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Attitudes of employees of service and trading companies towards people with epilepsy and their professional activity in Poland

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ABSTRACT

Purpose: Attitudes are shaped by the influence of the media and fixed social beliefs. Lack of interaction with people suffering from epilepsy may result in an inaccurate perception of this particular group. The aim of this study was to examine attitudes towards people with epilepsy as potential colleagues.
Method: A group of 187 employees, employed in medium sized service and trading companies was analyzed. Each employee completed a questionnaire divided into three attitude components: knowledge, emotions and behaviour. Each of these attitude subscales was analyzed separately. The results were verified with statistical tests.
Results: The lowest mean score was obtained by respondents on the knowledge subscale, a higher score was obtained on the emotions subscale whilst the highest on the behavioural subscale. Over half of respondents expressed an accepting attitude towards people with epilepsy. According to 67% of respondents, people with epilepsy have equal possibilities as far as access to work is concerned. Education had statistically significant scores within the emotions component. No correlation was found between any of the declared attitudes of respondents and their seniority, age or sex. Familiarity with a person with epilepsy translated into a higher level of knowledge and a positive perception of a patient as a possible future colleague.
Conclusions: To improve the employment situation of people with epilepsy, knowledge among workers should be increased. This should be done at various levels of employment to ensure that the risks of employing a person with epilepsy are more adequately assessed and mitigated if possible.

1. Introduction

Epilepsy is one of the most frequently diagnosed neurological disorders. It is estimated that there are approximately 50 million people with epilepsy worldwide. In the developed world, 40–70 new cases per 100,000 people are diagnosed every year.[1,2] In Poland there are currently 425,000 patients. According to WHO estimates, the number of people with epilepsy in Europe alone will go up to about 8 million by the year 2030.[3] The latest studies report a gradual improvement of attitudes towards people with epilepsy.[4–6] However, they claim people with epilepsy still have to struggle with many myths and mistaken beliefs concerning their condition and abilities.[7–9] Many adults with epilepsy point out that they feel the job market places restrictions and limitations on their economic activity. Analysis of research conducted around the world shows that there is a substantial number of people with epilepsy who are unemployed or have serious problems finding and staying in employment at a level reflecting their education and qualifications.[2,7,8,10–12] In the United States 39% of the surveyed patients work full time whilst 33% remain unemployed.[2] In Korea, unemployment among people with epilepsy is 31% and is five times higher than the national average.[13] A study conducted among people with epilepsy living in 10 different European countries revealed that 26% of respondents admitted that epilepsy had an effect on their professional career.[7] Due to their disorder many felt they were subject to many professional barriers created by their colleagues and employers.[8,10–12,14–17]

The aim of this study was to investigate the attitudes of employees from various workplaces towards people with epilepsy, including their views on employing and working with them.

2. Methods

The research was conducted between September and October 2010 in three medium sized service and trading companies in the city of Poznań. To take part in the research study, workers had to

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agree to complete a questionnaire and were also required to give an affirmative answer to the question 'Do you know the characteristics of epilepsy?'.

2.1. Research management

When planning the research, it was decided it would be conducted in the city of Poznań in medium sized workplaces (20–200 employees), where the scope of work is varied and potentially accessible to people with epilepsy.

Using this criterion, five workplaces were selected. Agreement to carry out our research was not granted in two of these workplaces. In the remaining three, 40 employees did not agree to take part. We finally distributed 210 questionnaires but only 205 were completed correctly. Eighteen participants gave a negative response to the qualifying prerequisite question and hence were excluded from further participation.

2.2. Study population

The participants consisted of 187 employees aged 20–60. All of the 187 workers were divided into one of three subgroups based on the nature of their employment. The first group, white-collar workers, accounting for 62 (33.15%) of the workers were people responsible for office work whose main responsibilities included data analysis and working with computers e.g. accountants. The second group, named white-blue-collar workers and numbering 63 (33.7%), were workers who combined conceptual and physical work e.g. a storekeeper or a trader. The third group, blue-collar workers, consisting of 62 people (33.15%) were workers in physical jobs such as cleaners or car mechanics. Four seniority divisions were created: less than 10 years (90/187, 48.1%), 10–20 years (52/187, 27.8%), 21–30 years (26/187, 13.9%), more than 30 years service (19/187, 10.2%). (Table 1) The majority of respondents (88/187, 47.1%) had completed secondary education (graduated from technical secondary or high school), 64 (34.2%) University degree whilst 35 (18.7%) had vocational skills. The questionnaire was filled in by a comparable number of women (99/187, 52.9%) and men (88/187, 47.1%).

2.3. Background measurement

The research method was a diagnostic survey and the study instrument was a questionnaire of attitudes and included respondent demographics. It was compiled after a literature review.[7,12,18–25] The questions in the questionnaire were divided into three separate components corresponding to three different aspects of attitude: knowledge, emotions and behaviour. The questions were assigned to these components separately and in order to carry out the analysis three corresponding subscales were created under the same names. The analysis of the results was based on these subscales. The questionnaire predominantly consisted of closed questions with additional six semi-open questions in which respondents could clarify their answers. Each answer in the closed question could score 0–2 points and in the semi-open question 0–1 point. Ultimately, a participant could score 0–24 points in the knowledge component, 0–17 in the emotions component and 0–13 points in the behaviour component. The scores were translated into a grading scale to standardize the interpretation of the results. The scale consisted of 6 possible grades: insufficient (2.0), sufficient (3.0), quite good (3.5), good (4.0), more than good (4.5), and very good (5.0). The grade *sufficient* for example, was given to a respondent who obtained 51% of the maximum score within a particular questionnaire subgroup. The grade *very good* was given to a respondent who scored at least 90%, whilst the grades *more than good*, *good* and *quite good* were awarded to respondents who scored at least 80%, 70% and 60%, respectively. The questionnaire was assessed for reliability and validity and a factor analysis was performed to check the criterion validity of the separate questions to confirm whether they were appropriate to each of the given domains (knowledge, emotions, behaviour). Questionnaire reliability was determined with the use of α-Cronbach with knowledge valued at 0.80, emotions 0.73 and behaviour 0.75. The inclusion of respondents' particulars on the questionnaire allowed for the collection of key group demographics such as age as well as the nature of their employment and seniority.

Table 1
The studied group characteristics.

Criteria	Women		Men		Total	
	N = 187	%	*N* = 99	%	*N* = 88	%
Age (years)						
20–30	33	33.3	30	34.1	63	33.7
30–40	33	33.3	30	34.1	63	33.7
40–50	12	12.1	9	10.2	21	11.2
50–60	21	21.2 19	21.6	40	21.4	
Seniority (years)						
0–10	48	48.5	42	47.7	90	48.1
10–20	27	27.3	25	28.4	52	27.8
20–30	14	14.1	12	13.6	26	13.9
>30	10	10.1	9	10.2	19	10.2
Education						
Vocational	18	18.2	17	19.3	35	18.7
Secondary	47	47.5	41	46.6	88	47.1
University degree	34	34.3	30	34.1	64	34.2
Health						
Healthy	84	84.8	75	85.2	159	85.0
With health problems	15	15.2	13	14.8	28	15.0
Total	*N* = 99	53%	*N* = 88	47%	*N* = 187	100%

2.4. Statistical analysis

Statistical analysis was conducted with the use of Statistica 10.0 Pl (StatSoft) statistical package. Comparative analysis was done with the use of appropriate nonparametric tests: *U* Mann–Whitney for comparing two groups and Kruskal–Wallis test for comparing more than two groups. Where significant differences were observed Dunn's post hoc test was additionally performed in order to find homogenous groups. A correlation analysis for quantity variables was performed with the use of Spearman's rank correlation coefficient its significance was checked with a *t*-student test. All tests were analyzed at the significance level $\alpha = 0.05$. Subscales were analyzed with respect to age, sex, education level, nature of employment, seniority and knowledge of a person with epilepsy.

3. Results

3.1. General description

Within the study group, the majority of respondents were aged 20–40 (127/187, 67.9%), had a seniority of more than 10 years (90/187, 48.1%) and had good health (159/187, 85.0%). Three subscales were taken into consideration while assessing reported attitudes (Fig. 1): knowledge (0–24 points), behaviour (0–13 pts), emotions (0–17 pts). The lowest mean score of points and, at the same time, the worst grade was obtained by respondents on the knowledge subscale (3.0). Respondents scored higher on the emotions and behaviour subscales scoring 3.5 and 4.0, respectively.

Over half of respondents (59.9%) had witnessed an epileptic seizure, 55.1% (103/187) of the group knew someone with epilepsy.