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GESTATION SELF-PORTRAIT/RAE MATÉ

A Public Health Nursing Initiative to Promote Antenatal Health

ABSTRACT

At least one in 10 pregnant women experiences depression. Other health risks during pregnancy include family violence, substance abuse, inadequate nutrition, financial challenges, environmental hazards and lack of social support.

Public health nurses are in a unique position to enhance perinatal health by assessing for antenatal psychosocial risk factors. During 2005-06 in a suburban/rural community near Edmonton, Alberta, public health nurses initiated a one-year demonstration project with the goal of increasing the number of health and community services accessed by pregnant women as a result of an interactive appointment with a public health nurse.

Eight family physicians in WestView Primary Care Network and three midwives from WestView's Shared Care Maternity Program referred local pregnant clients to the public health nursing unit at WestView Health Centre in Stony Plain. Each woman was assessed by a public health nurse for a variety of psychosocial risk factors. Results of the assessment determined the type of additional health services to which the pregnant women were referred.

Care providers were unanimous in their support for public health nurses' continuing to provide antenatal assessments to an expanded population of suburban/rural communities in the Capital Health region.

KEYWORDS

antenatal health, prenatal health, psychosocial risk factors during pregnancy

Depression has been identified as the most common disease among women of childbearing age worldwide (World Health Organization, 2004). Public health nurses are experts in identifying and screening for postpartum depression, but little to no attention is given to depression in pregnancy, even though it has a prevalence of 10 to 12 per cent (Misri, 2005) and has been found, along with low self-esteem, prenatal anxiety and child care stress, to be a strong predictor of postpartum depression (Beck, 2001). Additional antenatal psychosocial risks ►

that have a negative impact on women's health and postpartum outcomes are lack of social support, family violence, substance abuse and low socio-economic status (Midmer, Biringer, Carroll, Reid, & Stewart, 2005). Because care providers focus primarily on pregnancy-related medical conditions and the physical growth of the fetus, women's emotional health is often overlooked and depression is undiagnosed. Given the prevalence of antenatal depression and other psychosocial risk factors, it is essential that health-care providers view mental and psychosocial health as just as important and worthy of assessment as physical health.

The role of the public health nurse in pregnancy health is traditionally limited to providing prenatal classes. Contact between public health nurses and the majority of pregnant women is infrequent because many families do not attend these classes. In Alberta in 2004, 61.6 per cent of women giving birth for the first time attended prenatal classes (Alberta Health and Wellness, 2006). It is likely that an even smaller proportion of second-time mothers have contact with a public health nurse.

Although many women with preterm births have no identified risk factors (Moutquin, 2003), depression in pregnancy has been linked to decreased uterine blood flow, pregnancy-induced hypertension, pre-eclampsia and preterm delivery (Bonari et al., 2004).

MIDNIGHT MILK/RAE MATÉ

FIGURE 1: List of signs and symptoms for project participants

Instruction to clients: *Please check as many items that apply to you that have occurred on a regular basis during the last two weeks.*

- ❒ loss of pleasure in life
- ❒ fatigue
- ❒ headaches
- ❒ lack of appetite
- ❒ weight loss
- ❒ overeating
- ❒ unable to fall asleep
- ❒ difficulty coping
- ❒ irritability, anger
- ❒ unreasonably worried
- ❒ tearfulness
- ❒ overwhelmed
- ❒ sleeping too much
- ❒ strange dreams
- ❒ loneliness
- ❒ memory difficulty
- ❒ confusion
- ❒ indifferent towards pregnancy
- ❒ anxiety
- ❒ panic attacks
- ❒ early morning waking from sleep
- ❒ decreased concentration
- ❒ decreased motivation
- ❒ mood swings
- ❒ feeling emotionally numb
- ❒ difficulty making decisions
- ❒ feelings of hopelessness
- ❒ guilty feelings
- ❒ feelings of going crazy
- ❒ hyperactivity
- ❒ no interest in sex
- ❒ chest pains or heart pounding
- ❒ disturbing thoughts
- ❒ obsessions
- ❒ hallucinations
- ❒ screaming, yelling at children
- ❒ thoughts of harm happening to child
- ❒ thoughts of harming self

SOURCE: P. STRASS

In Alberta's Capital Health region (Edmonton area), preterm births increased from 8.1 per cent of all births in 1996 to 9.7 per cent in 2005 (Alberta Perinatal Health Program, 2006). Although this increase cannot be attributed to a single factor, evidence in the literature supports early screening for preterm birth risk and educating patients on lifestyle factors, such as stress, anxiety, poor dental hygiene, and tobacco and drug use, that influence preterm delivery (Health Canada, 2004).

In 2005, public health nurses at WestView Health Centre in Stony Plain, Alta., began an innovative approach to pregnancy health teaching. Collaborating with midwives and local suburban/rural physicians in the WestView Primary Care Network, they initiated a one-year demonstration project with the goal of increasing the number of health and community services accessed by pregnant women as a result of an interactive appointment with a public health nurse.

Given the prevalence of antenatal depression and other psychosocial risk factors, it is essential that health-care providers view mental and psychosocial health as just as important and worthy of assessment as physical health.

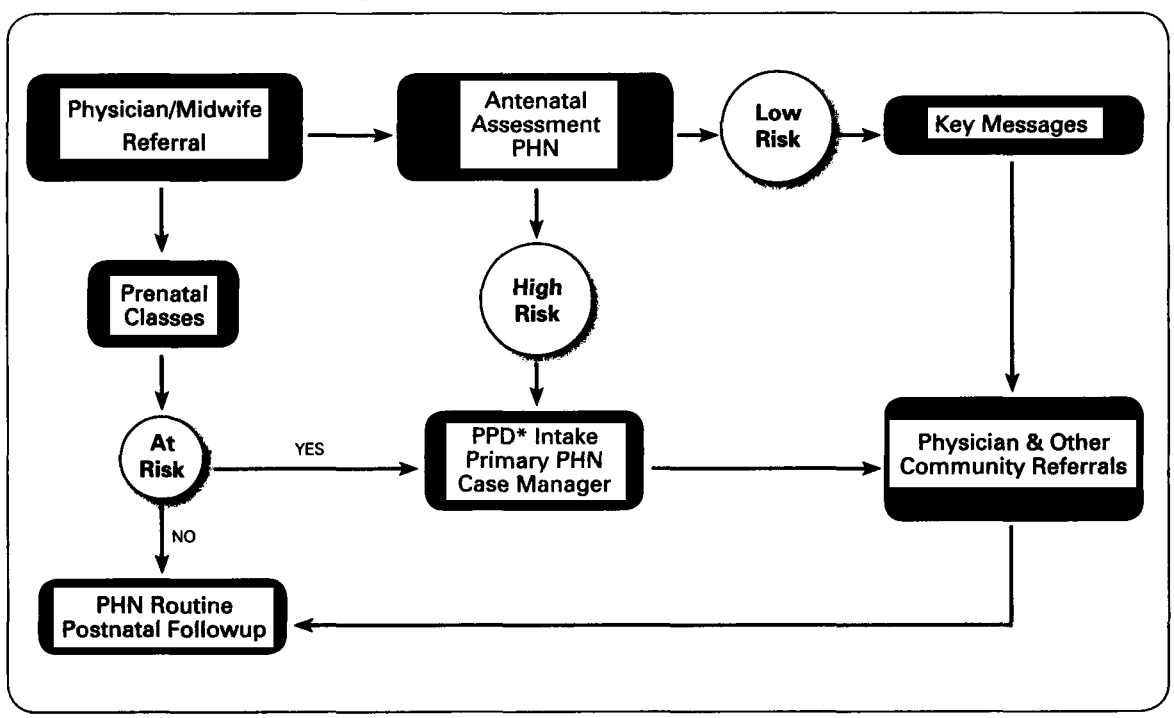
TABLE 1: Benefits of interactive appointment with public health nurse, as reported by clients (*n* = 75)

- Received information and/or resources (28%)
- Provided with reassurance and support (18%)
- Talked things out with a nurse (14%)
- Learned more about postpartum depression (13%)
- Increased self-awareness (8%)
- Confirmed that the health region promoted primary care (4%)

The project ran from April 1, 2005, to March 31, 2006. Eight local family physicians and three midwives agreed to refer their current and new pregnant clients to the public health nurse coordinator. The women were given a letter by the care provider outlining the project, along with an explanation that a public health nurse would be contacting them by telephone. During the telephone call, the nurse arranged for the expectant mother to have a 30-minute appointment with one of four public health nurses. Appointments for each participant occurred at, or after, 20 weeks' gestation. All clients were given the option of bringing their significant other to the assessment if they so chose.

The public health nurse coordinator gave the nurses a two-hour orientation on the project's goal and methods, the interviewing script and the assessment tool. The primary tool used during the ►

FIGURE 2: Public health nursing model for antenatal health assessment and referral



*postpartum depression

SOURCE: P. STRASS

A major finding and highlight of this project was the recognition of the potential for primary prevention and teachable moments by nurses with this client population. One-on-one time with clients provides an opportunity for "good catches," referrals and health teaching tailored to the needs of each family.

interview was the ALPHA Self-Report Questionnaire for Women, chosen because of the breadth of psychosocial risk factors it addresses. The self-report ALPHA is completed by the client and consists of 46 scaled, binary-choice and open-ended questions. This questionnaire was chosen rather than the Antenatal Psychosocial Health Assessment form (completed by the care provider) because the nurses determined the former would be more user friendly and time efficient.

Clients were also asked to complete a one-page checklist of signs and symptoms (see Figure 1). The purpose of this form was to allow the nurse to ask followup questions if needed during the appointment time (particularly if a client checked "thoughts of harming self" on the form) and to provide physicians and midwives with information at a glance if further medical assessment or diagnosis was indicated.

At the beginning of the appointment, the nurse obtained informed consent. The clients were told that a confidential summary report would be given to their primary care provider after the assessment took place. (The nurse filled out an ALPHA Provider Summary form following the appointment.) Next, clients filled out the checklist and the self-report ALPHA in the presence of the nurse.

COMMUNION/RAE MATÉ

After clients completed the forms, the nurse discussed any other issues that had come up, including dental health, proper seat belt use for women during pregnancy and smoking reduction. Through this assessment, the nurse could refer the client to community resources and programs she identified as being appropriate. In many instances, these brief discussions spurred additional health teaching.

At the end of the appointment, each client received a brochure describing health services offered in the region and the nurse's business card.

At six to 12 weeks postpartum, the clients were called by an independent evaluator (an RN) and asked if they would participate in a brief followup survey conducted over the telephone. The evaluator asked the clients if they felt that the appointment with the nurse had been beneficial. She recorded all client remarks. Finally, she asked clients for new responses to each checklist item. If, for any reason, the evaluator felt clients required followup or if clients had any additional questions, they were promptly referred to the nurse who had conducted the antenatal assessment.

At the completion of the project, a seven-question survey was given to the physicians, midwives and the nurses to obtain their feedback on the project and its benefits to patients.

RESULTS

A total of 163 women were referred by physicians and midwives for antenatal assessments. Seven women declined the appointment with the nurse, three women were removed from the project after moving away or experiencing miscarriage and three women were lost to contact. Of the 150 women assessed, 71 were primiparous; 79 were multiparous.

Fifty-five clients (37%) reported a history of depression, and 49 (33%) reported a family history of depression. (Eight women in the sample were followed for major postpartum depression by a public health nurse after the project ended.)

A total of 93 services were accessed by clients as a result of meeting with the public health nurse — 53 during the prenatal period and 40 during the postnatal period. The most frequently referred and accessed services were an additional appointment with a care provider, prenatal classes, a family health home visitor, a postpartum depression support group, an appointment with a mental health therapist, and the regional Women, Infants and Nutrition project. Other services accessed included a domestic violence support program, parenting classes, legal services, breast-

JOY/RAE MATÉ

feeding classes and a smoking cessation program.

The independent evaluator interviewed 75 of the women who had participated in the project. Their responses indicated that 68 per cent felt that the appointment with the nurse was beneficial; 13 per cent of clients said there was no benefit; and 19 per cent stated they were unsure of the benefits.

Fourteen program evaluation surveys were distributed to the care providers involved in the project; 12 (86%) were returned. Ninety-two per cent of the respondents indicated that the risk assessments, referrals and the appointment with a public health nurse were beneficial to clients. Respondents were unanimous in their support for public health nurses' continuing to provide antenatal assessments to their clients.

CONCLUSION

Because public health nurses have frequent contact with families and the focus of their practice is on health promotion and disease prevention, they are in a key position to routinely screen and assess for antenatal psychosocial risk factors.

A major finding and highlight of this project was the recognition of the potential for primary prevention and teachable moments by nurses with this client population. One-on-one time with clients provides an opportunity for "good catches," referrals and health teaching tailored to the needs of each family. Key topics discussed with women who participate in an antenatal meeting with the public health nurse have expanded to include dental care, proper seat belt use, physical activity, safety in relationships, nutrition, screening for depression, breastfeeding benefits, substance use, and early planning to develop social support before the birth.

Evaluation outcomes were positive, and the project goal was met. As a result of the project outcomes, public health nurses at WestView Health Centre — Stony Plain routinely offer antenatal assessments to all pregnant women in the surrounding community population of approximately 72,000.

Universal screening for antenatal psychosocial risk factors is essential, and early contact in pregnancy is recommended because it provides the optimal opportunity for intervention and referrals to community resources. Public health nurses are well-suited to lead in this area; they have broad knowledge of health promotion and disease prevention and are familiar with community resources and partnerships. Primary care networks and interprofessional teams can work together to develop a simple referral process (see Figure 2). With creative approaches, professional collaboration and commitment to early comprehensive perinatal health care, care providers are able to provide seamless enhancement of services to women and their families. ■

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