JCSM
Journal of Clinical Sleep Medicine

COMMENTARY

Does Anyone In Your Family Have Obstructive Sleep Apnea?

Comment on Puri et al. Pediatric positive airway pressure adherence in obstructive sleep apnea enhanced by family member positive airway pressure usage. *J Clin Sleep Med* 2016;12(7):959–963.

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Given the high prevalence of obstructive sleep apnea (OSA) in the community in both adults and children, it is perhaps not surprising that pediatricians are seeing more children who have a parent diagnosed with OSA. A study in the USA found that OSA was at least 1.5 times as likely in first-degree relatives of a person with OSA, including children.[1] In some cases of pediatric OSA, the referral may even be precipitated by parents noticing symptoms in their child similar to those they experienced themselves. Although adenotonsillectomy is first-line treatment for pediatric OSA, continuous positive airway pressure (CPAP) is used for those with residual OSA after surgery, or for those whom surgery is contraindicated.[2] CPAP is highly effective in children, but similar to adults, benefit is limited by poor adherence to therapy. Perhaps surprisingly, until now there has been a paucity of literature examining the effect of having a parent on CPAP for OSA on childhood CPAP adherence. In this issue of the *Journal of Clinical Sleep Medicine*, Puri et al. begin to fill this knowledge gap and examines the interesting issue of the impact of having a household member on CPAP on CPAP adherence in a child.[3] Parental CPAP use may potentially affect uptake of CPAP for their child, regularity of use, and hours of use on days used. It is attractive to think that the role model of a parent on CPAP has a positive influence, and indeed that was the finding of Puri et al. Children with a household member on CPAP used CPAP for about an hour longer per night than those without such a role model. Uptake of CPAP and nights CPAP was used did not differ statistically between the groups, but the direction of effect was towards a positive influence of a household member on CPAP. The authors did not directly compare objective adherence of each family member on CPAP with that of the index child, nor examine the impact of a parent who has been prescribed CPAP but does not use it, and these are important avenues of enquiry in the future.

Does this help us in clinical practice? We know that a positive parental attitude and commitment to therapy has a significant impact on CPAP adherence in children.[4–6] Clearly a parent with a diagnosis of OSA who has decided to embark on CPAP therapy, and in fact uses the treatment, likely selects those who have either felt benefit from the treatment or believed it is beneficial to their health, or both. Transferring those beliefs to their child, and modelling positive attitudes and consistent use seems to have a measureable effect, leaving aside all the other factors that might influence a child's CPAP use (e.g., the child's age,[6–8] maternal education,[7] aspects of family functioning[9]). Conversely, although not addressed in this study, a parent who has been diagnosed with OSA and prescribed CPAP but who does not use it, would seem likely to have the opposite effect. Addressing these biases, preconceived ideas and possible lack of education explicitly at the time of CPAP initiation for the child may be helpful in this context. Puri et al. advocate a "family-centered" approach to therapy, with careful history taking regarding symptoms, diagnosis, and treatment of OSA in close family members. This approach may preempt issues and allow clinicians to address barriers to CPAP use in a parent as part of the therapy for their child. Identifying family members as yet undiagnosed also has potential flow on effects to the child's family and the community as a whole. Identifying that treatment-resistant hypertension in a parent is secondary to undiagnosed OSA, for example, may have powerful effects on a family's health-related future. Pediatricians take the parents' health and welfare into account as a matter of course in their daily work. For example, making an assessment of a mother's mental health when seeing an infant with disturbed sleep, or considering the impact on a parent's employment of frequent prolonged admissions to hospital for their child. Thinking about the myriad of potential impacts of having a parent with OSA, diagnosed or not, treated or not, should be added to this treatment paradigm. Perhaps even more so, enquiry into the sleep of a patient's children might be an uncommon avenue of enquiry for an adult physician, but may yield information with substantial health benefits for that child given the potential long term effects of OSA in children. We therefore support the "family-centered" approach to OSA recommended by Puri et al. As pediatric and adult sleep physicians we can all take a multi-generational approach and think to ask "Does anyone in your family have obstructive sleep apnea?"

CITATION

Nixon GM, Hamilton GS. Does anyone in your family have obstructive sleep apnea? *J Clin Sleep Med* 2016;12(7):941–942.

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SUBMISSION & CORRESPONDENCE INFORMATION

Submitted for publication June, 2016
Accepted for publication June, 2016
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DISCLOSURE STATEMENT

A/Prof Nixon has received equipment to support research from Masimo Corporation. A/Prof Hamilton has received equipment to support research from Resmed, Philips Respironics and Compumedics Ltd.