

IMPACT OF MATERNAL ANXIETY ABOUT EPILEPSY AND AGE OF CHILD ON RESTRICTIONS IN CHILDHOOD ACTIVITIES

R J Schultz, RN, MSN¹; M L Chapieski, PhD¹;

K D Evankovich, PhD¹; A A Wilfong, MD¹; R Collins, PhD²

¹Baylor College of Medicine; ²MEDVAMC, Houston, TX



PURPOSE

- Parental anxiety has been reported to affect the quality of life and behavioral development of children with epilepsy.
- The purpose of this study was to examine the relationship of maternal anxiety about epilepsy and age of the child with epilepsy on restriction in childhood activities.

METHODS

- Study approved by The Baylor College of Medicine Institutional Review Board
- Recruited English-speaking mothers of children ≥ 6 years with epilepsy and a Full Scale IQ ≥ 60
- Measured maternal anxiety about epilepsy using the Parental Anxiety about Epilepsy Questionnaire (PAE).
- Hague Restrictions in Childhood Epilepsy Scale (HARCES) completed by each mother
- Assessed full scale intellectual ability (FSIQ) using Wechsler Intelligence Scale for Children (WISC-IV).
- Summarized demographic characteristics using descriptive statistics
- Contributions of maternal anxiety of seizures and age of child to the level of restriction on childhood activities were evaluated using stepwise multiple regression analysis

INSTRUMENTS

PAE

- Parental fears about epilepsy
- 14 item, 5-point Likert scale
- Chronbach $\alpha = 0.91$

HARCES

- Frequency of participation in common childhood activities
 - Amount of supervision
 - Extra precautions needed
 - Specific daily activities
- 10 item, 4-point Likert scale
- Total score
 - 10 no disability
 - 40 severe disability

WISC-IV

RESULTS

- Thirty-nine children with epilepsy and their mothers participated

Demographic Characteristics

| | N | Mean \pm SD |
|--------------------|-------|--------------------|
| Male/Female | 20/19 | |
| Age (yrs) | | 11.79 \pm 3.25 |
| Age onset (mo) | | 61.64 \pm 41.31 |
| WISC-IV-FSIQ | | 91.24 \pm 15.48 |
| Seizure freq | | 69.28 \pm 148.14 |
| Seizure type | | |
| Partial | 16 | |
| 2 ^o Gen | 21 | |
| Mother Educ | | 14.50 \pm 2.28 |

- Higher levels of maternal anxiety about epilepsy ($r = 0.603$, $p < .0005$) and lower age ($r = -0.322$, $p = .023$) correlated with higher scores on the HARCES
- There was no correlation between seizure frequency and scores on the HARCES

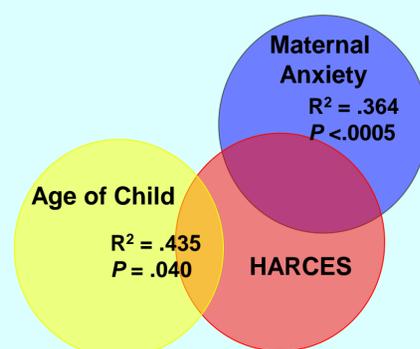
Means, SD, Correlations (N = 39)

| | M | SD | 1 | 2 | 3 |
|---------|-------|--------|--------|-------|-------|
| HARCES | 19.08 | 7.11 | | | |
| Sz freq | 69.28 | 148.11 | .214 | | |
| PAE | 31.69 | 9.97 | .603** | .223 | |
| Age | 11.79 | 3.25 | -.322* | -.085 | -.094 |

Note: * $p = .023$; ** $p < .0005$

- Maternal anxiety was a significant predictor of restriction in childhood activity ($R^2 = .364$, $F(1,37) = 21.16$, $p < .0005$)
- Age of child was a significant predictor of restriction in childhood activity over and above maternal anxiety ($R^2 = .435$, R^2 change = .071, $F(1,37) = 4.527$, $p = .040$)

Relationship of Maternal Anxiety and Age of Child on Restrictions in Activity



CONCLUSIONS

- Both maternal anxiety about epilepsy and younger age of the child were associated with greater parental restrictions on the activities of children with epilepsy.
- Mothers placed more restrictions on common daily activities (playing outside, swimming, going to parties, staying elsewhere overnight) the younger the child.