Introduction

Several thousands of American veterans are diagnosed with epilepsy. Epilepsy carries a strong social stigma. Twenty-five percent of adults having epilepsy describe social stigma as a result of their epilepsy. It has been generally accepted that educational programs can be beneficial in reducing the stigma of a number of chronic diseases such as epilepsy. Medication non-adherence is the most common reason for seizures in epilepsy patients. To date, there has been no formal epilepsy educational program implemented in the format of an one time, 1-hour seminar. We hypothesize that introduction of a formal teaching module amongst our Houston veteran population will increase epilepsy knowledge and improve awareness in our communities. The goal of this study is to assess the efficacy of this educational program, utilizing a pre and post module questionnaire. The teaching module is in the form of a power point presentation with emphasis on the definition of a seizure, identification of subtle signs/symptoms of seizure, seizure first aid, anti epileptic medication, medication side effects, and seizure precautions.

Methods

This is a prospective study amongst 23 veterans with epilepsy. The educational module is a one hour power point lecture administered by the first author. The efficacy of the educational module is assessed by a questionnaire, a ten item tool with answers graded from 1 through 5. The score of the questionnaire is determined by the number of correct answers. Veterans complete the questionnaire before and two weeks later by phone. The primary outcome measure is to determine a statistically significant difference between the pre and post module scores. Bivariate data analysis of 23 subjects (paired t test) was used to compare proportions of correct response for each question before and after the educational module. Veterans are given a chance to ask questions at the end of the session.

Table 1. Demographics, N=23

<table>
<thead>
<tr>
<th>Average age</th>
<th>Age range</th>
<th>Male</th>
<th>Ethnicity</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>28-82</td>
<td>23</td>
<td>Black</td>
<td>n (%)</td>
</tr>
<tr>
<td></td>
<td>15 (65.2)</td>
<td></td>
<td>White</td>
<td>7 (30.4)</td>
</tr>
<tr>
<td></td>
<td>1 (4.3)</td>
<td></td>
<td>Hispanic</td>
<td>4 (17.4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low</td>
<td>19 (82.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Middle</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
<td>0</td>
</tr>
</tbody>
</table>

Results

The post-module average score was 7.12±2.8 (Mean ± SD), significantly higher than the pre-module score 6.3 ±1.7 (p=0.02) The pre module average score was 6.3 +/-1.7 (Mean+/ SD) and post module score was 7.1 +/-2.8. (p=0.02) In each individual question, the answer for seven out of ten questions improved significantly after the educational module whereas the remaining 3 answers were unchanged. The average confidence score increased from a pre module score of 3.5 to a post module score of 4.5.

Conclusions

A formal epilepsy educational program module increases the knowledge of epilepsy in veteran patients.

This educational program module is easy to administer and cost-effective.

Further studies are needed to validate whether this educational program improves medication adherence and decreases the frequency of seizures.

References


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