AN OBSERVATIONAL STUDY TO ASSESS THE PERFORMANCE OF STAFF NURSES REGARDING NEBULIZATION PRACTICES IN SELECTED HOSPITAL, LUDHIANA, PUNJAB

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ABSTRACT

The present study was conducted to identify the performance of staff nurses regarding nebulization with a view to find out deficit skills and to develop a protocol for nebulization. Conceptual framework of the present study was based on three stage model Fitts and Posner (1967). Literature related to nebulization was retrieved. The e areas selected for the study were child care areas of Christian Medical College and Hospital, Ludhiana, Punjab. Observational approach was used in the study. Sample was selected by purposive sampling method for each subject three observations were done, time duration of each observation was 20 to 25 minutes. Structured Questionnaire for assessing Knowledge and observational checklist for assessment of performance was used to collect required data. Statistical validity of tool was 0.76 and reliability was 0.78. **Findings related to sample characteristics:** Maximum (50%) staff nurses were in age group 26-30years and (3.3%) in above 35 years. Majority (80%) staff nurses were GNM and (20%) were B.Sc. (N). Maximum of (46.7%) staff nurses were working in Pediatric medical ward and minimum (6.7%) staff nurses were in NICU/Nursing. Maximum (30%) of staff nurses were <2years of experience after training and minimum (3.3%) had 3-6 years of experience. Majority of the staff nurses (80%) are CMC trained and (20%) are non CMC trained. Majority of (83.3%) staff nurses had not received in-service education. Maximum (43.3%) were in evening and (20%) staff nurses were in night shift. Majority of (53.30%) staff nurses had average knowledge regarding nebulization. Mean percentage and rank order of knowledge score was highest in Procedure (72.8% and rank 1st) and lowest in Nebulization Medicine (22.4% and rank 5th). Majority (93.30%) of staff nurses had unsatisfactory performance regarding nebulization. Age of staff nurses showed association with knowledge of staff nurses regarding nebulization. Other variables had no association with knowledge of staff nurses regarding nebulization. Knowledge and performance of staff nurses showed negative (-0.70) correlation.

INTRODUCTION

"For breath is life, and if you breathe well you will live long on earth".

Aerosol therapy provides an effective treatment for many of the respiratory disorders. It is commonly used as an adjunct or supportive therapy in relieving the symptoms. It is exceedingly common in hospital practice and many patients report subjective improvements. Medicated aerosols mainly include inhaled Bronchodilators, mucokinetics and steroids and antibiotics to a lesser extends. Inhaled medications act directly on the target organs producing fewer systemic side effects, than other routes of administration.

A nebulizer is a device which turns an aqueous solution of a drug into a mist of fine particles for inhalation. The aim of nebulization therapy is to deliver a therapeutic dose of the desired drug within a short delivery time, usually 10 minutes. This is most beneficial when: Large inhaled drug doses are required , Patients are too unwell or are unable to coordinate drug delivery devices, Drugs are unavailable in hand-held inhalers and a wider choice is needed, Direct pulmonary therapy is required. Therapeutic areas are Asthma, Bronchiectasis, Immuno compromised children, Cystic fibrosis, and prophylaxis:

Although the exact mechanisms that cause asthma remain unknown, triggers are involved. These triggers are allergens like dust, pollen grasses, mites, cockroaches molds, animals dander etc, air pollution like exhaust fans, perfumes, oxidants, cigarette smoke, aerosol spray etc, viral upper respiratory infection like sinusitis, exercise and cold, dry air, stress, drugs like aspirin NSAIDS, B- adrenergic blockers etc., occupational exposure like metal salts, wood and vegetable dusts, chemicals plastics etc., food addictives like sulfites, dried fruit, monosodium glutamate and tartrazine. Even though India is a developing Country, the rapidly growing industries, irrational disposal of industrial waste, wide use of coal and petroleum products are increasing India's asthmatic population to an alarming state.

Nurses play an important role in the promotion of health and prevention of illness. Nursing intervention, aimed at relieving symptoms and promoting comfort in respiratory distress are essential. Early intervention is seen to reduce the severity and duration of an exacerbation. Maintaining bronchial hygiene by means of administering aerosols followed by chest physiotherapy and deep breathing and coughing exercises from important aspect of nursing care in respiratory disorder. Though the nurses work in collaboration with the physiotherapists, they hold a key position in the health team and directly involved in the case of patients round the clock. The nurse in order to be efficient in administering aerosol therapy, requires being knowledgeable.

NEED OF THE STUDY

In our country, it is a significant problem judging the frequency of wheezing episodes among young infants. A number of problems arise in evaluating nebulization therapy in children including anatomical and physiological variation due to age compliance, problems with drug delivery devices, and difficulty in knowing the dose received by patient. It is important to give practical guide lines for nebulizers. If the technique is poor, the benefit for patient will be slight.

STATEMENT OF THE PROBLEM

An Observational Study to Assess the Performance of Staff Nurses Regarding Nebulization Practices in a selected Hospital, Ludhiana, Punjab.

OBJECTIVES

1. To assess the knowledge of staff nurses regarding nebulization.
2. To assess the performance of staff nurses regarding nebulization.
3. To find out the relationship between knowledge and performance of staff nurses regarding nebulization.
4. To assess the relationship of knowledge and performance of staff nurses with selected variables. Such as age, professional qualification, professional experience, working areas, training institute, in-service education and duty shift.
5. To develop protocol for nebulization.

MAJOR FINDINGS: The analysis of the data revealed the following findings:

Findings related to sample characteristics: Maximum (50%) staff nurses were in age group 26-30years and (3.3%) in above 35 years. Majority (80%) staff nurses were GNM and (20%) were B.Sc. (N). Maximum of (46.7%) staff nurses were working in Pediatric medical ward and minimum (6.7%) staff nurses were in NICU/Nursing. Maximum (30%) of staff nurses were <2years of experience after training and minimum (3.3%) had 3-6 years of experience. Majority of the staff nurses (80%) are CMC trained and (20%) are non CMC trained. Majority of (83.3%) staff nurses had not received in-service education. Maximum (43.3%) were in evening and (20%) staff nurses were in night shift.

Findings related to assessment of knowledge and performance: Majority of (53.30%) staff nurses had average knowledge regarding nebulization. Mean percentage and rank order of knowledge score was highest in

Procedure (72.8% and rank 1st) and lowest in Nebulization Medicine (22.4% and rank 5th). Majority (93.30%) of staff nurses had unsatisfactory performance regarding nebulization. Age of staff nurses showed association with knowledge of staff nurses regarding nebulization. Other variables had no association with knowledge of staff nurses regarding nebulization. Knowledge and performance of staff nurses showed negative (-0.70) correlation.

CONCLUSION:

Overall performance of nurses related to nebulization was lower than the expected standard and therefore needed improvement to reach up to expected standards.

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