Type: Research Paper

Subject: Scientific Writing

Subject area: Nursing

Education Level: Masters Program

Length: 1 pages

Referencing style: APA

Preferred English: US English

Spacing Option: Double

Obstructive sleep apnea and cardiovascular risk

Instructions: this is an introduction to a research paper only. it needs introduction, purpose and problem statement. it will be a very short paper. my picot question is: in obstructive sleep apnea patients (p), how does the use of cpap (i) compared to the not use of cpap (c), affect the cardiovascular system (o) within one year of the treatment (t)?

Focus: it needs introduction, purpose and problem statement. it is not a full research paper.

Structure: i did select some articles that it can be used. please use any primary source, peer-reviewed source, scholarly paper.

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Course

Instructor

Date

Introduction

Patients suffering from obstructive sleep apnea (OSA) tend to develop recurring partial of full airway collapse while sleeping which often result to nocturnal hypoxia-normaxia cycling and are identified to be at an increased risk of developing cardiovascular disorders (Tietjens et al., 2019).The number of apneas and hypopneas indexed every hour of sleep in collaboration with intermittent hypoxia is an indication of an elevated risk of cardiovascular disorder; hence their prevention is the primary goals of OSA intervention (Bock et al., 2021). Researchers have indicated that continuous positive airway pressure (CPAP) is the most effective and standardized treatment method for OSA and when effectively employed, it mitigates the apnea-hypopnea index and hypoxemia (Labarca et al., 2020). Therefore, it is reasonable to predict that CPAP has the potential to reduce the risk of developing cardiovascular disease among patients with OSA.

Purpose

The purpose of this paper is to evaluate the effectiveness of continuous positive airway pressure (CPAP) compared to no- continuous positive airway pressure (NCPAP) among patients with obstructive sleep apnea affect the cardiovascular system within a period of one year of treatment (Labarca et al., 2020).

Problem Statement

A very common cause of illness and death in the USA as well as globally remains to be cardiovascular disease (CVD) (Tietjens et al., 2019). In line with the development of emerging and effective CVD treatments such as coronary artery disease (HF), an emphasis has been placed on modifying primary and secondary preventative cardiovascular risk factors, suggestive of an

emerging understanding of CVD as a systemic process with a range of causes. Randomized studies have failed to demonstrate that sleep apnea treatments enhance hard cardiovascular effects in confirmed patients despite the evident connection between CVD and OSA (Senaratna et al., 2017). This subject remains uncertain, nevertheless, since randomized trials are limited in number and design and emphasize the need for further research.

References

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Labarca, G., Dreyse, J., Drake, L., Jorquera, J., & Barbe, F. (2020). Efficacy of continuous positive airway pressure (CPAP) in the prevention of cardiovascular events in patients with obstructive sleep apnea: Systematic review and meta-analysis. *Sleep medicine reviews*, *52*, 101312.

Senaratna, C. V., Perret, J. L., Lodge, C. J., Lowe, A. J., Campbell, B. E., Matheson, M. C., ... & Dharmage, S. C. (2017). Prevalence of obstructive sleep apnea in the general population: a systematic review. *Sleep medicine reviews*, *34*, 70-81.

Tietjens, J. R., Claman, D., Kezirian, E. J., De Marco, T., Mirzayan, A., Sadroonri, B., ... & Yeghiazarians, Y. (2019). Obstructive sleep apnea in cardiovascular disease: a review of the literature and proposed multidisciplinary clinical management strategy. *Journal of the American Heart Association*, *8*(1), e010440.