

INTRODUCTION:

Haemostasis courses for trainee endoscopists improve knowledge, skills and behaviour.¹ Accredited, quality-assured endoscopy nurse assistant training courses are limited resulting in an inequality in access to potentially valuable training. We therefore developed and evaluated a standardised, peer-reviewed upper gastrointestinal (UGI) haemostasis course for endoscopy nurses training in this modality.

METHODS:

Selected nurse educators developed and delivered practical teaching sessions to peers for critical review. Delivery and lesson plans were refined, thus creating the programme. A multi-pronged approach targeted appropriate nurse delegates within the Midlands. Skills training was delivered by trained nurse educators paired with endoscopists. Pre- and post-course assessment of knowledge and confidence in performing UGI haemostatic techniques was analysed with Wilcoxon matched-pairs tests. Overall impact was calculated from changes between pre and post course scores for background knowledge, procedural confidence and the sum of both. A linear regression model was constructed for pre-course experience and delegate demographics to identify factors associated with improved overall impact from the course.

Results

64 delegates attended 4 courses: 86% (55) female, 92% (59) band 5 nurses, 69% (44) had <2 years endoscopy experience and 80% (51) were on the on-call GI bleed rota. Post course analysis showed a significant improvement in knowledge and confidence in endoscopic UGI haemostatic techniques (Table 1). Increment in knowledge correlated with incremental confidence in performing the technical skill for nurse cohort trained. Improved overall impact was associated with pre-course experience with variceal banding, less than 6 (regression co-efficient 12.4 (95% CI 3.3-21.6), p=0.008) and pre-course experience with thermal therapy, less than 6 (12.3 (2.7-21.8), p=0.013).

	Knowledge		p-value	Confidence		p-value
	Pre-course	Post-course		Pre-course	Post-course	
Pre-assessment and optimisation	3	4	p<0.0001			
Managing airway	3	4	P<0.0001	4	5	p<0.0001
Adrenaline injection	3	5	p<0.0001	3	5	p<0.0001
Mechanical Clips	3	5	p<0.0001	4	5	p<0.0001
Variceal banding	3	5	p<0.0001	3	5	p<0.0001
Gastric variceal thrombin injection	1	5	p<0.0001	1	5	p=0.0001
Thermal therapy	2	4	p<0.0001	2.5	5	p<0.0001
Haemostatic powders	2	4	p<0.0001	3	5	p<0.0001
Sengstaken tube	1	5	p<0.0001	1	4	p<0.0001

Post-procedural management/handover	3	4	p<0.0001	3	5	p<0.0001
Endoscopic Non-Technical Skills in Emergency Endoscopy	3	5	p<0.0001	3	5	p<0.0001

Table 1: Pre- and post-course self-assessed median survey responses. Scale of 1-5 (1=very little to no knowledge/confidence, 5=fully knowledgeable/confident).

CONCLUSIONS:

Nurse confidence in performing skilled tasks correlates with increments in their knowledge highlighting the importance of skilled trainers. The course significantly improved nurse knowledge and confidence in UGI haemostasis techniques with the greatest impact being for less experienced nurses.

REFERENCE:

- 1) Siau K et al. Gut 2019;68:A257-A258