IMPROVEMENT IN KNOWLEDGE OF DIAGNOSTIC CRITERIA OF NARCOLEPSY AMONG NEUROLOGISTS FOLLOWING PARTICIPATION IN AN ONLINE MEDICAL EDUCATION ACTIVITY

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RESULTS

The 123 neurologists who completed pre- and post-assessment questions were included in the data analysis, which showed a 66% relative improvement in the number of neurologists who correctly answered all questions. A relative effect size was calculated (0.16; P < .05; Figure 2) after participation in the educational intervention. (Figure 3) Specific areas of improvement included:

- Use of the ICSD-3 criteria to diagnose a patient with type 1 narcolepsy (relative pre-post percent improvement: 60%; P < .05; Figure 2)
- Use of the DSM-5 criteria to diagnose a patient with narcolepsy (relative pre-post improvement: 51%; P < .05; Figure 4)

In addition, tools such as the Swiss Narcolepsy Scale are designed to aid in the diagnosis of narcolepsy by identifying symptoms commonly associated with narcolepsy. The percentage of learners identifying symptoms associated with narcolepsy pre-post intervention was 64% (79; P < .05; Figure 5).

INSTRUCTIONAL METHOD

An online educational activity was presented as a 30-minute synchronized video presentation between an expert faculty and the learners.

- The video incorporated synchronized slides and interactivity questions to encourage participation and feedback.
- The content was reviewed in the diagnostic criteria for narcolepsy as outlined in the ICSD-3 and DSM-5.
- For instance, written lines for a program offering a test or tests and questions were made available for self-assessment or printing. In addition, the video was available on the Medscape Education platform, allowing learners to access the slides as well as audio comments and, for learners on mobile devices, for education.

The instructional intervention was online on January 26, 2016, and data were collected through March 22, 2016.

ASSESSMENT METHOD

The effect of the educational intervention was determined using a survey. Each participant’s responses to the questionnaire assessed their educational content pre-assessment were compared with the same participant’s responses to the same questions post-intervention to reflect the difference in their current post-assessment.

- Learning pre-assessment and post-assessment responses from individual participants showed each learner’s knowledge improved post intervention (Figure 6).
- A paired t-test assessed whether the mean pre-assessment score was different from the mean post-assessment scores. McNemar’s test was used to determine changes in responses in individual question pairs.
- "F" values were calculated to both test level 95% confidence intervals to determine significance. A "F" values less than 0.05 were considered statistically significant.
- Cohen’s κ statistic determined the effect size of the intervention. Effect sizes greater than 0.20 consider large differences between 0.20 and 0.40 are medium, and between 0.40 and 0.60 are small.

CONCLUSIONS

Narcolepsy can be a challenging condition to diagnose given its relative rarity among sleep disorders. To that point, data show that little change in awareness has been made in the past decade to improve diagnosis. These results show that educational intervention can provide education that highlights common symptoms associated with narcolepsy. The current educational activity demonstrated the success of a well-rounded educational intervention between two expert faculty in improving awareness of the diagnostic criteria for narcolepsy and the neurologists who interpret them. The activity was designed to provide education that highlights common symptoms associated with narcolepsy and how to properly identify them. The activity was designed to improve diagnostic accuracy.

In conclusion, the activity was designed to improve diagnostic accuracy. The activity was designed to improve diagnostic accuracy.

REFERENCES