Reviewer’s report

Title: The analysis of relationship between selected sociodemographic factors and disorders of speech organs in Parkinson's patients

Version: 0 Date: 25 Jul 2017

Reviewer: Elmar Nöth

Abstract

Assessment. Results: The study revealed significant association between the functionality of

Background

with age[12]. Other studies of voice loudness in PD patients have proved that there is an

-> Do you have a reference?

They are also less likely to display deterioration of cognitive functions. Hence, it can be assumed that the quality of articulation in well-educated PD patients will be different from that in their less educated counterparts.

-> Do you have a reference?

Could it be that the deterioration is the same, just that it starts at a higher onset.

Material and method.

The study involved 92 patients diagnosed with idiopathic PD, 33 of whom were women (35.9%), and 59 men (64.1%), aged between 50 and 86 (mean age 65.2). 55 (59.8%) were big city dwellers, 24 (26.1%) lived in towns and 13 (14.1%) in villages. There were 17 persons who had
a university education, 28 (30.4%) completed secondary schools, 30 (32.6%) were trade school graduates and the remaining 17 (18.5%) received a primary education.

> Why can you assume that this corpus is representative? What were the inclusion/exclusion criteria? Was there a correlation between education and place of living?

FDA[14], an objective test for studying dysarthria was used. FDA is also applied for the

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Statistical analysis appropriate. The statistical significance was adopted at two-side P value < 0.05. All statistical

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Results

Table 1. The association between age and particular speech determinants in study group.

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I really have trouble with this table. A table should be understandable without the text, i.e. abbreviations should be explained or referred to. What is H, what is the Mean? Is it age? How come the d Rating for cough is from patients with an age of 14.5? Why do you display the mean with 2 positions after the decimal point? How many patients in each group?

more efficient motion of the lower jaw in speech (0.0002; 0.0252; 0.0105; 0.0333

> more efficient motion of the lower jaw in speech (p=0.0002; 0.0252; 0.0105; 0.0333

Table.4 The link between FDA sections and level of education. Data are presented as number of cases.

> Well, if intellectuals start at a higher level (because they e.g. talk more in their profession, then their onset is higher; thus the deterioration could be comparable, just starting at a higher level of competence)
Discussion

Other studies, however, did not confirm the findings[7]. Also, an analysis of similar

Our study however revealed no correlation association between age and the performance of the speech organs.

-> I don't think that this is a good corpus for looking at this question

We carried out the research in an attempt to establish the impact of educationa

-> We carried out the research in an attempt to establish the impact of educational

We were also the first to undertake research into establishing the link between the efficiency of the speech organs in PD patients and their place of residence. Our study found that city dwellers displayed materially better performance of soft palate while eating, which probably results from the fact that those patients tend to take a better care of proper verbal expression, articulation, or are better educated.

-> Well, the guess about education could be checked. It could also be that they have better access to medical treatment and medication control, just because medical care is better in urban areas.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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Please indicate the quality of language in the manuscript:

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