Survey on trainees' perception on creation of special interests within the domain of general surgery in Sri Lanka: is it the way forward?

B K Dassanayake¹, J A S B Jayasundara²
¹Department of Surgery, Teaching Hospital, Peradeniya, Sri Lanka
²Department of General Surgery, District General Hospital, Nuwaraeliya, Sri Lanka

Abstract

Introduction
Sri Lankan surgical training curriculum underwent a major revision in 2012 with the introduction of special interests within the domain of general surgery. The main employers are yet to recognize this transformation into the employment structure. In such a setting, evaluation of the trainees' perspective is important as their careers may be negatively affected.

Methods
A pre-tested questionnaire was sent electronically to all fifty-one general surgery senior registrars (SR) who started their post-MD general surgery training after February 2012. Gathered data were reviewed during an observational study.

Results
Among twenty-four (47%) respondents, eight (33%), seven (29%) and nine (18%) were second years SRs, SRs in overseas training and acting consultant surgeons (aCS) respectively. Four, nine, five, four and two trainees have declared upper-gastrointestinal surgery, colorectal, hepatopancreaticobiliary surgery, breast surgery and endocrine surgery. Eight (33.3%), thirteen (54.2%) and three (12.5%) had their speciality training at a university unit, a ministry unit and an overseas unit respectively. Eleven (46%) believed they had adequate special interest training during local or overseas training. Six out of nine (66.7%) colorectal trainees believed they had adequate special interest training during local or overseas training. Six out of nine (66.7%) colorectal trainees believed they had adequate special interest training during local training compared to other categories. Trainees who had speciality training in university units (7/8) were more satisfied compared to those in the ministry units (3/13). Three (12.5%) said their employer recognizes this system and two (8%) believed they can practice the special interest in future. Seven (29%) each believed that there are career benefits and patient care improvement with the new system but only three (12.5%) believed it is better than the previous one. Five of nine aCSs who have completed training thought they would opt for general surgery without a special interest if the option was available compared to SRs on training (1/15).

Discussion and conclusions
Colorectal speciality and trainees selected to university units were more satisfied with the local special interest training circumstances. Non-recognition of the new system by the employer was a major concern for them. A limited minority of trainees believed to have the opportunity to function with a trained speciality. Trainees doubted personal career benefits or patient care improvement from this change and this as a better system overall.

Introduction
From its inception, Sri Lankan allopathic surgical training scheme was a descendant from the English counterpart. With such colonial influences, from the late nineteenth century to the early 1980s, most of Sri Lankans obtained their higher surgical training according to the old FRCS curriculum from the United Kingdom. [1, 2] Following the establishment of the Post Graduate Institution of Medicine (PGIM) by 1980, training curricula were created for specialities including general surgery. [2] Prevaling training curriculum for general surgery in Sri Lanka underwent a major revision in 2012 in view of keeping up with the world trends. During the process, the total pre-MD (Doctor of Medicine) training period was kept unchanged but subtle changes were made to the training and evaluation structure. [3] Main modifications were done to the MD examination and post-MD training segment with the introduction of seven 'special interest' sub-domains namely Upper Gastro-Intestinal, Hepatopancreaticobiliary, Lower Gastro Intestinal/ Colorectal, Breast, Vascular, Endocrine and Trauma within the domain of general surgery. The post-MD general surgery training period was extended by one year and more focused criteria were laid for overseas training to facilitate the special interest training. By 2018, general surgical trainees who commenced their training after the implementation of the new syllabus have been board certified as General Surgeons with one of the above special interest
areas and have become eligible for employment.

The majority of general surgeons in Sri Lanka are employed by the Ministry of Health, which is the largest provider of surgical care in the country. Although it has been stated in the curriculum prospectus that the PGIM, Ministry of Health, College of Surgeons of Sri Lanka and Association of General Surgeons of Sri Lanka as allied agencies in the process of this transformation, [3] ministry has not acted to accept the new system into the employment structure up to date.

Other stakeholders appear to be keeping a blind eye towards the whole process. The inability of the main employer to recognize and implement this transformation for the benefit of the patients may easily lead the entire process to failure. In such a background, evaluation of the trainees' perspective on this conundrum is important as their careers would be significantly affected by this shift.

Methods
A pre-tested questionnaire was sent electronically to all fifty-one general surgery senior registrars (SR) who started their post-MD General Surgery training after February 2012 up to February 2017 in April 2017. Data were collected anonymously to be reviewed during the observational study.

Results
Among twenty-four (47%) respondents, eight (33%), seven (29%) and nine (18%) were second years SRs, SRs in overseas training and acting consultant surgeons respectively. Nine, five, four, four and two trainees have declared lower gastrointestinal surgery, hepatopancreaticobiliary surgery, upper gastrointestinal surgery, breast surgery and endocrine surgery as their special interest.

A genuine interest in the given field was the main reason for the selection in 14 (58%) respondents. Availability of training slots - 3 (12.5%), Compulsion for selection at the end of the first year - 3 (12.5%), Non-training related reasons - 2 (8.3%) and in view of easily finding an overseas training slot - 2 (8.3%) were the other reasons. Eight (33.3%), thirteen (54.2%) and three (12.5%) had their special interest training at a university unit, a ministry unit and an overseas unit respectively.

Eleven out of 24 (46%) believed they had adequate special interest training during local or overseas training. Trainee satisfaction of special interest training was varied depending on the training station. Satisfaction on special interest training against the place of training is summarized in Table -1.

| Place of special interest training | University Unit | Ministry Unit | Overseas Unit | Total |
|-----------------------------------|----------------|--------------|--------------|-------|
| Satisfied                         | 7              | 3            | 1            | 11    |
| Neutral                           | 0              | 9            | 1            | 10    |
| Unsatisfied                       | 1              | 1            | 1            | 3     |
| Total                             | 8              | 13           | 3            | 24    |

Six out of nine (66.7%) colorectal trainees believed that they had adequate special interest training during local training compared to other specialities and satisfaction of local special interest training was dependent on speciality. Table -2 details the satisfaction of special interest training against speciality.

| Speciality  | Satisfaction on local special interest training | | | | | |
|-------------|-----------------------------------------------|---|---|---|---|---|
| COLORACTERAL | Satisfied                                    | 6 | 2 | 3 | 0 | 0 | 11 |
| UGI         | Neutral                                       | 2 | 0 | 0 | 4 | 1 | 7  |
| HPB         | Unsatisfied                                    | 1 | 2 | 3 | 0 | 0 | 6  |
| BREAST      | Total                                         | 9 | 4 | 6 | 4 | 1 | 24 |

Only three trainees (12.5%) employed by the universities believed that their employer recognizes this system. Only two (8.3%) believed that they would be able to practice the special interest in future. Seven (29%) each believed that there are career benefits and patient care improvement with the new system but only three (12.5%) believed it is better than the previous one. Five of nine (55.6%) acting Consultant Surgeons who have completed the entire training stated that in retrospect they would have opted for general surgery without a special interest as per the previous curriculum if the option was available compared to one out of 15 (6.7%) SRs in training. Consideration of such potential opinion was dependent on the position of the respondents' surgical career.

Table 2. Satisfaction on special interest training against speciality
Discussion and conclusions

In summary, half the study population believed that they received satisfactory special interest training either in Sri Lanka or overseas; and trainees who selected colorectal surgery as a special interest domain and trainees who got selected to university units for training were more satisfied with the local special interest training circumstances. Availability of adequate caseload for operative management was the main reason the relative values to be higher for colorectal surgery and the university units. The paucity of the number of cases encountered during the training period for management in hepatobiliary and upper gastrointestinal surgery was the main reason for the trainee dissatisfaction.

The majority of the study population (21/24) was employed by the Ministry of Health and they were aware that this system is yet to be recognized by the employer. Ministry of Health as the main employer, not recognizing this system was the major concern for them. Thus, only a limited minority of trainees believed to have the opportunity to function with special interests in the future as specialists within the existing employment structure. Therefore trainees doubted personal career benefits or patient care improvement from this change. The majority did not believe this as a better system overall. The low response rate of 47% in a small study population, was a limitation in this survey which precluded a statistical evaluation.

Revision of any medical curriculum should aim not only to upgrade the quality of training but also to uplift the quality of provided patient care in the system. [4] This basic fact has been accepted in the prospectus related to the current surgical curricular revision. [3] It is a positive move from the PGIM, as the training regulatory body to revise the general surgery curriculum par with the current global trend. Still, there may be relative inadequacies in training structure and training stations during this initial transit period and it is important to rectify them rapidly. Most of the training related concerns on the implementation of the new curriculum have been successfully dealt by the training authority, The PGIM and further queries made by upper gastrointestinal surgery and hepatobiliary surgery trainees on local training positions require prompt attention.

The highlight of this survey is the significant negative retrospect of the trainees who have completed the program towards the transformation. The majority of them are current consultant general surgeons in the Ministry of Health whose speciality training has not been recognized by the main stakeholder. Their concern about the lack of opportunities to utilize the obtained special interest training of an additional year to personal and/ or patient care benefit within the prevailing structure is reasonable. The two main sectors employing general surgeons in Sri Lanka are the Ministry of Health and the Universities, and the Ministry of Health is by far the largest provider of general surgical services.

The university system, by virtue of the department structure, allows and encourages general surgeons to engage in their area of interest. However, in the public health sector, the existing process of expansion of surgical services and the transfer system do not seem to be in resonance with the specialization within general surgery. Hence, it is of paramount importance for the stakeholders (including PGIM, Ministry of Health, College of Surgeons of Sri Lanka and Association of General Surgeons of Sri Lanka) to analyse the current system and identify the ways to utilize the additional training and knowledge received by general surgeons with special interests. Such a move is vital for the betterment of the profession of general surgeons as well as for the consumers of the service, the patients within the general public.

This study was presented as an oral presentation at Annual Scientific Session of the College of Surgeons of Sri Lanka and joint academic meeting with Royal College of Surgeons of Edinburgh, 17th - 19th August 2017, Kandy.

All authors disclose no conflict of interest. The study was conducted in accordance with the ethical standards of the relevant institutional or national ethics committee and the Helsinki Declaration of 1975, as revised in 2000.

References
1. Uragoda C G. A history of medicine in Sri Lanka - from the earliest time to 1948 (1987).
2. Available at https://pgim.cmb.ac.lk/index.php/history/ Accessed on 15th February 2019
3. Prospectus - MD General Surgery Board Certification in General Surgery with Special Interest .Post Graduate Institute of Medicine, University of Colombo 2012. Available at https://pgim.cmb.ac.lk/wp-content/uploads/2016/07/MD-Surgery-Prospectus.2011.pdf
4. Elam CL, Stratton TD, Wilson JF, Rudy DW, Jennings CD. The Kentucky medical curriculum: continuing innovations in educating physicians. Journal of Kentucky Medical Association. 2006; 104:147-52. PMID: 16700435