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Trainees' Perception of Medicolegal Practice in Surgery

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Abstract

Aim

Successful patient outcomes remain at the forefront of surgical practice. A perceived increase in surgical medicolegal cases has heightened awareness of risk management and safety. This study's objective was to assess surgical trainees' perception of medicolegal surgical practice.

Methods

A survey of Irish surgical trainees across all levels and subspecialties evaluating aspects of medicolegal practice was conducted.

Results

Three hundred and eighty-five trainees were invited to participate with a response rate of 35.3% (136). Clinical experience ranged from 3.4 to 11.6 years following qualification. Forty-six (33%) of those surveyed have received medicolegal correspondence, with 90% (123) of trainees maintaining supplementary personal medical indemnity. While only 0.74% (1) of trainees have attended judicial court for medicolegal investigation, 96% (131) of trainees foresee future involvement in a medicolegal case, with 61.8% (84) anticipating this to occur between one and five times. While 70.6% (96) of trainees feel medicolegal concerns have made their practice more risk adverse, only 37.5% (51) reported having received medicolegal training.

Conclusion

Most surgical trainees across all levels and subspecialties anticipate medicolegal involvement during their careers. Enhanced medicolegal understanding through dedicated training may aid in the minimisation of risk, enhancement of patient safety and a positive resolution for all parties.

Introduction

Successful patient outcomes and minimisation of clinical risk remains at the forefront of modern medical practice. While innovations in healthcare safety and open disclosure have improved patients' experiences^{1, 2}, patient satisfaction remains a complex measure of the healthcare journey³. Accordingly, medical litigation remains a reality, with up to 7.4% of physicians subject to a malpractice claim each year⁴. Historically, surgical specialties have tended to attract a higher rate of claims, with up to 98% of surgeons projected to have been subject to a malpractice claim by the age of 65⁴. While the incidence of litigation within surgical subspecialties varies^{4, 5}, increases of up to 66% have been observed across surgery⁵.

Multiple potential sequelae have arisen from increased medicolegal surgical practice. It has been suggested that analysis of claims can help improve clinical care⁶, and the widespread adoption of surgical risk management improvements in safe practice⁷. While this aspect of medicolegal practice may confer benefit it has also been suggested that the increasing medicolegal presence can adversely affect care, with up to 75% of healthcare professionals more defensive in their own practice due to medicolegal concerns⁸. Additionally, there is a potential cost associated with recent medicolegal trends, with an 11.5% yearly increased reported in medicolegal claims in the UK causing burden on already finite financial resources⁸. Surgical claims make up a significant proportion of medicolegal payments⁵, and this coupled with the potential cost of defensive medicine may impact surgical resources and care⁹.

With medicolegal claims becoming an increasing reality in surgery¹⁰, there is now an onus on minimising its potential impact through education and risk management⁸. In modern surgical practice, expectation lies upon surgical trainees to help support and deliver care of the highest standard, both as trainees as well as future consultants¹¹, with patient satisfaction a vital component¹². Developing an understanding of medicolegal practice in surgical trainees is thus of particular relevance¹³. To do so, strategies including postgraduate training¹⁴ with regular review¹⁵ is gaining prominence across all medical subspecialties. This could apply seamlessly to the structured surgical training programmes that today's trainees undertake¹¹. Establishing the medicolegal baseline of surgical trainees may therefore potentially help guide future development of such strategies.

The objective of this study was therefore to evaluate both current perception and understanding of surgical trainees towards medicolegal issues as well as whether there is a perceived deficit in medicolegal training.

Methods

A national cross-sectional online survey of Irish surgical trainees was undertaken. Doctors registered to National Surgical Training Programme (NSTP) were identified and invited to participate. All invited trainees are undertaking an 8-year training cycle based upon a standardised intercollegiate training pathway between the four Royal Colleges of Surgeons in the UK and Ireland¹¹.

An online electronic 11-item survey was developed by the authors to ascertain general perception of respondents towards medicolegal aspects of surgical practice. This survey was disseminated using SurveyPlanet™ (www.surveyplanet.com) and SurveyMonkey™ (www.surveymonkey.com), both anonymised, confidential online survey platforms. The survey was circulated on a single occasion with an accompanying email invitation. This email highlighted the survey's purpose as well as its confidential and voluntary nature. No participation honorarium was offered. The survey could only be opened once by a single IP address, allowing for minimisation of repeat participant responses. A follow-up email was circulated and access to the survey was closed at one and four weeks following initial circulation respectively.

Data collection was recorded by a single assimilator. Surgical trainees in the NSTP are subdivided into Core Surgical Training (CST), an exposure to a variety of subspecialties in the first two years of training (ST1-ST2) and Higher Surgical Training (HST) which involves training in a single subspecialty for the remaining six years of training (ST3-ST8). This classification formed a subdivision of the participants, with those undertaking HST further categorised by their chosen subspecialty.

Analysis of the recorded responses included both a descriptive analysis and statistical assessment of difference between training groups. Statistical analysis of the recorded data was undertaken utilising SPSS Version 26 for Windows®, assessing for potentially significant association between training group (CST versus HST) and between subspecialties within the HST group. This was assessed using either a chi-squared test or Fisher's exact test where appropriate, with a p value <0.05 considered statistically significant. Where a statistically significant association was detected, a Cramer's V test was used to demonstrate the strength of association.

Results

A total of 385 surgical trainees were invited to participate. Of those invited, 136 responses were obtained, yielding a 35.3% response rate. Mean time of survey completion was 102.5 seconds.

Forty (29%) of responses were furnished by CST trainees and ninety-six (71%) of responses by HST trainees. Of the HST trainees, the most frequently encountered subspecialties were Trauma & Orthopaedic Surgery (41%) and General Surgery (18%), with responses obtained from trainees in each of the 11 surgical subspecialty HST training programmes. The most frequently encountered training grades were ST3 (19%) and ST1 (18%), with representation from each of the 8 training years (ST1-ST8). The mean number of years that trainees had been practicing medicine at time of survey was 6.5 years, ranging from 3.4 years in ST1 and ST2 to 11.6 years in ST8. Descriptive statistics for the included trainees are further described in Table 1.

One hundred and twenty-three (90%) of all trainees maintained supplementary personal medical indemnity (Table 1). There was no significant difference between training grade (CST vs HST) in the proportion of those who maintained personal medical indemnity (p=0.329) nor was there a significant difference between subspecialties within the HST group (p=0.970).

Forty-six (33%) of trainees had received medicolegal correspondence, ranging from 8% of ST1 trainees to 73% of ST8 trainees (Table 1). There was a statistically significant moderate association between training group (CST vs HST) and the frequency of those who received correspondence (p=0.003, Cramer's V=0.257), with CST trainees less likely to receive medical indemnity correspondence (OR 0.247, 95% CI 0.95-0.644). There was no significant difference between subspecialties within the HST group (p=0.837). Only 0.74% (1) of trainees attended judicial court in respect of a medicolegal case, with 0.74% (1) declining to comment. There was no statistical difference detected between CST & HST groups in this parameter (p=0.655) (Table 1).

One hundred and thirty-one (96%) of trainees felt that they would likely be sued during their future medical practice (Table 2), with 46.3% of trainees feeling the likelihood of this being 100% (Table 3) and 61.8% of trainees anticipating being sued between one and 5 times during their careers (Table 4). There was no statistically significant difference in perceived likelihood of being sued (p=0.638) between training groups (CST vs HST). Additionally, there was no significant difference in perception between the most highly represented surgical subspecialties when compared to the cumulative HST group, namely Trauma & Orthopaedic Surgery (p=0.615) and General Surgery (p=0.547).

Ninety-six (70.6%) of trainees felt that medicolegal concerns made them more risk-adverse in their daily practice (Table 2), with no statistically significant difference in behaviour found between CST and HST trainees (p=0.107) or between HST subspecialties (p=0.082). Only 37.5% of trainees were certain they had received dedicated medicolegal education during their training (Table 2), with 5.9% unsure as to whether they had received medicolegal education. There was no statistically significant difference in the level of medicolegal education between CST and HST groups (p=0.273) or within HST subspecialties (p=0.549).

Table 1: Included Trainees Medicolegal Experiences to Date.

Group	No. of Participants	Mean No. of Years Practicing Medicine (+/-SD)	% Maintain Personal Medical Indemnity		% Received Medicolegal Correspondence		% Attended Judicial Court for a Medicolegal Case	
			% Yes	%No	% Yes	% No	% Yes	% No
Total	136	6.5 Years (+/- 3.0)	90% (123/136)	10% (13/136)	33% (46/136)	67% (90/136)	0.74% (1/136)	98.5% (134/136)
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Core Surgical	40	3.4 Years	85%	15%	15%	85%	0%	100%
Training (CST)		(+/-1.1)	(34/40)	(6/40)	(6/40)	(34/40)	(40/40)	(40/40)
Higher Surgical		7 F Voors	93%	7%	42%	58%	1.0%	97.9%
Training (HST: All	96	7.5 Years						
Specialties)		(+/-2.8)	(89/96)	(7/96)	(40/96)	(56/96)	(1/96)	(94/96)
	I		I	I	I	I		
Trauma &		7.4 Years	92%	8%	44%	56%		
Orthopaedic Surgery (HST)	39	(+/-2.2)	(36/39)	(3/39)	(17/39)	(22/39)		

Group	No. of Participants	Mean No. of Years Practicing Medicine (+/-SD)	% Maintain Personal Medical Indemnity		% Received Medicolegal Correspondence		% Attended Judicial Court for a Medicolegal Case
General Surgery		8.6 Years	94%	6%	35%	65%	
(HST)	17	(+/-3.3)	(16/17)	(1/17)	(6/17)	(11/17)	
Cardiothoracic	_	5 Years	100%	0%	33%	67%	
Surgery (HST)	3	(+/-2.9)	(3/3)	(0/3)	(1/3)	(2/3)	
Neurosurgery	4	0. V = = ==	100%	0%	100%	0%	
(HST)	1	9 Years	(1/1)	(0/1)	(1/1)	(0/1)	
Ophthalmic	7	6.5 Years	100%	0%	57%	43%	
Surgery (HST)	,	(+/- 2.8)	(7/7)	(0/7)	(4/7)	(3/7)	
Oral &		7 Years	100%	0%	0%	100%	
Maxillofacial	2	(+/- 5.7)	(2/2)	(0/2)	(0/2)	(2/2)	
Surgery (HST)		() (),	\-/-/	(5/ =/	(5) = 1	\-/-/	
Otolaryngology,		5.7 Years	100%	0%	13%	87%	
Head & Neck	8	(+/- 3.2)	(8/8)	(0/8)	(1/8)	(7/8)	
Surgery (HST)							
Paediatric	3	11 Years	67%	33%	67%	33%	
Surgery (HST)		(+/- 4.6)	(2/3)	(1/3)	(2/3)	(1/3)	
Plastics, Reconstructive & Aesthetic Surgery (HST)	4	6.7 Years (+/- 3.8)	100% (4/4)	0% (0/4)	50% (2/4)	50% (2/4)	
Urology (HST)	6	7.2 Years	83%	17%	33%	67%	
Orology (HS1)		(+/- 1.9)	(5/6)	(1/6)	(2/6)	(4/6)	
Vascular Surgery	6	9.0 Years	83%	17%	67%	33%	
(HST)	O	(+/- 3.7)	(5/6)	(1/6)	(4/6)	(2/6)	
	Ι	3.4 Years	92%	8%	8%	92%	
ST1	25	(+/-1.1)	(23/25)	(2/25)	(2/25)	(23/25)	
		3.4 Years	73%	27%	27%	73%	
ST2	15 26	(+/-1.0)	(11/15)	(4/15)	(4/15)	(11/15)	
		5.0 Years	92%	8%	15%	75%	
ST3		(+/- 1.6)	(24/26)	(2/26)	(4/26)	(22/26)	
		6.1 Years	93%	7%	21%	79%	
ST4	14	(+/- 1.6)	(13/14)	(1/14)	(3/14)	(11/14)	
ST5	18	7.4 Years	100%	0%	44%	56%	
		(+/-1.9)	(18/18)	(0/18)	(8/18)	(10/18)	
ST6	10	9.3 Years	100%	0%	50%	50%	
		(+/-2.1)	(10/10)	(0/10)	(5/10)	(5/10)	
	4-	9.2 Years	94%	6%	71%	29%	
ST7	17	(+/- 1.4)	(16/17)	(1/17)	(12/17)	(5/17)	
070	4.5	11.6 Years	73%	17%	73%	17%	
ST8	11	(+/-1.5)	(8/11)	(3/11)	(8/11)	(3/11)	

 Table 2: Medicolegal Perception, Behaviour & Training.

Group	Sued in Future Medical Practice?			Medicolegal Concerns Make You More Risk Adverse?			Received Medicolegal Education?		
	% Yes	% No	% Yes	% No	% Maybe	% Yes	% No	%Not Sure	
Total	96%	4%	70.6%	11.0%	18.4%	37.5%	56.6%	5.9%	
Total	(131/136)	(5/136)	(96/136)	(15/136)	(25/136)	(51/136)	(77/136)	(8/136)	
Core Surgical Training	98%	2%	80%	2.5%	17.5%	30%	60%	10%	
(CST)	(39/40)	(1/40)	(32/40)	(1/40)	(7/40)	(12/40)	(24/40)	(4/40)	
Higher Surgical Training	96%	4%	66.6%	14.6%	18.8%	40.6%	55.2%	4.2%	
(HST: All Specialties)	(92/96)	(4/96)	(64/96)	(14/96)	(18/96)	(39/96)	(53/96)	(4/96)	
Trauma & Orthopaedic	97%	3%	82.0%	7.7%	10.3%	46.2%	51.3%	2.7%	
Surgery (HST)	(38/39)	(1/39)	(32/39)	(3/39)	(4/39)	(18/39)	(20/39)	(1/39)	
Surgery (1151)	100%	0%	58.8%	11.8%	29.4%	29.4%	64.7%	5.9%	
General Surgery (HST)	(17/17)	(0/17)	(10/17)	(2/17)	(5/17)	(5/17)	(11/17)	(1/17)	
Cardiothoracic Surgery	100%	0%	66/7%	33.3%	0%	33.3%	33.3%	33.3%	
(HST)	(3/3)	(0/3)	(2/3)	(1/3)	(0/3)	(1/3)	(1/3)	(1/3)	
	100%	0%	0%	100%	0%	100%	0%	0%	
Neurosurgery (HST)	(1/1)	(0/1)	(0/1)	(1/1)	(0/1)	(1/1)	(0/1)	(0/1)	
Ophthalmic Surgery	86%	14%	100%	0%	0%	57%	43%	0%	
(HST)	(6/7)	(1/7)	(7/7)	(0/7)	(0/7)	(4/7)	(3/7)	(0/7)	
Oral & Maxillofacial	100%	0%	50%	50%	0%	0%	100%	0%	
Surgery (HST)	(2/2)	(0/2)	(1/2)	(1/2)	(0/2)	(0/2)	(2/2)	(0/2)	
Otolaryngology, Head &	75%	25%	37.5%	12.5%	50%	25%	75%	0%	
Neck Surgery (HST)	(6/8)	(2/8)	(3/8)	(1/8)	(4/8)	(2/8)	(6/8)	(0/8)	
	100%	0%	33.3%	66.7%	0%	33.3%	66.7%	0%	
Paediatric Surgery (HST)	(3/3)	(0/3)	(1/3)	(2/3)	(0/3)	(1/3)	(2/3)	(0/3)	
Plastics, Reconstructive	100%	0%	50%	25%	25%	50%	50%	0%	
& Aesthetic Surgery	(4/4)	(0/4)	(2/4)	(1/4)	(1/4)				
(HST)	(4/4)	(0/4)	(2/4)	(1/4)	(1/4)	(2/4)	(2/4)	(0/4)	
Urology (HST)	100%	0%	50%	16.7%	33.3%	16.7%	66.7%	16.7%	
Olology (1131)	(6/6)	(0/6)	(3/6)	(1/6)	(2/6)	(1/6)	(4/6)	(1/6)	
Vascular Surgery (HST)	100%	0%	50%	16.7%	33.3%	66.7%	33.3%	0%	
vascular surgery (1151)	(6/6)	(0/6)	(3/6)	(1/6)	(2/6)	(4/6)	(2/6)	(0/6)	
CT4	96%	4%	88%	4%	8%	44%	44%	12%	
ST1	(24/25)	(1/25)	(22/25)	(1/25)	(2/25)	(11/25)	(11/25)	(3/25)	
CT2	100%	0%	66.7%	33.3%	0%	6.7%	86.7%	6.7%	
ST2	(15/15)	(0/15)	(10/15)	(5/15)	(0/15)	(1/15)	(13/15)	(1/15)	
ST3	92%	8%	65.4%	7.7%	26.9%	19.2%	76.9%	3.9%	
313	(24/26)	(2/26)	(17/26)	(2/26)	(7/26)	(5/26)	(20/26)	(1/26)	
ST4	93%	7%	71.4%	14.3%	14.3%	42.9%	35.7%	21.4%	
314	(13/14)	(1/14)	(10/14)	(2/14)	(2/14)	(6/14)	(5/14)	(3/14)	
ST5	100%	0%	77.8%	5.6%	16.7%	72.2%	27.8%	0%	
313	(18/18)	(0/18)	(14/18)	(1/18)	(3/18)	(13/18)	(5/18)	(0/18)	
ST6	90%	10%	60%	20%	20%	30%	70%	0%	
J10	(9/10)	(1/10)	(6/10)	(2/10)	(2/10)	(3/10)	(7/10)	(0/10)	
ST7	100%	0%	64.7%	17.7%	17.7%	35.3%	64.7%	0%	
317	(17/17)	(0/17)	(11/17)	(3/17)	(3/17)	(6/17)	(11/17)	(0/17)	
ST8	100%	0%	54.6%	36.4%	9.1%	54.6%	45.5%	0%	
518	(11/11)	(0/11)	(6/11)	(4/11)	(1/11)	(6/11)	(5/11)	(0/11)	

Table 3: Surgical Trainees' Perceived Likelihood of Being Sued During Future Clinical Career.

Group	0%	0-24%	25-49%	50-74%	75-99%	100%
Tatal	3.7%	3.7%	6.6%	13.2%	26.6%	46.3%
Total	(5/136)	(5/136)	(9/136)	(18/136)	(36/136)	(63/136)
	2.5%	5%	7.5%	22.5%	200/	42.5%
Core Surgical Training				(9/40)	20%	
Higher Surgical Training (HST: All	(1/40) 4.2%	(2/40) 3.1%	(3/40) 6.3%	9.4%	(8/40) 29.2%	(17/40) 47.9%
Specialties)	(4/96)	(3/96)	(6/96)	(9/96)	(28/96)	(46/96)
Specialities	(4/30)	(3/30)	(0/30)	(5/50)	(20/30)	(40/30)
Trauma & Orthopaedic Surgery (HST)	2.6%	2.6%	2.6%	7.7%	25.6%	59.0%
Tradina & Orthopacaic Surgery (1151)	(1/39)	(1/39)	(1/39)	(3/39)	(10/39)	(23/39)
General Surgery (HST)	0%	0%	0%	5.9%	41.2%	52.9%
	(0/17)	(0/17)	(0/17)	(1/17)	(7/17)	(9/17)
Cardiothoracic Surgery (HST)	0%	0%	0%	33%	33%	33%
	(0/3)	(0/3)	(0/3)	(1/3)	(1/3)	(1/3)
Neurosurgery (HST)	0%	0%	0%	0%	0%	100%
	(0/1)	(0/1)	(0/1)	(0/1)	(0/1)	(1/1)
Ophthalmic Surgery (HST)	14.3%	28.6%	14.3%	0%	28.6%	14.3%
	(1/7) 0%	(2/7) 0%	(1/7) 50%	(0/7) 0%	(2/7) 0%	(1/7) 50%
Oral & Maxillofacial Surgery (HST)	(0/2)	(0/2)	(1/2)	(0/2)	(0/2)	(1/2)
Otolaryngology, Head & Neck Surgery	25%	0%	12.5%	0%	37.5%	25%
(HST)	(2/8)	(0/8)	(1/8)	(0/8)	(3/8)	(2/8)
(1131)	0%	0%	0%	67%	0%	33%
Paediatric Surgery (HST)	(0/3)	(0/3)	(0/3)	(2/3)	(0/3)	(1/3)
Plastics, Reconstructive & Aesthetic	0%	0%	50%	25%	0%	25%
Surgery (HST)	(0/4)	(0/4)	(2/4)	(1/4)	(0/4)	(1/4)
	0%	0%	0%	16.7%	33.3%	50%
Urology (HST)	(0/6)	(0/6)	(0/6)	(1/6)	(2/6)	(3/6)
Variable Company (UCT)	0%	0%	0%	0%	50%	50%
Vascular Surgery (HST)	(0/6)	(0/6)	(0/6)	(0/6)	(3/6)	(3/6)
	40/	00/	40/	200/	200/	4.40/
ST1	4%	8% (2/25)	4% (1/25)	20%	20%	44% (11/25)
	(1/25) 0%	(2/25) 0%	(1/25) 13.3%	(5/25) 26.7%	(5/25) 20%	(11/25) 40%
ST2	(0/15)	(0/15)	(2/15)	(4/15)	(3/15)	40% (6/15)
	7.7%	7.7%	3.8%	15.4%	34.6%	30.8%
ST3	(2/26)	(2/26)	(1/26)	(4/26)	(9/26)	(8/26)
	7.1%	0%	0%	14.3%	21.4%	57.1%
ST4	(1/14)	(0/14)	(0/14)	(2/14)	(3/14)	(8/14)
	0%	5,6%	11.1%	0%	50%	33.3%
ST5	(0/18)	(1/18)	(2/18)	(0/18)	(9/18)	(6/18)
	10%	0%	10%	0%	10%	70%
ST6	(1/10)	(0/10)	(1/10)	(0/10)	(1/10)	(7/10)
~	0%	0%	11.8%	11.8%	17.6%	58.8%
ST7	(0/17)	(0/17)	(2/17)	(2/17)	(3/17)	(10/17)
CTO	0%	0%	0%	9.1%	27.3%	63.6%
ST8	(0/11)	(0/11)	(0/11)	(1/11)	(3/11)	(7/11)

Table 4: Surgical Trainees' Perceived Frequency of Being Sued During Future Clinical Career.

Group	0	1	1-5	5-10	>10					
Takal	3.7%	8.1%	61.8%	19.1%	7.4%					
Total	(5/136)	(11/136)	(84/136)	(26/136)	(10/136)					
Core Surgical Training	2.5% (1/40)	7.5% (3/40)	70% (28/40)	17.5% (7/40)	2.5% (1/40)					
Higher Surgical Training	4.2%	8.3%	58.3%	19.8%	9.4%					
(HST: All Specialties)	(4/96)	(8/96) (56/96)		(19/96)	(9/96)					
Trauma & Orthopaedic	0%	7.7%	56.4%	23.0%	12.8%					
Surgery (HST)	(0/39)	(3/39)	(22/39)	(9/39)	(5/39)					
Surgery (HST)	5.88%	5.88%	70.6%	17.6%	0%					
General Surgery (HST)										
Candiath and de Company	(1/17)	(1/17)	(12/17)	(3/17)	(0/17)					
Cardiothoracic Surgery (HST)	0% (0/3)	33.3% (1/3)	33.3% (1/3)	33.3% (1/3)	0% (0/3)					
Neurosurgery (HST)	0% (0/1)	0% (0/1)	0% (0/1)	100% (1/1)	0% (0/1)					
Ophthalmic Surgery (HST)	14.3% (1/7)	28.6% (2/7)	57.1% (4/7)	14.3% (0/7)	14.3% (0/7)					
Oral & Maxillofacial Surgery (HST)	0% (0/2)	0% (0/2)	50% (1/2)	50% (1/2)	0% (0/2)					
Otolaryngology, Head & Neck Surgery (HST)	12.5% (1/8)	25% (2/8)	37.5% (3/8)	12.5% (1/8)	12.5% (1/8)					
Paediatric Surgery (HST)	0% (0/3)	0% (0/3)	66.7% (2/3)	33.3% (1/3)	0% (0/3)					
Plastics, Reconstructive & Aesthetic Surgery (HST)	0 (0/4)	0% (0/4)	50% (2/4)	50% (2/4)	0% (0/4)					
Urology (HST)	0% (0/6)	0% (0/6)	0% (0/6)	100% (6/6)	0% (0/6)					
Vascular Surgery (HST)	0% (0/6)	0% (0/6)	50% (3/6)	0% (0/6)	50% (3/6)					
ST1	4% (1/25)	8% (2/25)	64% (16/25)	20% (5/25)	4% (1/25)					
ST2	0% (0/15)	0% (0/15)	80% (12/15)	25.4% (2/15)	6.6% (1/15)					
ST3	3.8%	7.7%	53.8%	30.8%	2.85%					
	(1/26)	(2/26)	(14/26)	(8/26)	(1/26)					
ST4	7.1% (1/14)	7.1% (1/14)	64.3% (9/14)	14.3% (2/14)	21.4% (3/14)					
ST5	5.6%	16.7%	61.1%	5.6%	11.1%					
313	(1/18)	(3/18)	(11/18)	(1/18)	(2/18)					
ST6	10 (1/10)	10% (1/10)	60% (6/10)	20 (2/10)	0% (0/10)					
ST7	0%	5.9%	58.8%	17.7%	17.7%					
ST7	(0/17)	(1/17)	(10/17)	(3/17)	(3/17)					
ST8	0% (0/11)	0% (0/11)	54.6% (6/11)	27.7% (3/11)	18.2% (2/11)					

Discussion

The frequency of medicolegal litigation is growing^{4, 5}. A corresponding rise in medicolegal complaints involving trainee doctors of up to 94% per annum has been witnessed, most frequently observed in surgical trainees¹⁶. These increases precipitate the need for understanding surgical trainees' perceptions and background in medicolegal practice^{13, 16}.

The trainees surveyed in this study broadly represented all grades and subspecialties. Awareness of medicolegal practice within the broader surgical trainee group appeared to be high, with the vast majority across all subgroups maintaining their own personal medical indemnity, which allows for increased safeguarding of the trainee when involved with specific claims and costs incurred by medicolegal matters¹⁷. This demonstrates an appreciation amongst trainees of the need to prepare for potential medicolegal involvement.

Surgical trainees' perception is further indicated in their anticipation of medicolegal involvement. A vast majority felt their chances of being sued during their careers is high, with most feeling this would happen more than once. This belief appeared consistent across all training grades and subspecialties. A number of factors may potentially contribute to this. Current healthcare constraints can create challenges with regards to optimisation of the patient-physician relationship, particularly in terms of the time available for direct contact¹⁸. While patient satisfaction is multifactorial³, the physician-patient interaction has been shown to be of particular importance¹⁹, and allowing for conditions to optimise this within surgical practice may ameliorate trainees' perceived risk of medicolegal involvement.

Surgical trainees' concerns of medicolegal involvement appear to have translated into their clinical practice, with a majority of trainees feeling they have become more risk adverse as a result. This trend appears consistent across training grades and subspecialties, indicating that this is due to perception rather than accumulated through experience. While surgeons adopting a strategy of risk reduction is vital in establishing patient safety²⁰, the practice of "defensive" medicine in an attempt to minimise potential medicolegal risk can also cause negative associations such as surplus investigations, prolonged hospitalisations, higher costs and delayed healthcare access^{18, 21}. Establishing an appreciation of these negative sequelae in trainees is hence of paramount importance in reducing its potential occurrence.

While trainees' perceived risk of medicolegal involvement appears high, the reality to date appeared to be less severe, with only a small percentage of trainees involved in formal legal proceedings to date. While an argument that the risk of medicolegal involvement increases with growing clinical responsibilities exists, as evidenced in the proportionally higher rate of medicolegal correspondence in HST trainees when compared to CST trainees, the disparity between perceived and experienced medicolegal exposure emphasises the negative connotations of medicolegal proceedings in practice. Doctors who have been subject to medicolegal claims have been shown to be more likely to have negative attitudes to work, feel more distant from patients and consider either reducing or giving up their medical careers ²², and these fears may result in increased concerns within surgical trainees.

Strategies to improve surgical trainees' medicolegal understanding and perception would likely confer benefit to patients, trainees and healthcare systems alike. Education of healthcare practitioners in medicolegal practice has been suggested to help achieve this⁸. The majority of trainees in this study felt they had not received medicolegal training. Furthermore, a small proportion of trainees were unsure as to whether they had undertaken medicolegal training, further indicating uncertainty as to what this training involves.

Dedicated medicolegal physician training has been shown to be effective in improving knowledge in both prevention and management of claims¹⁴, and adopting uniform medicolegal training across all surgical trainees may confer similar benefits.

Limitations to this study exist in regards the overall sample size of those surveyed, particularly in surgical subspecialties with fewer trainees, limiting the ability to compare subspecialties. The overall response rate of 35.3%, while relatively favourable when compared to other surveys of medical practicioners^{22, 23}, further contributed to this potential limitation. Nevertheless, the authors believe this study to be of importance as it offers insight into trainees' understanding of an increasingly prominent aspect of surgical practice. It also allows for a broad representation of the medicolegal perception of surgical trainees across all levels and subspecialties within a national system, which to the authors' knowledge has not been reported to date.

To conclude, a significant proportion of surgical trainees across all grades and subspecialties anticipate involvement in medicolegal claims during their careers. While a majority of trainees have yet to be involved in claims, a high percentage of trainees both maintain personal medical indemnity and feel medicolegal concerns have made them more risk adverse in their practice. Most trainees have yet to receive dedicated medicolegal training during their training, and strategies to address this within the context of surgical training programmes should be considered.

Declaration of Conflicts of Interest:

The authors have no conflicts of interest to declare.

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