

## **Report to GESA of the inaugural GESA Fiji Training Team (GESA FiTT) August –September 2008**

### **Partnering of the Fiji School of Medicine and Colonial War Memorial Hospital with GESA to strengthen gastroenterology services in Fiji and the Pacific region**

This report summarises the experiences and recommendations of the first four gastroenterologists to participate in the GESA Fiji Training Scheme.

Doctors Donald Ormonde and Andrew Taylor participated in the first two weeks and A/Professor Peter Katelaris and Dr Tony Clarke in the following 2 weeks. All four gastroenterologists considered the initiative to be valuable and important and strongly support the ongoing development of the program and participation of GESA. All four acknowledge the tremendous initiative and work done by Finlay Macrae and Thein Htut to establish the program and also the enthusiasm and support by our counterparts in Fiji, especially the staff at the CWM Hospital and the Fiji School of Medicine. Dr Joji Malani and Professor Rob Moulds in particular were instrumental in ensuring the success of this first visit.

The benefit of the program to GESA occurred at many levels and at token cost. It is clearly appropriate that a well resourced large fraternity of gastroenterologists such as ours supports colleagues in the region. Judging by the many gastroenterologists who volunteered to be part of the program there is clearly a great deal of support for this by the membership. Secondly, the program establishes important regional links between Australian gastroenterology and physicians in the region. Thirdly, it has the potential to greatly enhance the interaction of GESA with the World Gastroenterology Organisation (who have nominated Suva as a designated training centre in gastroenterology for the region). Lastly, the GESA participants found that the experience of contributing to this program personally and professionally very satisfying and it is likely that other members that contribute will also share this positive experience.

#### **The Current Situation**

Fiji has a population of about 850,000. There are no gastroenterologists in Fiji or in any of the other island nations in the region. Digestive diseases are dealt with by primary care physicians, general physicians and general surgeons.

The Fiji School of Medicine has a postgraduate training scheme that confers diplomas and masters in medicine, which is the highest postgraduate level of training in Fiji. The course includes a gastroenterology module.

There are only two hospitals in Fiji that provide public endoscopic services. The larger is the Colonial War Memorial Hospital in Suva and the smaller is the hospital in Lautoka. None of the doctors providing endoscopy have been formally trained nor had sufficient experience to provide a sub specialty level of service. Endoscopic services are largely diagnostic gastroscopy and colonoscopy. Both present technical

challenges as measured by outcomes such as success at intubation of the second part of the duodenum at gastroscopy and intubation of the caecum and terminal ileum at colonoscopy. Therapeutic procedures are by and large not performed.

Endoscopy is provided in the private sector in Suva in a fairly new private hospital but the level of training and technical competence at that institution is probably lower than that at the CWM Hospital. The fees charged at that institution are such that only a tiny minority of all patients are able to access care there.

### **The Burden of Disease**

There are no systematic data that define the range and prevalence of digestive diseases in the community or referred to the CWM Hospital. What little data that are available are either dated or likely to be unreliable due to methodological constraints. During the brief time of the GESAFiTT visit it was abundantly clear that the major burden of gut diseases seen in the tertiary institution was predictable for such a setting. For example, peptic ulcer disease and gastric cancer related to *Helicobacter pylori* appear very prevalent in referred patients. The major colonic diseases seen were acute and chronic colitides. Whereas definite cases of ulcerative colitis were evident, infective causes particularly amoebic colitis appear more prevalent. Other acute gut infections appear common and viral hepatitis is present although the prevalence of this is not known. The prevalence of other gut cancers was also hard to assess. It is apparent that gastrointestinal diseases in Fiji and the wider Pacific could be better managed with improvement in endoscopy services and by improved knowledge and availability of cost effective diagnostic and treatment options.

Gastroenterological diseases compete for resources in a health system under severe resourcing pressures. Other major health issues include the huge burden of diabetes and the complications of that disease as well as major issues with other vascular diseases, infections and cancer.

### **Endoscopy equipment and service provision at CWM Hospital**

There is clearly a major unmet need in the community for endoscopic services. The yield of significant endoscopic findings was greater than 80% during the latter two week visit. The senior staff who provide endoscopy are constrained by a lack of formal training and by a dedicated endoscopy unit structure.

It is clear that efforts to upgrade the equipment, and increase training and throughput would have a major beneficial effect on service provision.

Constraints on productivity occurred at all levels. The booking process seem to work well but more than one patient dropped out from colonoscopy because of economic constraints related to the cost of the bowel preparation. Simple measures, such as making available a low-cost generic bowel preparation would do much to relieve the economic burden on patients who are unable to afford the \$20 required for a bowel preparation and this would also reduce wastage of endoscopy time.

Similarly, rapid urease tests were not available other than the few commercial ones brought by the team. An ultra-low-cost generic but validated urease test was discussed

and we are in the process of arranging for this to be used. This will lower the unit cost of the test from approximately \$8 dollars to less than \$0.20.

Turnover of patients is slow and this is constrained by the current layout of the area used for endoscopy, the available nursing staff, the limitations on reprocessing and the number of scopes as well as the unfamiliarity of the staff with respect to time and motion efficiencies.

The endoscopic equipment available for diagnostic and limited therapeutic procedures was just adequate. Cleaning was done to a safe level. There were major constraints with respect to endoscopic accessories and the donated consumables brought by us provided a stop gap supply of these items.

During the visit a SWOT document was generated (by DO and AK) to form the basis of ongoing planning of endoscopy services.

**The four gastroenterologists concurred with the following:**

1. It was uniformly agreed that the program should continue. It was considered essential that gastroenterologists from Australia who subsequently volunteer for this program will need to be well aware of the clinical needs and constraints of the medical services in Fiji. High-level sub specialty technical skills as applied to a developed country are at present of little value.
2. Teaching on the FSM postgraduate course should be retained as a core component of the program. GESA members may play a greater role in helping to develop and expand the gastroenterology part of the curriculum. GESA volunteers are likely to be willing to donate their teaching material.
3. This year the visit overlapped with the annual scientific meeting of the Fiji Medical Association and one of us (PK) had a role as an invited international speaker. It would be useful if future visits took place at the same time each year for a visiting GESA member to continue this role.
4. The consultants who perform endoscopy greatly benefited from the four-week period of intensive teaching and training. This benefit related to both technical training and learning about the clinical application of endoscopy. Over the brief time of the visit it was apparent that major improvements were made in technical and cognitive skills.
5. Training of postgraduate doctors should be limited to a small group who are likely to gain enough experience to become competent.
6. **Proposed strategies to help develop endoscopic expertise:**

One of the major impediments to the development of endoscopic skills is that insufficient numbers of endoscopies are being performed at CWMH to allow trainees to build their skills. This is aggravated by the relatively large number of specialist endoscopists and the tendency to try to have most medical and surgical trainees perform a few endoscopies. The net result is that neither the specialists nor the trainees have the density of experience necessary to develop their skills.

We would favour endoscopy being limited to say 4 specialists (2 medical and 2 surgical), who each do one or preferably two lists each per week.

Trainees in endoscopy should be selected for their interest in endoscopy, the needs in their likely final location as a consultant and their potential skill development. The numbers of endoscopy trainees should be limited to that which allows each to do a minimum of 2 lists per week for at least a year.

As the clinical need for endoscopy at the moment is particularly for gastroscopy, this should be the initial area of effort. Colonoscopy will need to be addressed from the start, but the expectation of the trainees will need to be realistic. Training in flexible sigmoidoscopy will be of value (given the frequent need to characterise colitis). ERCP should not be considered until the clinical need has been shown to be significant and skill levels and resource capacity is at an appropriate level.

Therapeutic procedures should be limited to those which will be easy to learn, have a major clinical impact and do not require expensive consumables. Techniques for endoscopic haemostasis and oesophageal stricture dilatation should be the priority.

The ongoing use of the donated computerized reporting system is encouraged to ensure quality and uniformity of reporting and as an ongoing audit tool.

To address the unmet clinical demand for endoscopy and provide the density of experience needed to achieve fairly rapid development of endoscopy skills, it is essential that the management of the endoscopy unit be such that at least 8 procedures (say 6 gastroscopies and 2 colonoscopies) are undertaken on each list. This will require quite significant changes to current work practices. Management of the lists to ensure that the current high rate of 'no shows' is minimised.

A program needs to be developed to ensure that trainees can appropriately utilise endoscopy clinically and become aware of what is required to provide safe, hygienic and effective endoscopy. This should ensure the trainees have a detailed understanding of:

- a. The conditions where endoscopy would be appropriate
  - b. The other investigations that are complementary
  - c. Infection control and equipment reprocessing
  - d. Use of diathermy
  - e. Sedation
7. It was considered crucial that the endoscopy unit develop an independent physical identity as a multidisciplinary diagnostic and therapeutic centre for the provision of endoscopic services, teaching and training. It was suggested that a nominated midlevel consultant be given a role as director of endoscopy and that that person would coordinate many of the activities outlined in the SWOT document. Every effort should be made to assist the Hospital develop such an appropriately resourced and managed Unit

#### **Other ways to enhance the partnership**

8. Tangible benefits should flow from the association with the World Gastroenterological Organisation. A request for help for obtaining the new endoscopic equipment has already been submitted to the WGO by Dr Malani.
9. In addition there are numerous tangible ways that GESA members can contribute. Although ad hoc donation of equipment and consumables will not establish a sustainable service it may play a short-term role in helping to establish the unit.
10. Discussions were held about potential models that may improve the resources that are directed to endoscopy services in CWMH. The hospital is severely constrained financially and models for limited charging of those able to make some contribution was suggested as a potential model for generating revenue. Such funding is crucial for ensuring a regular flow of consumables such as biopsy forceps, cleaning reagents and the like. A small number of expatriates and other insured individuals avail themselves of services at CWMH at almost no cost. It is recommended that a way of billing such patients be addressed with the funds quarantined for the unit. (This could make a significant difference. For example, the charge for one gastroscopy at the private hospital in Fiji exceeds the projected annual cost for all biopsy forceps at CWMH for one year)
11. The establishment of a gastroenterology and endoscopy resource centre at CWMH may be a worthwhile goal. There is good internet access to information, endoscopy atlases and data but apparently relatively little utilisation of this, partly because of the location of these resources. A number of hardcopy journals and textbooks as well as core articles were left by the team in the hope that these may form the nucleus of a small learning centre.
12. There is only one well trained endoscopy nurse at CWMH at present but no regular assistant. A second endoscopy nurse is considered essential not only to share the nursing workload but also to help improve the turnover of procedures. Liaison with GENCA to consider a visit by an Australian endoscopy nurse to help mentor and train the local nurses in the next year would be valuable.
13. As Suva is the medical educational hub of the Pacific it is probably better for GESA to concentrate its resources in Suva. The training provided will inevitably reach many of the island states as most physician trainees are located at CWMH and participate in the FSM courses.
14. Many GESA members have indicated a willingness to participate in this initiative by volunteering time for training. It is likely that there would be no difficulty in filling all the requirements the FSM identified as being needed. So that this is a true volunteer project, it is considered important that the GESA volunteers self fund their accommodation and living costs in Fiji. This is not seen as a major issue.
15. Notwithstanding the role of the WGO in equipment provision, GESA and GESA members may be able to negotiate with our industry partners in Australia to support the maintenance of a reliable supply of endoscopes and other equipment to CWM Hospital.
16. The program should identify diagnostic and treatment pathways that can be taught and implemented at a cost affordable to Fiji. The most obvious example

would be the development of standardized diagnostic and treatment pathways for *H. pylori* associated ulcer disease. (At present, the commercially available triple therapy regimen is very expensive and therefore unaffordable by many. A generic equivalent at one third the cost contains components not on the government funded list currently).

17. Opportunities may arise to expand the program through GESA member contacts with other organizations. For example TC has good contacts with AusAid and PK has had overtures from an Infectious Diseases Dept to potentially participate in a parallel program. The latter may be very helpful clinically as it is apparent that microbiological and histological diagnostic services struggle to meet clinical needs at CWMH. There are serious manpower and equipment constraints in the laboratories. An example was in cases of colitis of indeterminate nature that were thought likely to be amoebic colitis but where diagnostic tests were negative. In one case histology slides brought back to Australia clearly demonstrated amoebiasis. It is apparent that provision of training and support for consumables in the laboratory has the potential to greatly improve service provision.

GESA FiTT members met the Australian ambassador to Fiji and he is another potential source of local support for the program.

Peter Katelaris, and Tony Clarke

With support from Don Ormonde and Andrew Taylor