

# An Exploration of Non-Consultant Doctors' Views, and Current Practices, of Prescribing Thromboprophylaxis, for Patients with Chronic Liver Disease

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## Background and Importance

- Previous studies have shown prescribing rates of thromboprophylaxis to be suboptimal in patients with chronic liver disease (CLD).<sup>1</sup>
- Challenges faced by doctors include the uncertain balance between bleeding and thrombosis risk, and the limited data available to guide their decision making in this patient cohort.

## Aim and Objectives

- To determine non-consultant doctors' views and current practices of prescribing thromboprophylaxis for patients with CLD.
- To determine which variables, affect doctors' confidence determining if thromboprophylaxis is appropriate, and their current practices of same.
- To determine if doctors' views and current practices agree with current guidelines.

## Materials and Methods

**•Study Population:** Non-consultant doctors (interns: <1 year experience and senior house officers (SHOs): >1 year experience).

**•Data Collection:** A paper questionnaire was distributed to non-consultant doctors at their teaching session.

**•Data Analysis:** IBM SPSS Statistics @ version 29.

➢ Likert scale percentage agreement and disagreement.

➢ Fisher's exact test.

p < .05

➢ **Variables:** Doctors' Title/Grade, Years of Experience, and Gastroenterology Experience.

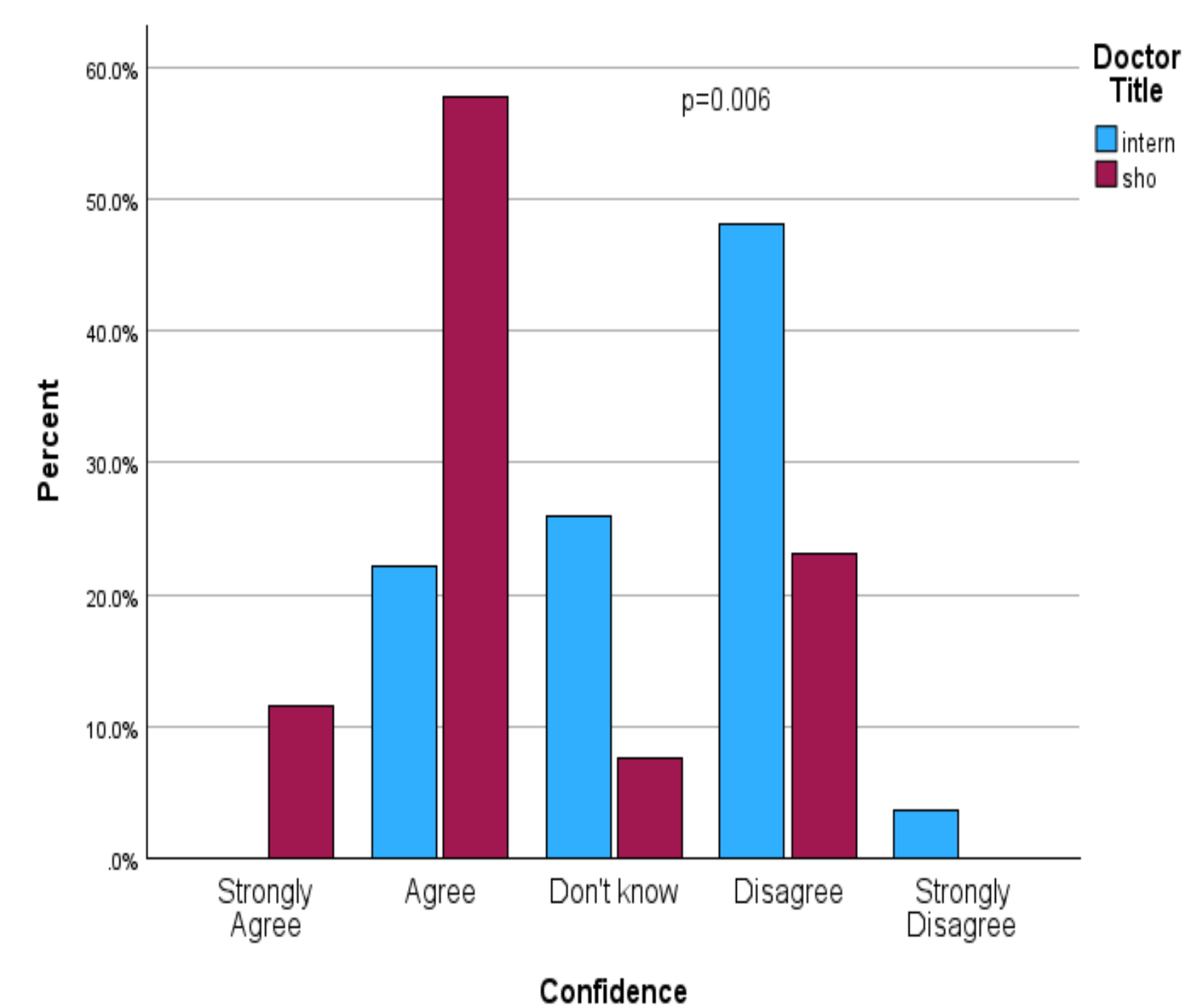
➢ **Guidelines:** Awareness of and Interest in

## Results

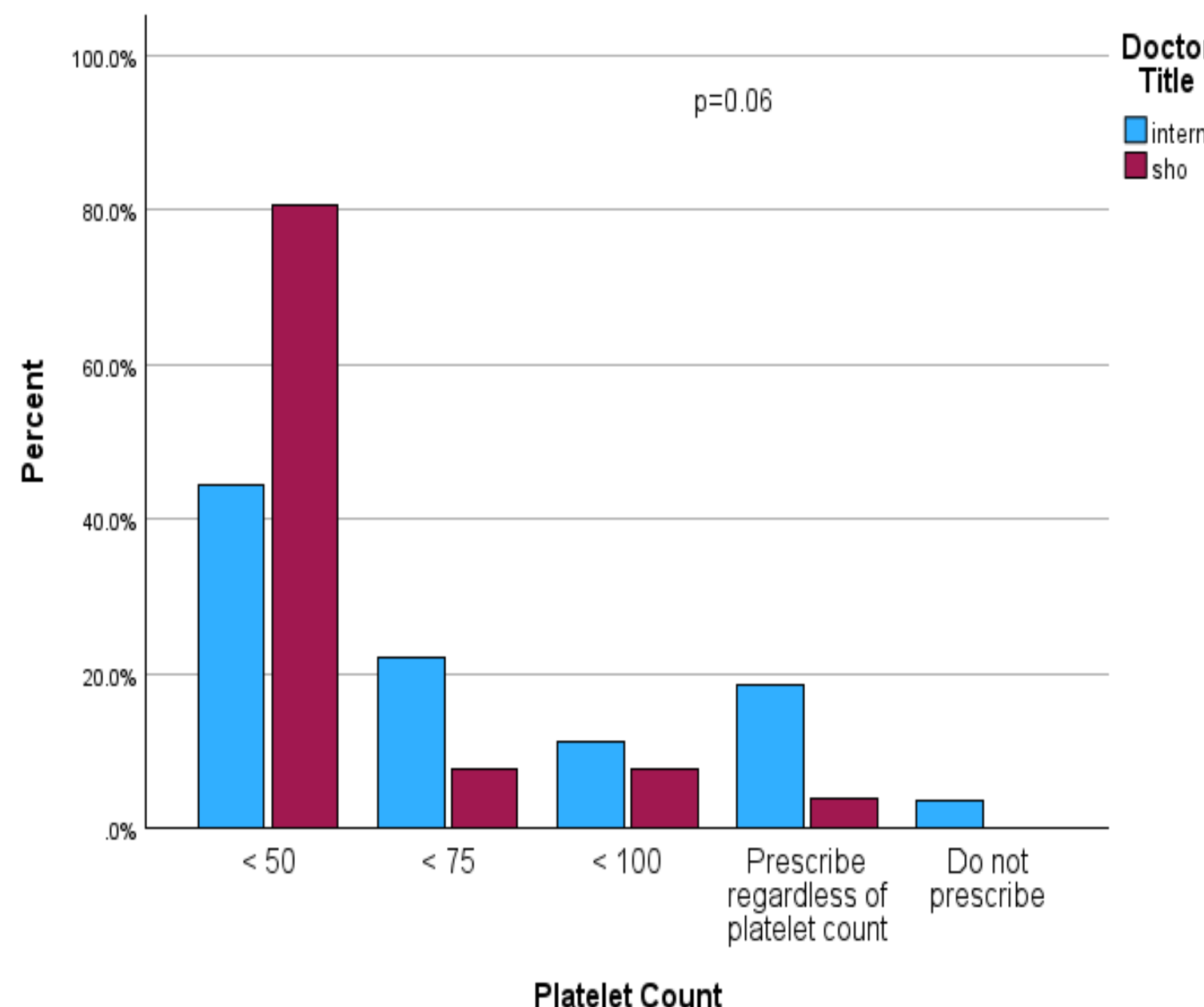
**Table 1: Professional Title and Experience**

Experience	All participants (n=53)	Interns (n=27)	SHOs (n=26)
Years of Experience			
<1 year	27 (50%)	27 (100%)	0%
1-2 years	7 (13.2%)	0%	7 (26.9%)
>2 YEARS	19 (35.8%)	0%	19 (73.1%)
Gastroenterology Experience			
No Gastroenterology Experience	38 (71.1%)	24 (88.9%)	14 (53.9%)

**Figure 1: Doctor Title and Confidence**



**Figure 2: Doctor Title and Platelet Count**



**Table 2: Clinical Situations LMWH Not Prescribed**

Clinical Situation	All doctors (n=53)	< 1 year Experience (n=27)	2 years' Experience (n=7)	>2 years' Experience (n=19)	p-value
UGIB	3 (5.7%)	1 (3.7%)	1 (14.3%)	1 (5.3%)	0.008
Active Bleed	28 (52.8%)	15 (55.5%)	3 (42.9%)	10 (52.6%)	
Low Platelets	1 (1.9%)	0 (0%)	0 (0%)	1 (5.3%)	
Active Bleed + Low Platelets	9 (17%)	2 (7.4%)	2 (28.6%)	5 (26.3%)	
Do not know	9 (17%)	9 (33.3%)	0 (0%)	0 (0%)	
Varices	1 (1.9%)	0 (0%)	0 (0%)	1 (5.3%)	
Severe Cirrhosis	1 (1.9%)	0 (0%)	1 (14.3%)	0 (0%)	
High INR	1 (1.9%)	0 (0%)	0 (0%)	1 (5.3%)	

- Out of fifty-three doctors, 45.3%(n=24) felt confident determining if thromboprophylaxis should be prescribed. There was significant correlation between doctors' title (intern / SHO) and confidence (p=0.006) (Fig. 1).
- The majority of doctors felt it was important to complete the Venous Thromboembolism (VTE) Risk Assessment (98.1%, n=52), to regularly review the need for thromboprophylaxis (92.5%, n=49), and that patients with CLD can be at an increased risk of thromboembolism even with a prolonged prothrombin time (71.7%, n=38).
- The International Normalised Ratio (INR) threshold above which doctors would not prescribe thromboprophylaxis varied. 11 doctors (20.8%) prescribed thromboprophylaxis regardless of the INR figure.
- The platelet count below which doctors would not prescribe thromboprophylaxis varied also. More SHOs prescribed thromboprophylaxis at a lower platelet count than interns did (p=0.066) (Fig.2). The doctors who prescribed thromboprophylaxis regardless of the platelet count did not have gastroenterology experience (11.3%, n=6).
- Clinical situations in which doctors felt thromboprophylaxis was not appropriate included an active bleed, upper gastro-intestinal bleed, and low platelets (Table 2).
- One doctor was aware of a guideline on the topic and all doctors would feel more confident having access to a guideline.

## Conclusion and Relevance

Doctors' title/grade, years of experience, and gastroenterology experience influenced their confidence and prescribing practices.

The prescribing practices of doctors were, to some extent, in accordance with the limited guidelines currently available.<sup>2,3</sup>

Areas where doctors deviated from the guidelines included the platelet and INR thresholds at which thromboprophylaxis is prescribed.

Access to, and teaching on, the guidelines is recommended to improve doctors' confidence and compliance with guidelines.

## References

1. Lau, C, et al. Decision making in venous thromboembolism prophylaxis: Is LMWH being inappropriately withheld from patients with chronic liver disease? Clinical Medicine. 2015. 15(1):31-34
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3. York Teaching Hospital NHS Trust. VTE (Venous Thromboembolism) Prophylaxis. Quick Reference Guide. 2017. Available at: <https://www.northyorkshireandyorkeformulary.nhs.uk/docs/bnf/02/vte-quick-reference-guide.pdf>



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