

CITY-WIDE STANDARDIZED LAPAROSCOPIC TRAINING WITH PORCINE MODEL FOR INTERNS IN SHENZHEN, CHINA - A PROSPECTIVE ANALYSIS

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INTRODUCTION

Being one of the highest GDP contribution in Mainland China, Shenzhen implemented the Nation-wide standardized training for interns since 10 years ago with great success. Laparoscopic surgery, was not included as mandatory scope of training in the initial program, becoming one of the criteria in final assessment of interns. The country-first city-wide structural and standardized laparoscopic training for interns was developed by Shenzhen Municipal Health Commission and implemented since 2020. This study aims to analysis the impact of the training course from interns' point of view by questionnaire studies.

All laparoscopic procedures in each table will be recorded and labelled, and playback immediate after the dissection session for debriefing purposes. All trainers are qualified by Shenzhen Municipal Health Commission. All animal use and procedures were approved by the Institutional Animal Care and Used Committee (IACUC).



CONCLUSION

Standardized Laparoscopic Training with Porcine Model for Interns is very important due to latest final assessment. Laparoscopic animal dissection sessions create a scenario and trainees can practice the complete laparoscopy procedure with real instruments. This course also cultivated a standardized trainer team, promote the course quality improvement. Shenzhen government can enroll the interns from surrounding cities and even the whole country to join this animal course. All this together make this course influence expanded and more valuable.

METHODS

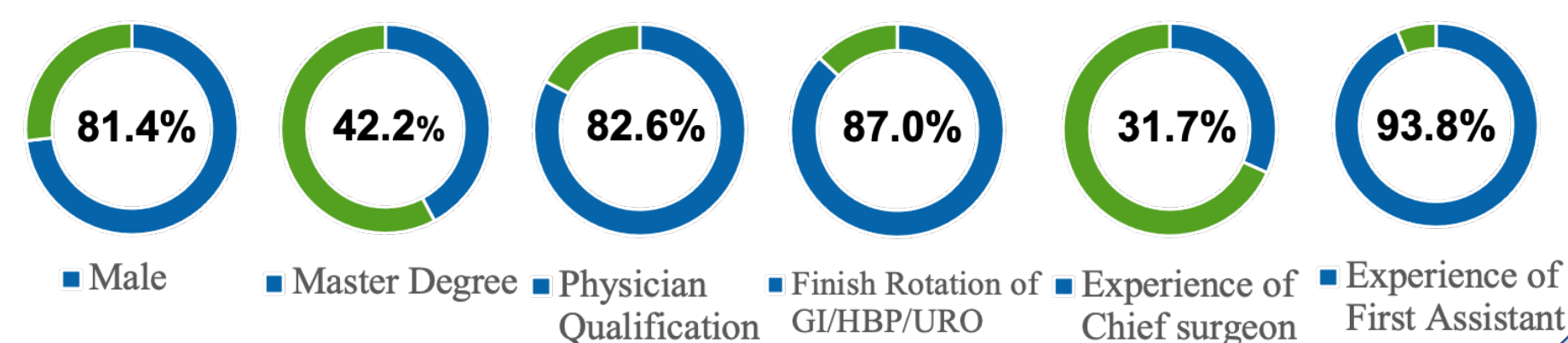
Standardized laparoscopic training course composed of lectures, dry lab training, animal dissection sessions for interns, and standardized teaching modules and debriefing skills for train-the-trainer course. All the teaching materials were prepared by clinicians and reviewed by specialists in the field; type of procedures were standardized in dry lab training to ensure teaching quality during the workshop. During the dissection session, interns will be supervised by trainer in 1:3 ratio and pace of dissection will be leaded by the course supervisor in all tables. Questionnaires was sent to all interns after completions of the course for evaluation.



RESULTS

We had successfully launched 6 courses, certificated 161 interns.

Courses	1st	2nd	3rd	4th	5th	6th	All	Rate (%)
Trainees	24	24	27	27	30	29	161	-
Male: Female	19:5	20:4	20:7	19:8	19:11	16:13	113:48	-
Master/Doctor degree	17	7	13	10	10	11	68	42.2
Physician qualification	19	22	24	22	23	23	133	82.6
Finish rotation of GI/HBP/URO	24	24	24	23	23	22	140	87.0
Experience of chief surgeon	8	4	15	6	10	8	51	31.7
Experience of first assistant	22	24	25	24	28	28	151	93.8



The first course concentrated in one day. The feedback to the course, interns were satisfied overall. But three quarter of the interns request more operation time.

Self Evaluation	Score ^a	n	Rate(%)	Feedback to Course	n	Rate(%)	
Overall	4-5	10	41.7	Overall	Very satisfied	9	37.5
	2-3	14	58.3		Satisfied	15	62.5
	1	0	0		Others	0	0
Theoretical Class	4-5	17	70.8	Time	Unenough	8	33.3
	2-3	7	29.2		Median	13	54.2
	1	0	0		Reasonable	3	12.5
Operation	4-5	18	75.0	Theoretical class	Need more	9	37.5
	2-3	6	25.0		Should be reduce	6	25.0
	1	0	0		Reasonable	9	37.5
#Scoring form 1 to 5 (1: Unsatisfied - 5 : Very satisfied)				Operation	Need more	18	75.0
					Should be reduce	0	0
					Reasonable	6	25.0

#Scoring form 1 to 5 (1: Unsatisfied - 5 : Very satisfied)

After quality debriefing meeting, we extend the course into two days.

Day 1:  Shanghai Health Care Quality Training and Continuing Education Center
9:00-17:30

				Problem	Improvement
Introduction	Theoretical class	Dry-Lab	Simulator	Unenough time	+ 1 day
				Unenough theoretical class	+ 30%
				Unenough operation	+ 120 mins
				Unenough pre-course preparation	Pre-course test
				No standardized Dry-Lab practice	+ Dry-Lab practice in first day
				No Simulator Practice	+ Simulator practice in first day
				To different trainees	Information collection & corresponding modulation

Day 2:  The University of Hong Kong Shenchou Hospital
9:00-20:00

Animal ethics	Operation skill	Animal operation	Video review and Debriefing	Certification
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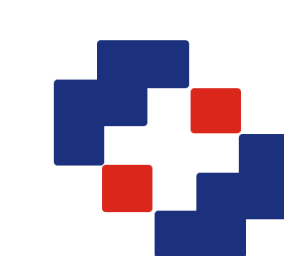
Feedback		1-day Course		2-day Course		P-Value ^a
		n	Rate (%)	n	Rate (%)	
Overall	Very satisfied	9	37.5	24	100	0.00
	Satisfied	15	62.5	0	0	-
	Others	0	0	0	0	-
Time	Unenough	8	33.3	0	0	-
	Median	13	54.2	11	45.8	0.52
	Reasonable	3	12.5	8	33.3	0.19
Theoretical Class	Need more	9	37.5	1	4.2	0.01
	Should be reduce	6	25.0	5	20.8	0.81
	Reasonable	9	37.5	18	75.0	0.02
Operation	Need more	18	75.0	1	4.2	0.00
	Should be reduce	0	0	4	16.7	-
	Reasonable	6	25.0	19	79.2	0.00



KEYWORDS

Interns, Laparoscopy, Simulated Training

DIRECTORS



INSTRUCTORS

