Sleep Disturbances in Singaporean Children with Attention Deficit Hyperactivity Disorder

Dear Editor,

I read with interest the published article by Choon Guan Lim et al entitled "Sleep Disturbances in Singaporean Children with Attention Deficit Hyperactivity Disorder".¹

They surveyed some of the sleep problems in children with Attention Deficit Hyperactivity Disorder (ADHD) prior to and during treatment. The sample contained 114 child and adolescent patients with ADHD and 60 children were recruited from among all new patients who attended the clinic. They named the second group as normal patients. Sleep problems were detected and evaluated by the 6 items of parent-reported Child Behaviour Checklist (CBCL). In addition, 54 patients were interviewed and their charts were reviewed. They reported that children with ADHD sleep less than the control group. "Trouble sleeping" is more common in girls than boys with ADHD. Moreover, frequency of sleep disturbances in children with ADHD is lower prior to treatment with medications.

I think there are a few points that should be noted before interpretation of the results. First of all, the CBCL and its subscales have enough validity and reliability. It has been used for assessment of sleep problems in a previous published study.² However, further explanation would be constructive for validity and reliability of each item. For example, the validity and reliability of the item for "Trouble sleeping" is helpful.

Secondly, the study concluded that the children with ADHD sleep less than the control group. In other words, this sentence means that the children of the control group sleep more than ADHD children. Even so, the control group does not sleep as much as the children with ADHD. On the other hand, item 77 of CBCL is "Sleeps more than most kids during day and/or Night". The frequency of the responses to this item was not different between the 2 groups [odds ratio (OR), 1.63; 95% CI, 0.55 - 5.81] (refer to Table 4 of original paper). It means that the children with ADHD and

the control group are not different regarding sleep duration. It seems that these 2 results are contradictory and needs more clarifications.

It was then concluded that there is a "significant difference in the prevalence of sleep complaints evaluated through the CBCL between patients with and without ADHD who attended the clinic". In addition, the result section states that sleep problems are less common in ADHD children than those in the control group. The ORs of most of the sleep problems are greater than 1 (Table 4 of original paper). However, the 95% confidence interval for most of the ORs included an OR of 1. It means that there were no differences between the 2 groups, except for the item of "sleep less". So, despite the mean total score difference between the 2 groups, it is confusing that it can be concluded that the sleep problems are more common in ADHD children than the control group. A further explanation and interpretation of the OR will be valuable.

REFERENCES

- 1. Lim CG, Ooi YP, Fung DS, Mahendran R, Kaur A. Sleep disturbances in Singaporean children with attention deficit hyperactivity disorder. Ann Acad Med Singapore 2008;37:655-7.
- Johnson EO, Chilcoat HD, Breslau N. Trouble sleeping and anxiety/ depression in childhood. Psychiatry Res 2000;94:93-102.

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