

A Study to Assess the Effectiveness of Structured Teaching Programme (STP) on Knowledge Score Regarding Arterial Blood Gas Analysis Among the Under Graduate Students in a Selected Educational Institute of Indore M.P

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ABSTRACT:

These Study Find knowledge score regarding arterial blood gas analysis. The aims of the A study to assess the effectiveness of structured teaching program (STP) on knowledge score regarding arterial blood gas analysis among the under graduate students in a selected educational institute. To find out the association between the Pre-test Age, Gender, Education, Educational status, Nutritional status arterial blood gas analysis among the under graduate students in a selected educational institute Indore M.P. **The study** pre-experimental research design and the investigator chose 40 sample who were in a selected educational institute Indore M.P. Result- The result showed that out of 40 sample majority of sample 23 (57.5%) were in age group,20 year, followed by 25(62.5%) sample found to be female, followed by 29 (72.5%) Vegetarian. The researcher also reported that, 27(67.5%) unmarried. status with ABG Analysis and all the samples. Further on ,the calculate pre-test mean value score found to be (1.95) It was also observed that all demographic variable found to be significant. Hence the research H1 hypothesis is accepted.

KEYWORDS: ABG Analysis, STP, Effectiveness.

BACKGROUND OF THE STUDY:

Arterial blood gas (ABG) analysis is a crucial diagnostic tool used in healthcare settings to assess a patient's acid-base balance, oxygenation status, and overall respiratory function. Competence in interpreting ABG results is essential for healthcare professionals, particularly for undergraduate students pursuing careers in nursing, medicine, and allied health sciences. Despite its importance, studies have indicated deficiencies in the understanding and interpretation of ABG results among undergraduate students. These deficiencies can lead to errors in patient management and treatment decisions, compro-

missing patient safety and quality of care.

NEED OF THE STUDY

Studying ABG (Arterial Blood Gas) analysis is crucial for students researching various medical conditions and treatments, as it provides valuable insights into a patient's respiratory and metabolic status. Understanding ABG results helps students diagnose respiratory acidosis/alkalosis, metabolic acidosis/alkalosis, and assess oxygenation. This knowledge is fundamental for medical professionals in various fields, including emergency medicine, critical care, and pulmonology.

PROBLEM STATEMENT

A study to assess the effectiveness of structured teaching program (STP) on knowledge score regarding arterial blood gas analysis among the under graduate students in a selected educational institute Indore M.P.

OBJECTIVE

- To assess the pre-test knowledge score regarding arterial blood gas analysis among the under graduate students of Indore M.P.
- To evaluate the effectiveness of the structured teaching program on knowledge score regarding arterial blood gas analysis among the under graduate students of Indore M.P.
- To determine the association between the Pre-test and Post-test knowledge score with the selected demographic variables.

HYPOTHESIS

- RH0: There is no significant relationship between pre-test and post-test knowledge score regarding arterial blood gas analysis among the under graduate students in a selected educational institute of Indore M.P.
- RH1: There is significant relationship between pre-test and post-test knowledge score regarding arterial blood gas analysis among the under graduate students in a selected educational institute of Indore M.P.
- RH2: There is significant association between Pre-test and Post-test knowledge score with the selected demographic variables.

METHODOLOGY

In this study the research adopted quantitative research approach were pre-experimental research design was used with one group pretest and post- test design, as the investigator has incorporated a single experimental group with an intervention and randomization in this study. A total of 40 Sample were chosen who were working at Renaissance University Indore. Samples underwent exclusive and inclusive criteria. The tools were divided into two section One section included demographic variable and second section included 20 item self-structured questionnaire to determine the knowledge of sample regarding the data were analyzed, the data were analyzed through both inferential and deferential statistics.

RESULTS

The analysis also showed that the demographic variable's assessing the relation between the demographic and pre-test, The result showed that out of 40 sample majority of sample 23 (57.5%) were in age group, 20 year, followed by 25(62.5%) sample found to be female, followed by 29 (72.5%) Vegetarian. The researcher also reported that, 27(67.5%) unmarried. status with ABG Analysis and all the samples. Further on, the calculate pre-test mean value score found to be (1.95) It was also observed that all demographic variable found to be significant. Hence the research H1 hypothesis is accepted. Over all when knowledge was observed 23 (9.2%) were in good and rest 17(6.8%) in excellent level.

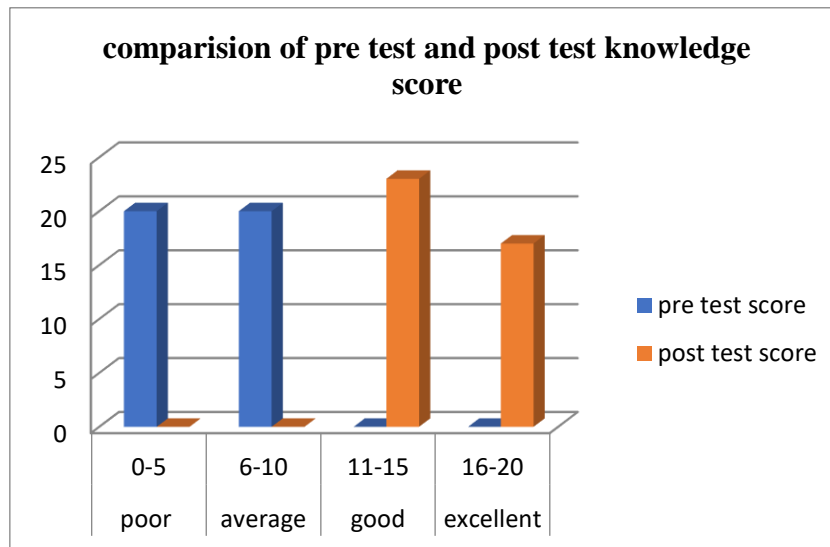


Figure comparison of pre test and post test knowledge score.

INTERPRETATION AND CONCLUSION-

During assessing the relationship between demographic variable and Pre-test and it was estimated that age, gender, education found to be significant at $p < 0.05$ level of significance only gender found to be significant. (Mean \pm Standard Deviation) score to judge the attitude (1.95) and Standard Deviation score (2.20) among BSc Nursing students found to be significantly greater and improve as compared to average score of knowledge at baseline stage. The research found that most of the sample have excellent Pre-test knowledge was observed 20 (8%) were in good and rest 20 (8 %) in excellent level. and post-test knowledge was observed 23 (9.2%) were in good and rest 17 (6.8%) in excellent level.

The computed Chi square value at $p < 0.05$ level p value is 0.88119 and chai square value is found 0.347876 this demographic is a not significant. The hypothesis H1 is accepted. The knowledge of students was increased and null hypothesis rejected.

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