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# Pregnancy and Epilepsy: a Korean Tertiary Epilepsy Center Review

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## ABSTRACT

**Background:** Pregnancy in women with epilepsy (WWE) is known to have a higher risk for fetal development complications, which may include congenital malformations. Unfortunately, information pertaining to pregnancy in WWE is difficult to obtain because there are considerable ethical issues preventing these studies from being conducted on pregnant women. Therefore, this study investigated the pregnancies of Korean WWE in a tertiary epilepsy center to observe data resulting from the outcome of the pregnancies.

**Methods:** This was a retrospective study of 48 pregnant WWE who were treated at the regional tertiary epilepsy center. All records of hospital visits before and after the period of pregnancy were analyzed to obtain information about the seizures as well as pregnancy-related outcomes, including the status of the newborns' conditions.

**Results:** The subject group consisted of 31 (63.3%) with partial epilepsy, 6 (12.5%) with generalized epilepsy, and 11 (22.9%) with unclassified epilepsy. There were 27 subjects who took one antiepileptic drug (AED), and 12 who took two AEDs. The most commonly used drug was lamotrigine (29.8%). Of the 48 WWE involved in the study, 31 underwent caesarian sections and 17 opted for natural birth. Thirty-nine (81.3%) delivered at full-term, but 9 (18.7%) delivered at preterm. Compared to full-term infants, pre-mature infants showed lower birth weight, smaller head circumference, shorter height, and lower 1-minute Apgar scores, but seizure frequencies of the mothers did not differ.

**Conclusion:** In WWE, epilepsy classification, number of AEDs taken, and frequency of seizures are not significantly correlated with delivery and fetal condition. This data could be used as a clinical reference for physicians to provide useful information to WWE if they are concerned about their pregnancies.

**Keywords:** Pregnancy; Epilepsy; Antiepileptic Drugs

## INTRODUCTION

Women with epilepsy (WWE) who are pregnant have reported various effects related to either the epilepsy itself or as a result of taking antiepileptic drugs (AEDs).<sup>1</sup> Taking an AED during pregnancy may make some WWE anxious in addition to arousing the misconception that epilepsy is a hereditary disease. This can lead to WWE hesitating to follow through with a pregnancy.

















