



Analyzing depression coping strategies of patients with epilepsy: A preliminary study

Ramon Edmundo D. Bautista*, Philip A. Erwin

Comprehensive Epilepsy Program, Department of Neurology, University of Florida Health Sciences Center/Jacksonville, Jacksonville, FL, USA

ARTICLE INFO

Article history:

Received 24 March 2013

Received in revised form 27 April 2013

Accepted 3 May 2013

Keywords:

Brief-COPE

Coping

Denial

Depression

Epilepsy

Seizures

ABSTRACT

Purpose: To determine whether individuals with epilepsy who are depressed have different coping reactions, such as increased use of disengagement-type coping reactions, compared to those who are not. **Methods:** We surveyed 200 patients with epilepsy and obtained demographic and clinical information. We used the Neurological Institute Disorders Depression Inventory for Epilepsy (NIDDI-E) to determine those patients who had a major depression (NIDDI-E score >15) and administered the Quality of Life in Epilepsy-10 Inventory (QOLIE-10), Beliefs About Medicines Questionnaire-Specific, Sheehan Disability Scale, a screening question for health literacy ("How confident are you filling out medical forms by yourself?"), and the Brief Coping with Problems Experienced (Brief-COPE). Using univariate analysis, we determined those demographic and clinical variables that were associated with depression. We also determined the coping reactions more frequently utilized by individuals with depression, and using multivariate analysis, determined whether those coping reactions retained statistical significance. We performed subgroup analysis of depressed epilepsy patients to determine whether coping reactions they preferentially utilized were associated with seizure frequency and quality of life.

Results: Seventy-one patients had a major depression while 128 did not. On univariate analysis, not driving, not working, higher seizure frequency, experiencing convulsions, poorer quality of life, and higher disability scores were significantly associated with major depression. These individuals used denial more often as a coping reaction. On multiple linear regression, the association between the use of denial and being depressed retained statistical significance. The mean denial coping scores were higher among depressed patients with more frequent seizures. However, this did not reach statistical significance.

Conclusion: Individuals with epilepsy who have a major depression utilize denial more often as a coping reaction. Realizing this is of value to caregivers as they help patients deal with their stressful situation. This also provides additional impetus to more effectively and aggressively treat depression in the epilepsy population.

© 2013 British Epilepsy Association. Published by Elsevier Ltd. All rights reserved.

1. Introduction

Epilepsy affects over one million people in the United States (U.S.). Hauser and colleagues estimate an epilepsy point prevalence of up to 1% and a lifetime prevalence as well as a cumulative incidence of up to 4% in the U.S.^{1,2} In a recent study, the Centers for Disease Control, analyzing data from the 2010 National Health Interview Survey, indicated that 1% of adults in the U.S. have epilepsy.³

Depression is one of the most prevalent psychiatric comorbidity encountered in patients with epilepsy.^{4,5} According to Tellez-Zenteno and colleagues, there is a 17.4% lifetime prevalence of a major depressive disorder in the epilepsy population compared with 10.7% in the general population.⁶ In a survey of over 4000 adults in the U.S. in 2004, 2.6% were informed by their healthcare provider that they had a seizure disorder/epilepsy. These individuals were 2.5 times more likely to have a self-reported depression during the previous year and 2.3 times more likely to have self-reported anxiety.⁷

Among the general population, the symptoms of depression are vast, and include but are not limited to, appetite changes, anhedonia, decreased energy, and suicidal ideations.⁸ Evidence demonstrating that depression causes significant disease burden is well-established.⁹ Across several medical conditions, the severity of co-existing depression adversely affects morbidity and mortality, making it

* Corresponding author at: Department of Neurology, University of Florida HSC/Jacksonville, 580 West Eighth Street, Tower One, Ninth Floor, Jacksonville, FL 32209, USA. Tel.: +1 904 244 9190; fax: +1 904 244 9493.

E-mail address: ramon.bautista@jax.ufl.edu (R.E.D. Bautista).

important then to treat both the primary disease as well as coexisting depression.^{10,11}

In the epilepsy population, coexisting depressive symptoms leads not only to a substandard quality of life, but can also predict poorer seizure control following medical intervention.¹² In turn, poor seizure control also predicts failure of other treatments.¹³

Coping strategies consist of behaviors, primarily management and problem-solving techniques, that are designed to reduce patient burden and are often implemented to manage stressful situations.¹⁴ Various positive strategies may incorporate spirituality as well as emotional support from friends and family, the utilization of distracters, or meditative techniques. On the other hand, negative coping reactions may also be utilized, including denial, self-blame, or even alcohol or drug use.

These various coping styles can also be categorized as being either problem- or emotion-focused. Problem-focused techniques, such as planning, are those that actively manage stressors. In contrast, emotion-focused coping strategies, such as substance abuse, are used in an attempt to avoid dealing directly with stressful situations and often lead to patient denial and avoidance.^{15,16}

In other disease states such as heart failure, it has been shown that maladaptive coping mechanisms such as denial and disengagement are encountered more often among patients who are depressed.¹⁷ What is not known is whether depression influences coping strategies across the epilepsy population.

In this study, we surveyed epilepsy patients at a Level 4 epilepsy center in Jacksonville, Florida, USA, to determine the coping mechanisms utilized by those with depression, and compared these with the coping reactions used by patients who were not depressed. The coping mechanisms employed by patients with epilepsy and depression have not been previously studied and needs to be determined for several reasons. First, it is important to know whether being depressed is associated with unhealthy coping reactions; and if so, whether this may provide one explanation for the poorer seizure control and inferior quality of life encountered in this subset of epilepsy patients. Knowing the coping reactions employed by epilepsy patients who are depressed can also be of value to caregivers as they help patients deal with an already stressful situation. Above all, realizing that depression is associated with unhealthy coping reactions should provide additional impetus to more aggressively and effectively manage this often-encountered co-morbidity in the epilepsy population.

2. Methods

This study is an extension of a previous work that was detailed in an earlier publication about the coping strategies of individuals with epilepsy.¹⁸ Two hundred continuous individuals seen at the Comprehensive Epilepsy Program-UFHSCJ outpatient clinics were surveyed for this study. These patients were adults with a diagnosis of localization-related (partial) epilepsy who had no history of psychogenic, non-epileptic seizures. Patients were their own primary caregivers and could complete the survey without assistance.

The survey contained different demographic and clinical variables that included age, gender, marital status, ethnicity (Hispanic versus non-Hispanic), race, educational attainment, annual household income, driving status, disability status, employment status, age at seizure onset, seizure duration, seizure frequency, presence of convulsions, occurrence of waking seizures, seizure etiology, number of AEDs (antiepileptic drugs) they are currently taking, and severity of side effects from their current AED regimen. Various psychosocial instruments in the survey were also utilized. These included the Neurological Institute Disorders Depression Inventory for Epilepsy (NIDDI-E),¹⁹ Quality of Life in

Epilepsy-10 Inventory (QOLIE-10),²⁰ Beliefs About Medicines Questionnaire-Specific (BMQ-S),²¹ Sheehan Disability Scale (SDS),²² and a screening question for health literacy (“How confident are you filling out medical forms by yourself?”; this question was answered using a 5-point Likert scale with responses ranging from “extremely” to “not at all”). This health literacy screening question was chosen because it correlated well with overall Short Test of Functional Health Literacy Assessment (STOHFLA) scores in detecting patients with limited health literacy (AUROC 0.82).²³ We also administered the Brief Coping with Problems Experienced (Brief-COPE) Inventory and used disposition-type questions to assess the subjects’ coping strategies.^{24,25}

For this study, we determined whether depression was significantly associated with particular coping strategies among individuals with epilepsy. We defined individuals with depression as having a score >15 on the NIDDI-E as this has a sensitivity of 81%, specificity of 90%, and a positive predictive value of 62% for diagnosing a major depression.¹⁹

The Institutional Review Board of the University of Florida Health Sciences Center/Jacksonville (UFHSCJ) approved this study.

2.1. Statistical analysis

Statistical analysis was performed using SPSS 15.0™ at a 5% level of significance using a 2-tailed test. The null hypothesis was that depressed and non-depressed did not significantly differ across the various demographic, clinical, and psychosocial parameters measures, nor did they differ according to coping strategies employed.

We enrolled 200 patients for the study. Based on this, the categorical comparison of substrata (i.e. comparing coping strategies of depressed and non-depressed subjects) had a power of about 80% for detecting differences of a moderate effect size. Comparisons and analysis using interval data also had sufficient power to detect operationally meaningful differences even within substrata.

We first determined whether depressed and non-depressed patients differed from one another across various demographic, clinical, and psychosocial, non-coping variables. We tested for the equality of means for interval variables using ANOVA (transforming certain data to satisfy the assumptions of ANOVA). We tested ordinal variables using Mann Whitney and analyzed categorical data with chi-square statistics. Adjusted standardized residuals (ASR) were used as the post hoc comparison method.

We then determined whether depressed and non-depressed individuals differed across the various coping strategies using selected items from the Brief-COPE whose question-pairs had good internal consistency based on the earlier study (Cronbach’s alpha of at least 0.5). Included were the coping reactions of substance abuse, religion, humor, instrumental support, acceptance, denial, and emotional support, positive reframing, and planning. Active coping, self-blame, behavioral disengagement, venting and self-distraction were excluded from analysis due to poor internal consistency. We also determined whether depressed and non-depressed individuals differed on the two main coping clusters we earlier identified using Principal Component Analysis: Factor 1 (engagement-type coping strategies) and Factor 2 (disengagement-type coping strategies).¹⁷

Multiple linear regression (MLR) was performed to determine whether coping strategies that distinguished depressed and non-depressed patients on univariate analysis retained significance in the simultaneous context of the other significant demographic, clinical, and psychosocial variables.

We also performed subgroup analysis of depressed individuals with epilepsy in order to determine whether coping strategies that were preferentially utilized in this subgroup were associated with

Download English Version:

<https://daneshyari.com/en/article/10309719>

Download Persian Version:

<https://daneshyari.com/article/10309719>

[Daneshyari.com](https://daneshyari.com)