#### Abstract

#### Introduction:

Every year, a significant number of patients hospitalized for benign diseases succumb to pulmonary embolism or hemorrhagic events, which are often preventable by adhering to evidence-based guideline recommendations. Given the substantial non-compliance rates observed in prior studies regarding thromboprophylaxis, this study investigates the level of compliance with valid guidelines.

### **Methods:**

A study was conducted at Ardabil Imam Khomeini Hospital, involving 200 hospitalized patients. Demographic data, including age and gender, along with clinical information such as medical history, and paraclinical data, including test results, were meticulously documented. Thromboembolism (VTE) risk scores were assessed for all patients using the Padova and Caprini scoring systems. Compliance was evaluated concerning thromboprophylaxis indications, the type of thromboprophylaxis, timing, dosage, frequency, and duration.

## **Results:**

Among the 200 patients under scrutiny, 104 (52%) were male, and 96 (48%) were female. The average age of the patients was  $56.09 \pm 18.27$  years. The mean drug count was  $10.86 \pm 2.51$  medications. Thromboprophylaxis was prescribed for 85 (42.5%) patients, with 76 (38.0%) receiving Heparin. Subcutaneous administration was the chosen method for all patients on thromboprophylaxis. According to the Padua system, 85 (42.5%) patients were considered high-risk, but only 38 (44.7%) of them received prophylaxis. Interestingly, 47.9% of patients with a low-risk score, who did not require prophylaxis, were still administered thromboprophylaxis.

# **Discussion and Conclusion:**

This study's findings highlight the inadequate compliance with thromboprophylaxis protocols in the mentioned hospital, irrespective of the Padua score. To address this issue, it is advisable to provide retraining programs and written guidelines to healthcare professionals, enabling them to tailor thromboprophylaxis to individual patient conditions and guideline recommendations.

Keywords: Thromboprophylaxis, Heparin, Deep Venous Thrombosis