### ABSTRACT

#### Introduction

Blood transfusions save lives every second throughout the world. Transfusion-related events and errors continued to happen despite interventions. It's a World Health Organization (WHO) priority area. The study focused on nursing services intending to access factors affecting safe blood transfusion practices. The study describes current transfusion practices among nursing officers (N/O). The study assesses N/Os' transfusion knowledge, attitude, and practices (KAP) and describes relationships among KAP. The study also describes work environment factors and team factors affecting transfusion safety.

## Methodology

A descriptive cross-sectional study was performed at Colombo South Teaching Hospital (CSTH). A sample of N/O was selected from stratified random sampling. Personal factors were assessed using a quantitative approach, and work environment and team factors were assessed using a qualitative approach. A modified version of the Routine Blood Transfusion Questionnaire (RBTKQ) and Safety Attitude Questionnaire (SAQ) was used to assess personal factors. Quantitative data were analyzed using SPSS version 23. Data were analyzed using ANOVA, correlation, regression, and the chi-square test. The qualitative component was analyzed using the word cloud.

# **Results**

The response rate for the study is 94.67%. The sample of N/Os consisted of 92.8% (n = 375) females. The majority of N/Os (84%, n=241) have more than one year of experience. Only 32.2% (n = 130) of nurses underwent in-service training programs on transfusion safety. Further training on transfusions is requested by 93% (n = 377) of nurses. The mean practice score (n=404) is 22.54, with a standard deviation (SD) of 2.672, and 55% have a practice

score higher than the mean. The mean knowledge score is 26.85 (n = 404), with an SD of 2. 910. The percentage of knowledge scores above the mean is 58. The mean attitude score is 44 (n = 404), with an SD of 5. 172. The study revealed 54.7% have attitude scores below the mean. A significant difference between the mean scores of knowledge, attitude, and practice concerning N/O's working unit was found. Practice score and knowledge score show a significant relationship at the 0.01 level. (p = 0.000; Pearson value: 0.279). Practice score and attitude score show a significant relationship (p = 0.000, Pearson value: 0.179) at the 0.05 level. Knowledge score and attitude score show a significant relationship (p = 0.001;

### **Discussion**

Factors affecting transfusion safety with regards to nursing officers need more attention, as most nursing officers have unmet training needs on blood transfusion safety practices. To combat with the unavailability of designated transfusion nurses improving the knowledge, attitudes, and practices of nursing officers is mandatory to ensure safe transfusions.

### **Conclusions and recommendations**

Pearson value: 0.128) at the 0.05 level.

Current nursing practices and knowledge toward transfusion safety are satisfactory, while the attitude toward safe transfusions is good. Nurses' training needs have not been addressed adequately. Work environment and teamwork factors are favorable toward safe transfusions. It is recommended to regularize existing in-service training programs on safe transfusions for nurses to improve transfusion safety.

(Key Words: Patient safety, Blood transfusions, Nursing officers, Knowledge, Attitude, Practices, Factors),