatal program who delivered between December 8, 2016-Feburary 8, 2017 and the number of those women who returned for a routine PPC visit under the new scheduling guidelines, before March 15, 2017. Data was also collected to determine how many of those returning for a PPC visit also scheduled a concurrent well-baby visit. In addition to the de-identified frequency data, qualitative data was collected by the project manager in the form of short open-ended interview questions with the front desk staff and providers.

Results

Prior to the project, postpartum follow-up was not tracked. In the three months prior to the intervention start date, the percentage of women who had a routine PPC visit was 36% (five out of 14). During the three months of the project the percentage rose to 43% (three out of seven). This demonstrates a seven percent increase in percentage of women returning for a

routine PPC visit with interventions in place. Of the three women who returned for a PPC appointment there was one known concurrent well-baby visit. Three out of four of the front desk staff participated in interviews as well as all four providers. Some example of provider statements include:

> "I saw two women who screened positive for postpartum depression and was able to get them resources."
>
> "I love that the PowerPoint reminds moms that they can bring the baby here for care too."
>
> "This is such an easy fix. Why didn't we think of it before?"

Examples of staff statements include:

> "I think moms like having their visit at the same time as the baby."
>
> "It would be easier if the EHR would remind me to schedule them at the same time."
>
> "Most of our patients are Spanish speaking and the prenatal education slide was in English."

Due to the use of frequency data alone, statistical significance was not determined, however, clinical significance was demonstrated in the increase in the percentage of women returning for a PPC visit as well as the encouraging statements from staff and providers.

Discussion

Significance of Findings

Comparing the results to those found in the literature review show the significance of this project. The interventions of enhanced prenatal education and four-week scheduling did lead to an increase in the percentage of women who attended a routine PPC visit. Although rates remain below national average, the seven percent increase in three months is on track to attaining and

possibly exceeding the CMS goal of increasing PPC visit adherence rates by 10% in a 12-month period. The benefit of prenatal education remained evident during this project. In the literature review prenatal education was deemed by women to be a referred time for education on postpartum care, the prenatal education piece of this project was in line with those findings. What was not found in the literature was information specific to concurrently scheduling PPC and well-baby visits at a family practice clinic. Because this clinic was able to offer both visits by one provider, it allowed for the convenience of two visits in one day along with giving mom the opportunity to discuss her postpartum care with her prenatal provider. This project did not address the other barriers to accessing care to include transportation issues. The change was simple but beneficial to the clinic process.

Strengths and Limitations

A strength of this project is the simplicity of the intervention. Immediate buy-in from clinic stakeholders aided in the ease of implementation. Providers and staff were key to the success of the project. There was no additional workload for staff once the education slide was created and added to the existing presentations. Schedulers also did not note increased workload since the amount of appointments did not change; just the timing changed. Providers potentially had more time to spend with each patient. Mothers often attend visit with their babies and providers might be expected to address her needs as well as the babies; with the change in place providers have an opportunity to spend more time with each patient, which in turn could decrease their overall workload.

There are also limitations to address. The lack of discrete data leads to uncertainty as to which specific intervention had the most profound effect on adherence to the visit. The uneven number of pre- and post-intervention patients is also a limitation, as it does not allow for direct

comparison. Although the front desk staff was given verbal and written instructions on scheduling changes, post intervention interviews noted that reminders were needed. Lastly, the prenatal education slide to promote the postpartum care was only in English and does not easily translate to Spanish. With the population of this clinic being primarily Spanish speaking, the information may not have had as much of an impact due to lack of understanding.

Implications for Practice

This project had a positive impact on patients, providers, staff, system, and policy. For the patients who obtained a concurrent visit, there was a decreased transportation need and they benefited from family-centered care. Those women who returned for their PPC visit had increased access to contraception, health promotion, screening for postpartum depression, and access to needed resources. The providers and staff were able to offer the recommended care without an increased workload. There were no additional costs and potential increased system-wide revenue since the one-month well-baby visit is not included in the prenatal program bundle. There is also potential for decreased healthcare costs from undiagnosed postpartum complications. For this FQHC and any clinic that receives federal or state reimbursement it is beneficial to continue to be able to report adherence to CMS, HEDIS, and Healthy People 2020 goals and initiatives.

Recommendations for Future Research

Future research should include isolating each intervention, enhancing prenatal education, changing the PPC appointment to four weeks instead of six weeks, and concurrent scheduling when applicable to determine which intervention had an impact on visit attendance and the magnitude of the impact. Health information could be used in two ways. A link should be made between mother and baby records when they are seen in the same clinic and a reminder message

could be placed in the EHR to remind providers and staff to schedule needed follow-up when patients are in the clinic.

Conclusion

The postpartum care visit is an important, yet under-attended part of perinatal and well-woman care. After childbirth, women and families can easily be inundated with caring for their new baby and trying to adhere to the numerous follow-up appointments. The number of appointments can be overwhelming, especially to those with financial as well as transportation challenges. The purpose of this project was to increase adherence rates to a routine PPC visit. The success showed that simple interventions are possible to increase attendance compliance. To assist in increasing adherence rates, postpartum care should be discussed during prenatal appointments and the appointment process should include dual scheduling when appropriate to create family-centered care and easier access to care. In the end, the ultimate goal is achieving healthy mothers and healthy babies through access to appropriate care at the appropriate time.

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