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Implementation of a Comprehensive Clinical Toolkit for Postpartum Depression Screening: Breaking Barriers in Women's Health Care

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Implementation of a Comprehensive Clinical Toolkit for Postpartum Depression Screening: Breaking Barriers in Women's Health Care

Abstract

A quality improvement initiative to increase screening of postpartum women to detect depression and appropriately refer women screening positive for follow-up care was implemented in an obstetrics and gynecology practice. Physicians in the practice (n = 13) completed an educational module on use and benefits of a toolkit and showed a significant post test increase. Review of patient medical charts found a significant increase in screening rate in an 8-week intervention cycle. Through means of establishing a protocol for appropriate referral for follow-up, the goal of referring 50% of women who screened positive was exceeded.

Keywords

postpartum depression, postpartum depression screening toolkit, postpartum blues, screening rate, screening tool

Introduction

According to the American College of Obstetricians and Gynecologists (ACOG), up to 25% of women giving birth experience postpartum depression (PPD) and as many as 80% have some form of post-partum blues (American College of Obstetricians and Gynecologists [ACOG], 2010). A problem recognized in the practice of obstetrics and gynecology (OB/GYN) physicians was that screening for postpartum depression did not occur on a consistent basis. Barriers identified were inadequate time for PPD screening, lack of reimbursement for the screening process time, and concerns with referring patients who screen positive to other facilities.

Background

With approximately four million births in the United States each year (Hamilton, Martin, & Ventura, 2013), PPD is the most common medical complication associated with childbirth (Fitelson, Kim, Baker & Leight, 2011; Sit & Wisner, 2009). The condition has traumatizing effects when PPD is not identified and is left untreated (Gjerdingen & Yawn, 2007; Josefsson & Sydsjo, 2007). Women who do not transition smoothly to motherhood may succumb to negative aspects associated with depression or suffer silently (Abrams & Curran, 2007; Beck, 2006; Thurgood, Avery, & Williamson, 2009).

Organizations such as ACOG, U.S. Preventive Services Task Force, and American Academy of Pediatrics recommend screening for postpartum depression and following up for patient management. Despite the availability of evidence-based recommendations and guidelines, screening for postpartum depression is not necessarily routine or a standard of care. More than a decade ago, a study found that 32% of OB/GYNs reported using a depression screening tool, and 16% reported using a patient self-report test (LaRocco-Cockburn, Melville, Bell & Katon, 2003).

Although time constraints and inadequate reimbursement have often been cited as reasons for not screening for PPD (LaRocco-Cockburn et al.,2003), newly practicing OBs also stated that residency did not prepare them to diagnose depression (Dietrich et al., 2003). Furthermore, lack of coordination among OB/GYNs, primary care providers, and mental health professionals can create an obstacle for follow-up treatment of depressed patients (National Institute for Health Care Management Foundation, 2010). More recently, Meyers et al. (2013) in a report of the Agency for Healthcare Research Quality also noted that follow-up rates for women with positive screens were low (zero to 30%).

Purpose and Aims

An underlying assumption of the initiative was that screening for PPD would increase the detection rate. Sit and Wisner (2009) showed a high increase in detection rate (from 6.3% to 35.4%) when using a screening tool in outpatient settings. The purpose of this quality initiative was to establish a protocol that the OB/GYN physicians in the practice could consistently use to improve the screening process for postpartum depression and subsequent referrals to follow-up care. In addition, the intent was to increase physician's knowledge, identify reimbursement codes, and identify resources for referral. A goal was to increase the number of referrals to appropriate providers of patients identified as being at risk for PPD by 50% within 2 months of initiating the screening process. The ultimate aim was to improve patient safety and quality of postpartum health care through timely diagnosis of PPD.

Methods

The quality initiative project occurred in two phases. In the first 8-week cycle, training units for the OB/GYN physicians and medical assistants (MAs) were administered, a PPD algorithm was developed, and baseline screening data were tabulated. Project implementation occurred in the second 8-week cycle, after physicians and MAs had time to be familiar with the PPD toolkit.

Context and Support

The OB/GYN private practice, located in a southwestern city, was staffed by 13 OB/GYN physicians; a nurse practitioner (NP), who served as project coordinator; and the clinic's MAs and nurses. The NP project coordinator was available throughout the implementation phase to support physicians, MAs, and staff in any aspect of the initiative. The president and board of the practice's organization approved the project's goals and the Quality Assurance Committee approved the selection of the project's implementation plans. The Committee for the Protection of Human Services approved the project protocol.

An obstetrical screening toolkit used by ACOG District II, New York was identified as one that met project aims, and the agency's Director of Medical Education granted permission for use in the project initiative. The toolkit included the *Edinburgh Postnatal Depression Scale* (EPDS), a 10 item instrument developed by Cox, Holden and Sagovsky (1987) that is considered reliable for PPD screening (Gibson, McKenzie-McHarg, Shakespeare, Price, & Gray, 2009).

Initial Planning

Initial steps were to develop and put into place processes that would promote project aims. An educational module for physicians of basics of PPD, including administration of the EDPS screening test was developed. An algorithm was devised for follow up of patient screening that included a pharmacological information chart on drugs used for treatment of depression and anxiety, hospital admission protocols (routine and emergency), reimbursement codes for billing, a resource/referral list of community mental health resources, and referral form templates. Part of the flow process included aspects for referral of patients screening positive for depression to appropriate facilities. The activities accomplished were as follows:

- Developed a hospital transport and admit (ADDMIT) protocol to promote a smooth transition to an affiliated hospital when patients required admission. (ADDMIT acknowledges the provider's responsibility to **A**ssess, **D**iagnose, and **D**elegate and the staff's responsibility to **M**ake phone calls, **I**nitiate paperwork and **T**ransfer or **T**ransport patient safely.)
- Developed a postpartum depression screening order form (fill in the blank and checklist) that was approved for use by the Health Information Management Committee of the affiliated hospital.
- Established direct contacts to enable smooth transition from practice facility to hospital when depressed patients without suicidal or homicidal ideation required observation.
- Established a direct connection with a neighboring facility to enable a more immediate psychological consultation of a suicidal/ homicidal or unstable patient.
- Created agreement with neighboring facility to provide a licensed mental health provider within one hour upon request and provide transportation to their 24-hour facility when required.

Educational Intervention

Four 30 minute in-service sessions were scheduled and physicians attended one at their convenience. The session introduced the proposed intervention and covered basic PPD education and screening tool information. A knowledge-based test was given before and after the training session (n = 13). Participants received a binder which included components of the toolkit, including the pharmacological information chart, copies of the EPDS (in both English and Spanish) with instructions for use and scoring, reimbursement codes, and a list of community facilities and contacts. After screening a patient, physicians were directed to document test scores and follow-up instructions in the patient's chart.

Data Collection

A primary outcome measure was to determine if a change in the screening rate for depression occurred, as compared to a pre-intervention baseline. Using the postpartum global code (V24.2), 10 patient charts per provider were randomly selected in each of the two 8-week cycles. Although the initial plan was to review 130 charts (10 charts per provider), the estimate was revised because 2 of the 13 physicians were new to the clinic and had not established their practice. Documentation of screening was noted for each medical chart reviewed to give pre-intervention (n=117) and post-intervention (n=122) tabulation for calculating a rate increase.

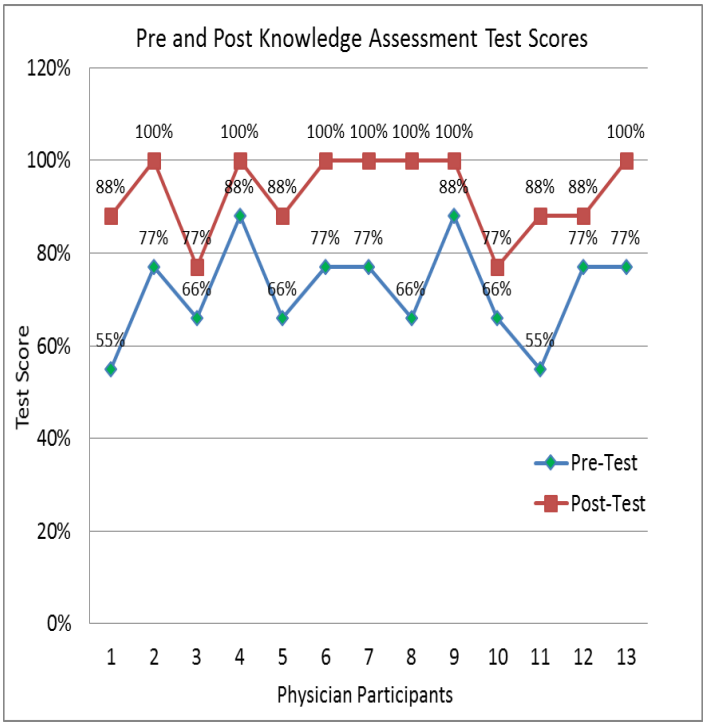
Analysis and Evaluation

The project coordinator reviewed the medical records and entered information into a database. Accuracy was ensured through use of a double-checking system. Continuous and categorical measures were used to quantify improvement in knowledge, screening practice, and satisfaction with the toolkit. To test for improvement in knowledge, differences in pre and post test scores were calculated. In the medical chart reviews, notation was made of existence of EPDS scores and total frequencies were tabulated. Satisfaction was determined using self-reported responses. Responses were recorded using a four point Likert scale of "strongly agree" to "strongly disagree". All project data was stored on a secure password protected USB flash drive.

Results

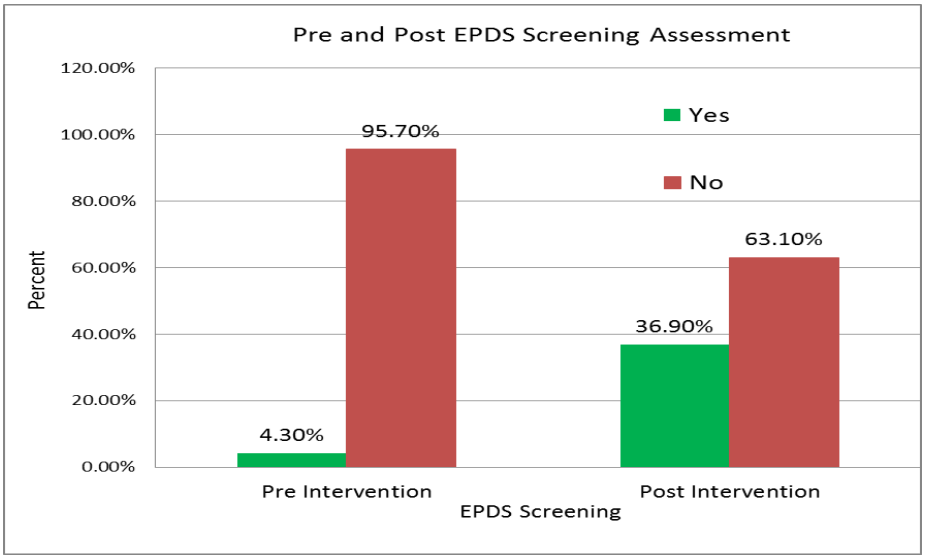
In regard to the educational training module, physicians (N = 13) scored higher on the post-test (M = 93.23, SD = 8.45) than on the pre-test (M = 72.92, SD = 10.64), with 7 of 13 achieving 100% accuracy on the post-test. A t-test for dependent samples to analyze the pre and post test results was significant (T = -8.314, P < 0.001, d = -2.306). Percent of correct response for the pretest matched with percent correct response for the post test for each of the 13 physicians is shown in Figure 1.

Figure 1. Knowledge Scores Pre and Post Intervention



Chi-square analysis of frequency of screening post intervention was significant (= 38.394, df = 1, P < 0.001), and this is indicative of a higher screening rate at post intervention than that established at baseline. The difference between pre to post intervention screening showed a 32.6% increase. In the chart reviews, scores for pre to post intervention analysis were obtained by marking "No" (no screening) or "Yes" (screening occurred). The pre-interview review of the medical charts showed that 1 of 13 physicians had screened for PPB. At the post intervention chart review, 10 of 13physicians posted EPDS scores. One physician screened every postpartum patient, five screened at least 50% of patients, three were inconsistent, one did not screen any patients, and one began screening in the last week of implementation. The pre and post intervention screening rates are shown in Figure 2. The figure shows a markedly decrease in "No" responses and increase in "Yes" responses.

Figure 2. Pre and Post Intervention Screening Rates as per Medical Records



Physicians were asked to evaluate the initiative within two weeks following the intervention cycle. The physicians completing the form (12 of 13) strongly agreed that the quality initiative reinforced the importance of routine screening for PPD and that they would recommend use of the toolkit to their peers.

Discussion

In the 8 week implementation cycle of the quality improvement initiative, screening rates improved significantly, even though the percent rate of screening was approximately 34% at the end of the implementation period. This rate is in keeping with other studies that also note a relatively low screening rate (Meyers et al, 2013; Sit & Wisner, 2009). That postpartum depression is becoming a public health concern is noted through media reports of mothers harming their children and in published clinical studies (ACOG, 2010).

One reason for the increase in screening rate could be that steps in the initial planning phase addressed specific barriers. Additional time for screening was obtained by teaching the MAs to use the toolkit. Putting a screening form in the patient's medical chart also enhanced the chance of screening. To remedy lack of reimbursement, appropriate reimbursement codes were identified for billing purposes. We corrected the issue of no protocols in place for referral of postpartum women screening positive for

depression. Contracts were established with an affiliated hospital and neighboring mental health facility, and additional mental health resources were identified.

Conclusion

Identification of postpartum depression is beneficial for the well-being and safety of a mother and her family. Clinicians providing care for postpartum women need to be able to identify the signs and symptoms of depression and refer those screening positive to appropriate follow up care. Establishing a systematic approach in a practice setting reduces barriers to effective screening and care and enables the practice to reach its stated goal. In this case, the goal to increase the number of referrals to appropriate providers of patients identified as being at risk for PPD by 50% within 2 months of initiating the screening process was exceeded: a 100% goal was achieved.

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