



▼ POST GRADUATES ABSTRACTS

PG - 91 : EFFECTIVENESS OF NELSON'S STEAM INHALER VS ELECTRICAL STEAM INHALER ON RESPIRATORY OUTCOME AMONG PATIENTS WITH LOWER RESPIRATORY TRACT DISORDERS ADMITTED IN MGMC&RI, PUDUCHERRY – A COMPARATIVE STUDY.

Surendran S R M.Sc - II Yr,

Department of Medical Surgical Nursing,

Kasturba Gandhi Nursing College, Puducherry

Background: Lower Respiratory Tract Disorders are a persistent and a pervasive health problem which impose an enormous burden on the society. Steam Inhalation using Nelson's Inhaler serves as one of the major treatment modality in reducing secretions among these patients. Nelson's Inhaler also have certain demerits as well. So, the Electrical Steam Inhaler which is a newly manufactured inhaler in the Medical Industries. Since, it is the new method of inhalation and it will not have the demerits of Nelson's Inhaler, this study was used to prove the effectiveness of Electrical Steam Inhaler and can be implemented in the hospital. **Aim:** The main aim of this study is to compare the effectiveness of Nelson's Steam Inhaler Vs Electrical Steam Inhaler on Respiratory Outcome among patients with Lower Respiratory Tract Infections admitted in MGMC&RI, Puducherry.

Materials and Methods: Quantitative research approach was used for this study. Pre-test and Post-test design with two comparison treatments was used for this study. 80 samples (40 in Group I and 40 in Group

II) were selected using convenient sampling technique. Pretest was done for both groups using Demographic Variables and Assessment of the Respiratory Outcome. Steam Inhalation was given through Nelson's Steam Inhaler for Group I and Steam Inhalation using Electrical Steam Inhaler in Group II (2 times a day for 5 days). Respiratory Outcome was assessed during the Posttest using Respiratory Rate, Pulse Oximetry, Peak Expiratory Flow Rate, Modified Borg Dyspnea Scale and Sputum Amount).

Results: Steam Inhalation using Nelson's Steam Inhaler and Electrical Steam Inhaler were effective on Respiratory Outcome in both group I and group II. While comparing the effectiveness of Steam Inhalation using Nelson's Steam Inhaler and Electrical Steam Inhaler, according to Wilcoxon test the mean rank of group I and group II was -4.674 and -4.831 respectively. It was statistically significant at $p > 0.001^*$. It indicates that there is a variation in the respiratory outcome in Group II than group I.

Conclusion: The use of Electrical Steam Inhaler has the better experience in handling and makes the procedure easier comparing to the use of Nelson's Steam Inhaler. Hence, The Electrical Steam Inhaler can be the best

of its kind among Inhalation Devices. This Newer Inhalation Device can save the precious time of the Nursing Fraternity and leaves a way for nurses to utilize those time Essential Patient Care.