UNPLANNED PREGNANCY IN WOMEN WITH EPILEPSY FOLLOWED IN A REGIONAL EPILEPSY CENTER

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REVISED ABSTRACT

RATIONALE: The U.S. Department of Health and Human Services, Center for Disease Control, report unplanned pregnancies occur frequently in the United States. Since previous studies have suggested that women with epilepsy are at a higher risk of having children with birth defects and other perinatal complications, the implications of unplanned pregnancy in this group are potentially serious. This study examines the incidence of unplanned pregnancy in an epilepsy population and possible factors that might identify women at risk.

METHODS: The medical records of women of childbearing age were reviewed. 29 women were identified who had 34 pregnancies between 1991 and 2000. All women received pregnancy counseling at our center prior to pregnancy. Planned/unplanned pregnancy, age, marital status, educational background, and IQ were obtained.

RESULTS: 24 (68%) of the pregnancies were unplanned. The mean age for women with planned pregnancies was 29 years and for unplanned pregnancies, 26.6 years. Age range was 19 to 34 years. The women with planned pregnancy were all married. 70% of the women with unplanned pregnancies were single. Mean years of education were 15.7 for women with planned pregnancy, 12.2 for women with unplanned pregnancy. Four of the nine women with planned pregnancies and 14 of the 20 women with unplanned pregnancies had neuropsychological testing. Mean IQ of planned pregnancy group was 102 (median 101), while that of the unplanned pregnancy group was 88 (median 83).

CONCLUSIONS: The incidence of unplanned pregnancy is high in this patient sample. This study found that unplanned pregnancy is associated with single marital status, 12 years or less of education and low average IQ. Married women with average IQ and post-high school education also had unplanned pregnancy but to a lesser extent. Despite receiving counseling in pregnancy planning, two thirds of our sample had unplanned pregnancies. These results have implications for the choice of anticonvulsants prescribed to women of childbearing age.

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INTRODUCTION

Unplanned pregnancy occurs frequently in the United States according to the U.S. Department of Health, Center for Disease Control. Unplanned pregnancy in women with epilepsy is of special concern as they are at a higher risk of having children with birth defects or other perinatal complications. This study examines the incidence of unplanned pregnancy in patients followed in an epilepsy program and explores factors that identify women at risk for unplanned pregnancy.

METHODS

Information about pregnancy and epilepsy, and the risk of fetal abnormality is provided to all women of childbearing age in this comprehensive epilepsy program.

20 women with epilepsy (ages 19 - 34 years) were identified who had 34 pregnancies between 1991 and 2000. Information on whether the pregnancy was planned or unplanned was obtained. The women’s age, marital status, educational background and FSIQ (if known) were obtained from chart review.

Relationship between planned vs. unplanned pregnancy and marital status, education, and IQ were compared using the Chi Square statistic and t-tests.

RESULTS

24 of the 34 (68%) pregnancies were unplanned (Figure 1).

The mean age range for women with planned pregnancy was 29 years and for unplanned pregnancy was 27 years.

While all 9 of the women with planned pregnancies were married, only 6 of the 20 women with unplanned pregnancy were married (chi square p < .001) (Figure 1).

A significant difference in the two groups was observed in the mean years of education: women with planned pregnancy = 15.7 years of education versus 12.2 years for women with unplanned pregnancy (t-test p < 0.001) (Figure 2).

Significant differences were also observed for IQ. Four of the nine women with planned pregnancies and 14 of the 20 women with unplanned pregnancies had previously undergone neuropsychological testing. Mean FSIQ of the planned pregnancy group was 102 (range: 93 – 114) (median 101), while that of the unplanned pregnancy group was 88 (range: 67 – 125, median 83) (t-test p = 0.051) (Figure 3).
CONCLUSIONS

The incidence of unplanned pregnancy is high in this patient sample. Unplanned pregnancy is associated with single marital status, 12 years or less of education, and low IQ.

Despite receiving information in pregnancy planning, two-thirds of our sample had unplanned pregnancies.

Health care providers need to carefully select anticonvulsant medication for women of childbearing age.

For those women planning a medication change prior to pregnancy, delaying the change because the woman is not married or not planning a pregnancy may not be prudent.
Figure 2

Education

Number of Years of Education

Planned Pregnancy Group

Unplanned Pregnancy Group

*p < 0.001

Figure 3

Mean FSIQ

Median Full Scale IQ

Planned Pregnancy Group

Unplanned Pregnancy Group

*p < 0.051