Positive Airway Pressure Adherence: What’s Missing in the Formula?

By Abdullah Alismail, M.S, RRT-NPS, SDS, Assistant Professor, Loma Linda University

Positive Airway Pressure (PAP) adherence is an important priority in sleep medicine. Several studies looked at PAP adherence prediction after the first night of study, at one-month, or six months. However, the primary issue is the need for evaluation of long term adherence. There is a lack of literature studying the use of PAP beyond 6 months and limited understanding of the actual obstacles to achieving long term adherence. Krakow B et al (2016) investigated the understanding of the term “adherence” versus “use” in their retrospective study. The authors suggested it might be better to focus on the word “usage” rather than “adherence” as it offers much greater advantage in assessing patient benefit. Part of this is related to how insurance companies interpret patient usage of PAP therapy as they have a certain percentage that patients must achieve for insurance payment of PAP. The authors illustrate their point by comparing PAP usage to blood glucose in diabetic patients. For instance, if a diabetic patient does not achieve the required glucose threshold, should they get coverage for their diabetic medications? This example forces us to think about how we approach our patients as healthcare professionals and the importance of an interdisciplinary approach (including insurance companies). Other modalities more recently found to improve suboptimal adherence to PAP therapy include: Nasal mask sizes, adding humidity to CPAP therapy, and/or add-on of chin strap.

With the rise of technology “solutions” to make things easier for the consumer, several companies and professionals are utilizing technology as a method to solve the adherence problem. An excellent editorial and commentary response in the Journal of Clinical Sleep Medicine discussed this issue. Quan SF et al (2012) reviewed two studies that implemented and proposed the use of innovative technology to potentially improve patient adherence. However, the response and argument was that a sole focus on innovative technology may not be the sole solution. One reason is that several studies have not shown any significant difference in PAP adherence improvement for both adults and children. Novel modes of PAP and related technology have also failed to improve adherence to PAP therapy. Another barrier to adherence may be PAP accessibility. There have not been any studies to date discussing Durable Medical Equipment (DME) companies and their role in PAP adherence. Studying this gap should provide further understanding of the challenges faced by DME companies, sleep professionals, and patients. Understanding and applying the concept of inter-professional care seems to be a missing key factor in the formula from diagnoses to expectation of high adherence levels. A qualitative study conducted by Prasad PS et al (2013) documented the challenges that patients experience while undergoing PAP therapy. Several themes and theories arose from their findings, including: Family structure and organization, routine communications, stress, and benefits of PAP usage. This study provided several grounded theories for future studies to better understand the challenges of PAP therapy. Thus, there is a huge opportunity for researchers to investigate this topic from a qualitative design perspective regarding the role of DME providers in interprofessional care.
References:


