Potehina E., BA AUCA

VARIABLES RELATED TO NAUSEA AND VOMITING IN EARLY PREGNANCY

Nausea and vomiting in pregnancy (NVP) is common in the first trimester of pregnancy. Although many hypotheses have been put forth, and scientific studies undertaken, the etiology of mild and severe NVP remains obscure. A specially constructed question was administered to 792 women of the public, neonatal, and pregnant sub-samples in an effort to investigate the relationship between NVP and various factors. Results showed that women who planned their pregnancies and were between 20 and 35 were much more likely to develop symptoms. The tentative hypothesis that there might be an association between the match of desired-for and actual sex of baby and mild or moderate NVP was marginally supported.

In the past pregnancy was regarded as a nine-month sickness, and that view sometimes persists today. Almost every organ system in a woman's body is affected by pregnancy, although most of the consequences are not serious. Some of the more common physical reactions include the following: weight gain, protrusion of the abdomen, breast tenderness and swelling, nausea and vomiting in pregnancy, fatigue, and frequent urination. These changes, in turn, can result in not only positive emotions about pregnancy occurrence, but also negative ones, which are often attributed to very common symptoms of pregnancy nausea and vomiting (NVP). NVP occurs in 50 to 90% of all pregnancies. The classification of NVP includes -- Emesis Gravidarum (EG), known as morning sickness and characterized by mild or moderate symptoms of nausea and vomiting, and Hypermesis Gravidarum (HG) characterized by persistent, severe vomiting every day. HG, as opposed to morning sickness, affects less than 1% of pregnancies. The death of the famous British writer Charlotte Bronte, author of "Jane Eyre", was perhaps a sad example of severe NVP. The very earliest
known description of NVP is considered to be from the Greek physician Soranus of Ephesus, written on papyrus about 2000 b.c.e.

Although NVP has been of great interest for a long time, very little data is available on the etiology of this condition. Recent theories reflect an interactions perspective, viewing both physiological and psychological factors relevant. There seems to be general agreement that mild and moderate symptoms of NVP have a strong physiological basis linked to hormonal changes during pregnancy and are predictive of positive pregnancy adjustment and outcome. The etiology of severe form is less clear. Some authors have argued that psychological and emotional factors play a role.

The primary purpose of my study was to investigate any association between presence or absence of NVP and selected demographic, pregnancy and baby's sex related characteristics, such as the match of desired and actual sex of baby, actual sex of baby, pregnancy planning, pregnancy type (first/subsequent), age, level of education, and sphere of occupation. These factors, with the exception of the first one, were selected as previously associated with symptom variability.

Seven specific hypotheses were formulated for testing, including the tentative hypothesis -- that there might be an association between the 'agreement' between desired and actual sex of baby (that is, whether the desired and actual sex of the baby were the same) and the presence of NVP.

To test this a specially constructed questionnaire was administered to 792 women. The goal of subject selection for this study was to obtain a representative sample of women with or without NVP. For this purpose the data was collected from the three sub-samples representing the population of interest: public group- 324 women questioned in public places, neonatal group- 297 women who had recently given birth, and pregnant group-171 expectant mothers.

The chi-square test was used for the analysis of the data on the basis of the following met conditions: (1) both variables (NVP
and one of the factors) were qualitative in nature; (2) the two variables have been measured on the same individuals; (3) the observations on each variable were between subjects in nature.

Results showed that women who planned their pregnancies and were between 20 and 35 were much more likely to develop symptoms \((p < .05)\). In contrast to previous findings, significant associations between NVP and such factors as sex of baby, pregnancy type (first/subsequent), level of mother's education and the field of occupation were found \((p > .05)\). The tentative hypothesis that there might be an association between the match of desired-for and actual sex of baby and mild or moderate NVP was marginally supported \((p = .058)\).

The possible explanation of the association of NVP with mother's age is that the age between 20 and 35 is considered to be the most appropriate time for reproductive function. The optimum time for childbearing is in a woman's early twenties. Mothers over 35 are at increased risk for several kinds of problems, including miscarriages, stillbirth, and complications of pregnancy. Mild or moderate NVP is regarded as a protective mechanism and predictor of a positive pregnancy outcome and adjustment. Women who have NVP in the first part of their pregnancy have decreased risk of miscarriage, prenatal mortality and congenital heart defects; normal weight gain and deliver heavier infants, while women without NVP be considered a high-risk patient.

The results indicating that planned pregnancies were more prone to nausea and vomiting do not at first sight seem logical, but do agree with those of Fairweather (1968, as cited in de la Ronde, 1994) and Vellacott et al. (1998). Women who plan their pregnancies are considered to be healthier, and than to have a greater chance for NVP. It is possible that those women who plan their pregnancies and more likely to be the highly competitive achievers, whereas those who are relaxed or even careless about conception, may be equally relaxed in pregnancy. A study by Uddenberg et al. (1971)
found that women with severe NVP planned their pregnancies less frequently, were often unmarried when the child was born, and were more likely to assume that their pregnancies were undesired than women who experienced mild or moderate NVP.

Despite detailed research over the last two decades to determine the etiological factors involved in NVP, many of the results have been contradictory. My study along with others strengthened the theory that mild and moderate NVP is a pregnancy positive factor on the basis of the mentioned above findings.