SAGES report on academic gastro-intestinal unit survey

Sandie R Thomson

Academic gastro-enterology is not functioning well, research output is down and fewer trainees are choosing it as a career path. The South African Gastro-enterology Society (SAGES) council felt that a composite appraisal of the national problems was necessary. I was tasked with canvassing the heads of department (HODs) of the nine Health Professions Council of South Africa (HPCSA)-recognised academic gastro-intestinal units in this regard.This preceded the national Modernisation of Tertiary Services (MTS) initiative.

These data sources and opinions are collated as follows.

Resources

Human resources. Two HODs have resigned, one is in the Middle East, the other in Canada and a third professor has gone to the USA. One former senior head has emigrated to Australia. This expertise cannot be replaced easily. Manpower is critically short — only 1 unit has 3 full-time medical staff The staffing levels are variable and, importantly, there are currently only 4 trainees in the country. A variable portion of the service endoscopy load is taken care of by non-subspecialist doctors. The recommendations from the MTS workshops were that there be 3 medical gastroenterologists and 3 surgeons with a special interest in GI diseases at each of the academic GI units. Most units are woefully short of this recommended target.

Equipment. All units are in poor shape with regard to state-of-the-art equipment. Most of the academic fleet consists of fibre scopes and many are more than 10 years old, beyond the working lifespan of an instrument. On average, one-third of the scopes are non-functional at any 1 time. These instruments should be condemned and are slowly being replaced with video systems. However, there are hardly enough scopes to run large slates efficiently with effective inter-patient disinfection. Five units have no manometry or pH metrimetry equipment which is essential in the provision of tertiary service. Four units have a full-time technician. Specialised, dedicated nurses to handle their equipment are not universal and there is a need to develop and train in this regard.

Physical structure. In terms of physical space most units have enough rooms/space to conduct their procedures and clinics. One unit has an integral dedicated X-ray screening unit.

Workload/equipment

Specialist clinics in liver, acid-related foregut problems, and inflammatory bowel diseases are universal. The total endoscopy workloads are similar to or greater than those of a district general hospital (DGH) in the UK catering for a population of 250 000. This procedure load is 2 500 - 3 000 endoscopies, 800 colonoscopies and 200 ERCPs annually. The exception is colonoscopy. In those hospitals with a large proportion of black patients the procedure load is about one-third that of a UK unit. This workload is dealt with by 3 medical gastro-enterologists and a minimum of 6 nursing staff. On average the academic units in this country have less

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than this number of staff.

It is recommended that dealing with this load requires 6 gastroscopes, 4 colonoscopes, and 3 duodenoscopes based on a minimum disinfection immersion time of 10 minutes. The high prevalence of HIV and tuberculosis in our community must entail adequate provision of endoscopes to allow proper disinfection. The purchase, maintenance and replacement of a basic endoscopy set (3 gastroscopes and 2 colonoscopes) for a regional hospital equivalent in workload to a DGH but catering for 4 times the catchment population is not unreasonable. It would be an initial capital outlay at current prices of R1 400 000. With replacement after 10 years, a 10% depreciation/maintenance per annum and a modest 5% per annum inflation rate this translates into a annual cost of approximately R498 000 annually for the hardware alone.

Postgraduate programmes

All units have in-house postgraduate and external trade-sponsored CPD programmes. Multidisciplinary approaches are being fostered and are considered essential for future development.

Training regulations

Four trainees have been examined under the new College regulations for the subspecialty. The regulations are in need of constant review. The number and nature of procedures laid down in the College document, concomitant general medical duties and article publication require continued discussion.

Research activity

There has been a decline in the number of peer-reviewed publications and presentations at the annual SAGES congress. The reasons cited are that fewer academics undertake or promote research because of a large service load and lack of funding. The trainees' perspective is that specialty teaching should be procedure-orientated rather than research-driven and research output is of little benefit to them in private practice.

Solutions

Solutions are dependent on staff retention and development both within the discipline and in the key supporting disciplines. To achieve this there must be improvement in the working and training environment (equipment and research) and in financial remuneration.

Discussion

Equipment. Equipment norms are available. Those proposed for a regional hospital are outlined above. These requirements must be made available to national, provincial and hospital managers so that appropriate budgeting including service maintenance and replacement costs can be allocated. Endoscopic ultrasound (present in 2 units) and other state-of-the-art equipment needs to be budgeted for as part of service provision and/or research. Improved medical-surgical liaison will avoid duplication of equipment and services and strengthen training capabilities.

Research. Research and trainee teaching must be regarded as integral parts at all levels of service provision. Resources should be channelled from contract research into audit, clinical and basic science research by linking more with the medical scientists. This research must be of high quality and applicable to our health care environment.

Training. We need to attract and keep trained gastroenterologists in the academic and state sector. The number of consultants necessary in the academic and state sector has been outlined and the number of training posts necessary to sustain that number needs to be calculated. The trainee's necessary clinical and procedural exposure must be gained at regional and tertiary centres. Level of care and disease treatment protocols need to be developed and implemented to facilitate this approach. Support, nursing and technical staff must be allowed to attend workshops and funds need to be made available to do this. Advancement of their technical skills must enhance their promotion and salary prospects.

Financial package. The first step is a market-related salary commensurate with the training and commitment of full-time practice. Support to attend congresses must be built in for 2 local and 1 overseas attendance annually. Mechanisms for income supplementation, remunerative work outside the public service, consultancy, medico-legal and contract research work need national rather than provincial standardisation. A private practice model, in the same building with a separate infrastructure to the state patient system, is likely to keep staff in procedure-related specialties on site.

These steps might help to retain the few remaining academic role models and allow them to nurture research and provide direction and leadership for their specialist trainees. This document is designed to act as a catalyst and to provide a start for SAGES and the HODs to take the process forward.