

## Validation of a questionnaire for epilepsy diagnosis in primary care services

### ABSTRACT

**Objective.** To evaluate the usefulness of a questionnaire in primary health care services for establishing the diagnosis of epilepsy in children from 1 to 10 years old and for classifying their epileptic seizures.

**Methods.** This cross-sectional observational study was conducted in 2004. There were 204 children in the study (102 diagnosed with epilepsy and 102 without epilepsy). The children were randomly selected at the Regional Center of Epilepsias and the Vincent Corral Moscoso Hospital, which are both in the city of Cuenca, Ecuador. For the study, each child with epilepsy was matched with a child without epilepsy, in two age groups: 1 to 5 years old and 6 to 10 years old. Four students who were in their last academic year in the School of Medicine of Cuenca and who did not know the child's diagnosis utilized the questionnaire with a family member or other guardian of the child. The validity, sensitivity, specificity, positive predictive value, and negative predictive value of the questionnaire were calculated, with 95% confidence intervals (95% CIs). The clinical diagnosis carried out by specialists was used as the gold standard.

**Results.** The assessment showed that the questionnaire had good sensitivity (95.10%; 95% CI: 94.58%–95.61%) and good specificity (97.06%; 95% CI: 96.58%–97.59%). Validity was 96.08% (95% CI: 95.84%–96.36%), with a positive predictive value of 97.00% (95% CI: 96.48%–97.52%) and a negative predictive value of 95.19% (95% CI: 94.74%–95.74%). The level of agreement in the classification of the epileptic seizures carried out by the neurologists and by the medical students who used the questionnaire was satisfactory for the generalized seizures ( $\kappa = 0.67$ ). Upon testing for interobserver agreement among the specialists, the kappa value for the diagnoses was 0.80 among the neurologists and 0.89 among the pediatricians.

**Conclusions.** The diagnostic questionnaire that was assessed has good sensitivity and adequate specificity, and, after brief training, primary health care general practitioners can use it to help them diagnose epileptic seizures.

**Key words** Epilepsy, early diagnosis, questionnaires, primary health care, Ecuador.

### ERRATUM

#### Robles and Roses Periago, "Guanacaste, Costa Rica: a landmark for cervical cancer prevention"

(*Pan Am J Public Health* 2004;15(2):73–4)

Please note an error on p. 74, second paragraph, sixth line:

**Incorrect version:** "On February 2004, the ACCP launched partnership with Digene Corporation, the company that produces the Hybrid Capture test for HPV . . ."

**Correct version:** "On February 2004, PATH launched partnership with Digene Corporation, the company that produces the Hybrid Capture test for HPV . . ."