Greek teachers' knowledge about attention deficit hyperactivity disorder.

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Abstract

Attention deficit hyperactivity disorder (ADHD) is a neurobiological disorder, which affects about 5.2% of school-aged children worldwide. Children with ADHD present teachers with a special challenge, since they interfere with teaching process and do not respond to typical classroom management techniques. In order to meet this challenge teachers must have accurate, up-to-date, information about the disorder so that they can respond to the needs of the student with ADHD. Studies that have examined teachers' beliefs and knowledge relating to ADHD highlighted the need for providing training to increase Greek teachers' knowledge and understanding of the disorder. Thus, the aims of the present study were: (a) to develop and evaluate brief ADHD training seminar for teachers; and (b) to investigate whether the training format (half-day versus two-day seminar) would have a differential effect on teachers' knowledge about ADHD. A total of 143 teachers formed the two sample groups; Group 1 (n=68) attended a half-day training (5 hours), and Group 2 (n=75) a two-day training (18 hours). Seminar topics included: (a) gaining basic knowledge about the symptoms, causes and natural history of ADHD, (b) understanding the key underlying cognitive deficits of the disorder and their impact on learning and behavior, (c) implementation of specific learning strategies for children with ADHD, (d) benefits and limitations of existing treatment approaches including the pharmacological treatment, and (e) available instruments for teachers that could inform their decision to refer the student to CAMHS for an assessment. A self-report ADHD Knowledge Questionnaire (ADHD-KQ), which covers four domains (clinical presentation, causes, cognitive deficits, interventions) was developed for the purpose of the present study, and was administered pre- and post-seminar. Teachers were generally knowledgeable about clinical presentation of ADHD, with more than 80% of the sample responding correctly to items pertaining to core symptoms. The internal consistency of the total ADHD-KQ scale measured by Cronbach’s alpha coefficient was found to be good (0.89). The alpha coefficients for the sub-scales were acceptable (0.70 for the Symptoms/Diagnosis sub-scale, 0.73 for the Cognitive Deficits sub-scale, and 0.75 for the Intervention sub-scale), except for the Causes sub-scale, which was poor (0.59). In addition, each of the sub-scales showed a significant correlation with the total scales score (range r=0.66 to r=0.79), and there also was significant correlation between the four sub-scales (range r=0.39 to r=0.45). As expected, gaps in knowledge were identified, particularly in the area of causes, pharmacological treatment and cognitive deficits associated with ADHD. The results, using paired samples t tests, showed a highly significant increase in ADHD-KQ total and all sub-scale scores in both groups (p<0.001), indicating an overall improved knowledge about ADHD irrespective of the training format, i.e. half-day versus two-day training seminar. One-way MANOVA revealed significant difference between the two training seminars in mean pre-post difference sub-scale scores considered simultaneously. Subsequent univariate tests of between-subjects effects revealed that the group (training format) had a statistically significant effect on ADHD knowledge of symptoms sub-scale only [F(1,141)=10.46, p<0.01], with those who participated in the two-day training seminar having significantly higher mean pre-post difference scores as compared to teachers who attended the half-day training seminar (p<0.01). The present findings merit replication and, if confirmed in larger samples, have important implications for undergraduate curriculum development and training of practicing teachers, so that to overcome specific knowledge gaps and misconceptions with regards to ADHD. Future study should incorporate the use of classroom interventions and teaching strategies for students with ADHD, before and after brief training seminar, for a more thorough evaluation of its effectiveness.