







Doctors Academy Workshop on Key Skills for Urology Trainees

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Aims of the Course

The main objective of Key Skills for Urology Trainees was to offer delegates the opportunity to utilise animal tissue and dry models to enhance their urology skills. Many doctors in their early years often have limited exposure to practice basic and routine urological procedures.¹ We intended to encourage doctors to deliver these practical skills effectively at an early stage. We also wanted to ensure that surgical trainees are competent in the management of acute urological emergencies, as well as common scenarios in the urology outpatient clinic.

Abstract

The Key Skills for Urology Trainees Course offers delegates the opportunity to practice and enhance their urological skills on animal tissue and dry models. To evaluate the effectiveness of the course which was conducted in 2016 and 2017, feedback was collected from the attendees on both occasions and evaluated.

The delegates' feedback that has been collected and analysed will help the organisers to improve the course and, thus, continue to benefit surgical trainees.

Key Words

Key Skills; Urology; Urology Trainees; Surgical Trainees; Educational Training; Simulation

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Target Audience

Delegates primarily comprised of junior surgical trainees who were preparing for specialty training and their Specialty Training 3 (ST3) application, but also included professionals at any level with an interest in Urology. A total of 19 delegates attended the course in 2016, and 21 delegates attended in 2017. Each cohort comprised of Core Surgical Trainees, Foundation Year Doctors and Medical Students.

About the course

Key Skills for Urology Trainees was held on 19th November 2016 at Walsall Manor Hospital, Walsall. The fee was £85, including lunch and refreshments. This course was held again the following year on 18th November 2017.

Organisers of the Course

The course was conducted by Doctors Academy (UK), a non-profit organisation that delivers education and training for healthcare professionals alongside programmes run by medical universities, institutions and hospitals. Consultant Urologists and Specialist Registrars in Urology were invited to deliver lectures and supervise the workshops.

Structure of the Course

Delegates were divided into groups to attend a series of workshops supervised by Urological Consultants. The attendees received hands-on experience on hydrocele repair, scrotal exploration and scrotal fixation (Figure 1a, b), circumcision (Figure 2) and vasectomy (Figure 3). They also practiced using the kidney and bladder ultrasound scan (Figure 4), and suprapubic catheterisation. These workshops were run in a circuit over the course of the day.

Lectures were organised according to scenarios encountered as urological emergencies and in outpatient clinics to complement the experience on developing key skills as a surgical trainee. Course material was provided, making it possible for delegates to hold written information on their learning.

Feedback from Delegates

Delegates were asked to complete: 1) feedback for each lecture; 2) feedback for each workshop session; 3) feedback for the overall course; and 4) The Dundee Ready Education Environment Measure (DREEM) questionnaires

Feedback for each lecture and the overall course were scored on a scale of Excellent, Good, Neither Good Nor Poor, Fair, and Poor. Feedback for each workshop session was scored based on a 7-item personal questionnaire that was scaled on Strongly Agree, Agree, Neither Agree Nor Disagree, Disagree, or Strongly Disagree. In this article, we demonstrate the percentage of responses to lectures, the 'Strongly Agree' rates in each workshop session, and 'Excellent' feedback to overall course.

We demonstrate the compliance of our outcomes to expected standards (Strongly Agree; Excellent) in our feedback for each workshop and the overall course to aid improvement in the delivery of this course in subsequent years. We do this because they are the most modifiable aspect of the course for improvement in training of basic urology skills.



Figure 1a: Workshop on scrotal exploration using sheep testicles

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Figure 1b: Closure of skin



Figure 2: Circumcision taught to the delegates using a plastic model from 'Limbs and Things'

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Figure 3: Vasectomy taught using a realistic home-made model



Figure 4: Kidney and bladder ultrasound demonstration

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Feedback to each lecture	How to deal with urological emergencies (%)	Common scenarios in the urology OPD clinic (%)	
Excellent	53	47	

Excellent	53	47
Good	47	47
Neither	0	0
Fair	0	6
Poor	0	0

Table 1 : Percentage	(%) responses	to lectures in 2016

Feedback to session	1(%)	2(%)	3(%)	4(%)	5(%)
Appropriate to level of training	76	82	59	41	71
Sufficient time allocated	41	53	30	47	76
Adequate supervision	53	65	47	47	76
Tutor-delegate ratio	65	76	47	59	76
Workshop objectives met	65	71	53	47	76
Useful to urology career	82	88	59	35	71
Useful for ST3 interview prepa- ration	59	65	59	35	71

Table 2: Percentage (%) of 'strongly agree' rate among delegates for individual workshop sessions in 2016

1. Hydrocele repair

2. Scrotal exploration and scrotal fixation

3. Circumcision and vasectomy

4. Kidney and bladder ultrasound scan

5. SPC catheterisation

The feedback received for the practical workshops was generally highly positive. For individual workshops, most delegates thought that the sessions were appropriate for their level of training, had sufficient allocated time, were satisfied with the tutor-delegate ratio, and agreed that the workshop met their objectives to be useful towards their urology career or ST3 interview.

Feedback to overall course	2016	2017	Average
Trainee experience	50	71	60
Facilities and venue	64	53	59
Refreshments and lunch	37	6	22
General friendliness of faculty organisers	77	71	74
Recommendation to friend	68	65	67

Table 3: Comparison of percentage (%) in 'excellent' feedback for overall course in 2016 and 2017

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An increase in trainee experience is noted, with 71% of delegates rating it as 'Excellent' in 2017. For future years, course organisers can improve on refreshments and lunch. The reason for which 'Excellent' feedback in this area dropped in 2017 was due to a delay between the arrival of food and actual lunchtime. One of the workshops was brought forward to before lunchtime as the Consultant leading the session had unavoidable circumstances and needed to leave early.

We also distributed The Dundee Ready Education Environment Measure (DREEM) questionnaires to all delegates in both 2016 and 2017. DREEM is a 50point questionnaire initially developed to measure the quality of an educational environment, based on five domains of perception that reflect the education climate.² These five areas are perception of learning, perception of teachers, academic self-perception, perception of atmosphere and social self-perception. Each parameter is scored on a Likert scale: 0 is strongly disasgree, 1 is disagree, 2 is neither agree nor disagree, and 4 is strongly agree.

A score of 168.6(±21.92) indicates an excellent perception among the course delegates³ (Appendix 1). In 2017, we used a modified DREEM guestionnaire removing items that we thought were not relevant to this course, such as "Cheating is a problem in this school", "I seldom feel lonely", and "My accommodation is pleaseant". We have removed the social domain altogether in 2017 as this was irrelevant to this one-day course. This amounts to 38 items instead of 50, leaving 152 points in total. We have expressed a comparison between DREEM scores of both years by using percentages instead of absolute scores. There is no significant difference between results compiled in 2016 and 2017 between total scores (p=0.66) and scores in each domain.

	2016	2017	p-value of differ- ence in percentage
Number of delegates, n	19	21	
Response rate (%)	93.8	100	
Points achieved	168.6 (±21.9)	127.7(±12.5)	
Total points	200	152	
Percentage (%) of total	84.3(±0.11)	84(±0.08)	0.66

Figure 4a: Comparison of DREEM questionnaire responses in 2016 and 2017 where p value=0.66 (>0.05)

Domain	2016			2017			2016/17
	Mean score achieved	Total in each do- main	Percent- age of total (%)	Mean score achieved	Total in each do- main	Percent- age of total (%)	p-value of difference in percentage
Learning	45.5(±3.2)	48	94.8	42.7(±4.7)	48	89.0	0.14
Teachers	38.9(±5.4)	44	88.4	25.4(±2.8)	32	79.3	5.00
Self- perception	23.8(±8.0)	32	74.3	23.4(±3.9)	28	83.6	1.00
Atmos- phere	40.9(±8.5)	48	85.2	36.2(±5.1)	44	82.2	0.08
Social	19.5(±6.5)	28	69.6	0	0	-	-
DREEM total	169 (±22)	200	84.3	128(±13)	152	84.0	

Figure 4b: Breakdown of DREEM scores in individual domains where p values are >0.05

Data analysis on each domain in 2016 (*Appendix* 1) correlates with teaching highly thought of, model teachers, students feeling more on the positive side, a good feeling overall on the learning environment and the social environment being not too bad.³

There is no significant difference (p>0.05) in DREEM scores in each domain between 2016 and 2017.

Delegates' Individual Comments

"Very well run course, providing very good value for money."

"Very well organised, one to one teaching. Picked up a lot of surgical skills from the course."

"Course is very relevant to daily practice."

"Very well organised. Useful for those considering a career in urology."

Conclusion

This course has been very well received by delegates so far in years 2016 and 2017. It gives the

opportunity for greater exposure of hands-on experience for medical students and junior doctors with an enhanced interest in Urology. With delegates' feedback, we aim to improve this reproduce this course in subsequent years for further training and education with Doctors Academy.

References

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Appendix 1. Interpretation of DREEM³

Section	Interpretation
Total DREEM score (out of 200)	
0-50	Very poor
51-100	Plenty of problems
101-150	More positive than negative
151-200	Excellent
DREEM subscales	
Students' perception of learning	0-12, very poor
	13-24, teaching is viewed negatively
	25–36, a more positive approach
	37-48, teaching highly thought of
Students' perception of teachers	0-11, abysmal
	12–22, in need of some retraining
	23–33, moving in the right direction
	34–44, model teachers
Students' academic self-perceptions	0-8, feeling of total failure
	9–16, many negative aspects
	17–24, feeling more on the positive side
	25–32, confident
Students' perception of atmosphere	0-12, a terrible environment
	13–24, there are many issues that need changing
	25–36, a more positive atmosphere
	37–48, a good feeling overall
Students' social self-perceptions	0-7, miserable
	8–14, not a nice place
	15–21, not too bad
	22–28, very good socially

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