Teachers’ knowledge and attitudes toward epilepsy

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Primary school teacher’s knowledge and attitudes toward children with epilepsy

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EPILEPSY & SCHOOL

- Epilepsy has higher incidence during the school years
- Critical period of the child's social, psychological, and physical development
- Significantly impact the child's quality of life and future adult roles
- Increased risk of educational underachievement, learning difficulties
- Mental health problems, social isolation, and poor self-esteem

Sillanpaa et al. Epilepsia 2015;56(11):1774-83
EPILEPSY & TEACHERS

- Teacher's knowledge and attitudes can have significant impact
- Influence student’s performance, social skill development, and future employment
- Many international studies
- Teachers often have insufficient knowledge, inadequate training, and misconceptions about epilepsy and its management

Dumeier et al. Arch Dis Child 2015;100(9):851-5
OBJECTIVES

• Study primary school teacher’s attitudes toward epilepsy.

• Identify areas in which further teacher training and education are required.

• Identify contributing factors to inadequate knowledge and negative attitudes.
HYPOTHESIS

• Many teachers are not well informed about epilepsy

• Some are misinformed from unreliable sources

• Contributes to their negative attitudes toward the students
METHODS

- Stratified random sample survey
- Primary school teachers in Jeddah
- Private/public schools - male/female students
- Four regions (north, center, south W, south E)

- Structured 37-item questionnaire
- Demographics, knowledge, attitudes, experience
RESULTS

• 620, public (58%) and private (42%) schools
• Ages 21-59 years (mean 36)
• 53% females
• 66% with university degree
• 1-35 years of experience (mean 13.5)
Level of Teacher's Knowledge

Not informed at all
Somewhat informed
Moderately informed
Very well informed

%
### Teacher's knowledge

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy is a lifetime disorder</td>
<td>59%</td>
</tr>
<tr>
<td>One of the causes of epilepsy is spirit possession</td>
<td>27%</td>
</tr>
<tr>
<td>Intelligence of an epileptic child is below average</td>
<td>25%</td>
</tr>
<tr>
<td>Evil eye is a cause of epilepsy</td>
<td>22%</td>
</tr>
<tr>
<td>Epilepsy cannot be cured</td>
<td>21%</td>
</tr>
</tbody>
</table>
## Teacher's Attitudes

<table>
<thead>
<tr>
<th>Statement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children with epilepsy have abnormal behavior in class</td>
<td>47%</td>
</tr>
<tr>
<td>They have future career limitations</td>
<td>42%</td>
</tr>
<tr>
<td>Children with epilepsy should be placed in a special class</td>
<td>28%</td>
</tr>
<tr>
<td>They should be placed in a special school</td>
<td>27%</td>
</tr>
<tr>
<td>I mind having a child with epilepsy in my classroom</td>
<td>25%</td>
</tr>
<tr>
<td>They should not participate in sport activities</td>
<td>18%</td>
</tr>
</tbody>
</table>
RESULTS

• Age, gender, years of experience, or type of school did not correlate with knowledge

• Teachers with higher education had better knowledge (57% vs 21%, p=0.009)

• Saudi teachers had better knowledge independent of their educational level (67% vs 52%, p=0.013)

• Saudi teachers were less likely to think that children with epilepsy have lower IQ (p=0.002), should be placed in a special class (p=0.0001), or should not participate in sports (p=0.04)
RESULTS

• Teacher's attitudes correlated highly with knowledge
• Those with good knowledge were less likely to mind having the child in their class (p=0.028) or think that they should be placed in a special classroom (p=0.029)
• Teachers working in private schools were more likely to mind having a child with epilepsy (p=0.02), think that they should be placed in a special class (p=0.0001)

• Those who encountered an epileptic child (28%) had better knowledge (p=0.0001)
• At the time, most (58%) did not know what to do
DISCUSSION

• A study from a different Saudi region found that possession was still believed to be a cause of epilepsy among 40% of university educated teachers (regional variations)

• Another Saudi study revealed that 14% of the public believed that epilepsy is infectious and 8% believed that epilepsy was a type of mental illness

Obeid et al. Seizure 2012;21:245-9
DISCUSSION

• Many international studies
• Teachers have insufficient knowledge, inadequate training, erroneous acute management
• Taiwan, >30% thought epileptic seizures were associated with insanity
• Thailand, 38% had not heard of epilepsy
• Developed countries, most teachers do not feel confident about their knowledge

Kankirawatana P. Epilepsia 1999;40:497–501
DISCUSSION

• Teacher's attitudes correlated highly with their knowledge
• Those with better knowledge were less likely to have negative attitudes
• Documented by several authors from different countries
• Lack of first-aid knowledge
• Also negative attitudes toward marriage and employment

DISCUSSION

• Studies have found an association with years of experience and female gender
• Turkish study found young teacher's age and male gender predictive of positive attitudes
• Saudi teachers had better knowledge and better attitudes, independent of their educational level
• Teachers in private schools were less tolerant
• Teachers with personal experience of epilepsy had greater knowledge

Aydemir N. Epilepsy Behav 2011;20(2):286-90
LIMITATIONS

• Sample may not be representative of all teachers limiting our ability to generalize
• Study sample is large and included public and private schools
• Representation of all ages, experiences, and equal gender contribution
• Only primary teachers (greater impact on psycho-social development)
CONCLUSIONS

- Primary school teacher's knowledge needs improvements
- Attitudes correlated with their knowledge
- Need focused education and training
- Epilepsy resources should be made accessible
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