

What trainee interns experience on their general practice run

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ABSTRACT

Aim

To describe the experience of four trainee interns (final year medical students) and compare this to previously published accounts from New Zealand general practice.

Method

Diaries were kept of the first 30 consecutive consultations and the age, sex, ethnicity of the patients seen was recorded. Other factors noted included the diagnosis of the presenting complaint, type and outcome of the consultation, and whether there had been teaching or discussion between the student and the host practitioner.

Results

A description of 120 consultations was obtained. The students saw a wide range of age groups and diagnoses. Teaching took place in 62% of the consultations. In 57% of consultations the trainee intern was the primary consultant.

Conclusions

The experience of these senior medical students was seen by them as being highly relevant, and realistically reflects current New Zealand general practice. It is recommended that trainee interns should see patients on their own and should be encouraged to set goals for themselves within the experience.

Key words

Education, medical, undergraduate, family practice.

(NZFP 2001; 28:400–405)

Introduction

What are the experiences of trainee interns during their general practice run? This is the question our group wanted to answer in our project. We wanted to look at the types of patients seen in the general practices visited by trainee interns as well as how these patients were managed. We also wanted to look at how much responsibility trainee interns were given and the teaching they received from the general practitioners they were attached to.

Investigating the types of patients seen during our general practice run should determine whether or not this run is providing experience representative of general practice in New

Zealand as a whole. Looking at what trainee interns get to do during their general practice run gives an idea of the skills a trainee intern can expect to obtain from the run. Our report includes a literature review, the study design and results, evaluation of the results and our recommendations in regards to our findings.

Literature review

There have been various studies looking at what trainee interns experience in the general practice setting. We found five articles which were especially relevant to our study.

We reviewed the WaiMedCa study.¹ This survey sampled patient encounters within the Waikato area

between 1991 and 1992. It identified details of patient demographics, the presenting problems and the resources used in the management of these problems. The data was collected using a questionnaire which the GPs filled out.

The most useful study was a New Zealand article by St George.² This study was based on 29 trainee interns from the Otago School of Medicine who saw 2 904 patients in three weeks. It looked at the types of patients that were seen, their major presenting complaint, the type of visit and what the trainee intern (TI) involvement was within the general practice setting. We used these results as a comparison to our find-

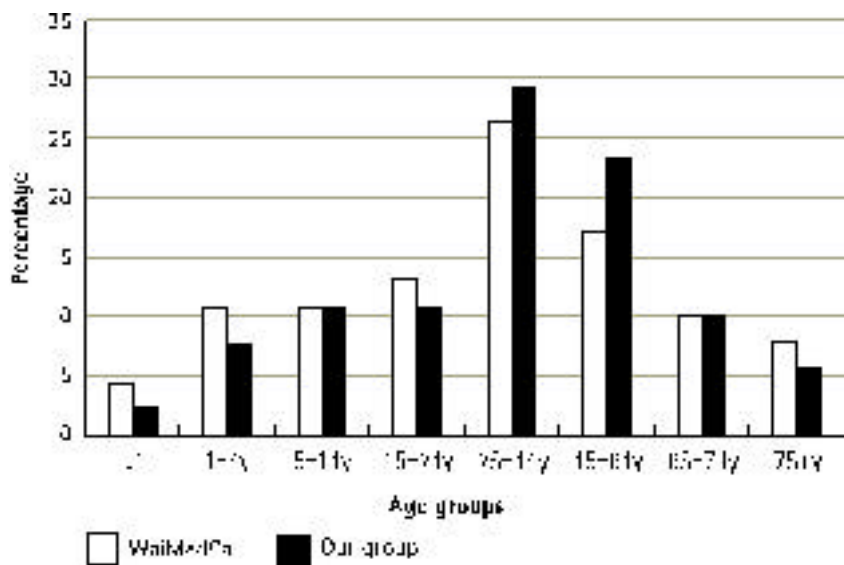
ings. The study found that students saw patients that were typical of the GP setting in terms of age, sex and morbidity distribution. The TIs were the primary people involved with the patients 1 210 times out of 2 904 (42%). Of these 1 210 patients, 80% had been seen by the student for the first time. The high number of accidents seen was thought to be realistic for rural practice in NZ. The low number of mental disorders seen by the students was thought to be due to the GPs 'shielding' their psychiatric patients from students.

Another article by Corboy and Herbison³ stated that in the general practice setting teaching was provided mainly by general practitioners (87% of all teaching). The other 13% of teaching came from others involved in the general practice such as other doctors, and nurses.

Hanne⁴ wrote an article about his experiences of having trainee interns at his clinic, which to a large extent reflected our experiences. He described what students were allowed to do and the extent of their involvement. This helped give us an idea of what we would be experiencing, and helped us to suitably plan our study.

Another article that was of interest was one written by Holden and Pullon.⁵ However, it was not directly

Figure 1. Age range of patients seen



relevant to our study. It found that GPs, nurses and receptionists found advantages in having TIs at their clinics. There was a beneficial impact on the quality of primary care. Many felt that the attachment duration should be extended. GPs reported increased levels of stress and decreased levels of productivity, with greater hours at work per week. Patients found TI involvement advantageous, with improvement in quality of care and communication. Disadvantages included longer waiting times and longer ap-

pointment times. Younger patients were more likely to find disadvantages than older patients.

After reviewing these articles we decided to use the St George and WaiMedCa studies as a template for our research, so that we would be able to compare our results to these two key studies.

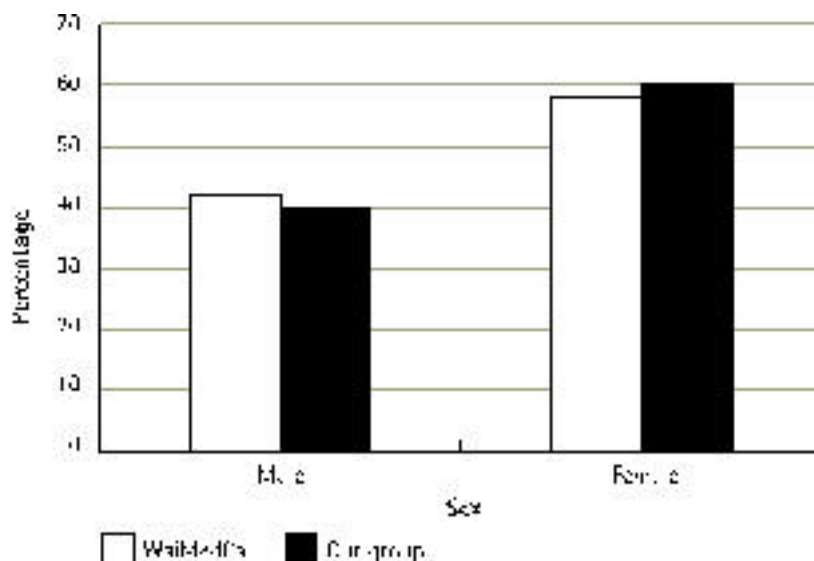
Study design and methodology

A survey was developed by our trainee intern group. The survey included the age, sex and ethnicity of patients seen, the diagnosis of the presenting complaint, the type and outcome of the consultation and finally if there had been any teaching or discussion about the consultation between the TI and GP. The survey was filled in by the TIs for the first 30 consultations done consecutively on their GP attachments. With a group of four TIs, a total of 120 consultations were surveyed. The results of the surveys were collated and compared to the WaiMedCa and St George studies using Microsoft Excel and PowerPoint 2000.

Results and critical evaluation

The age distribution of the patients seen during our general practice attachment was similar to that found by the WaiMedCa study (figure 1).

Figure 2. Sex of patients seen

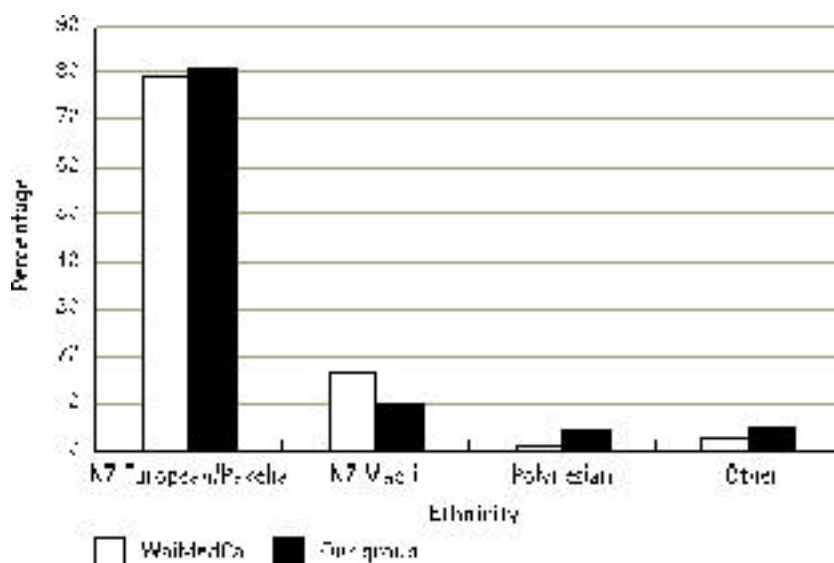


Sixty per cent of the patients we saw were female. This was similar to the 57.8% found by WaiMedCa (figure 2).

WaiMedCa found that 79.1% of patients seen were NZ European/Pakeha; our study found a similar percentage of 80.8%. WaiMedCa had more Maori patients than our study with 17.1% compared to 10.0% in our study. In our study 4.2% of patients were Polynesian and 5.0% were 'other' (including Indian, Chinese and Yugoslavian); these were higher than the percentages of 1.2% Polynesian and 2.6% 'other' found by WaiMedCa (figure 3).

The four most common diagnoses in our study were musculoskeletal (22.5%), respiratory (19.2%), skin (18.3%) and cardiovascular (11.7%). WaiMedCa found that respiratory (21.7%), musculoskeletal (17.4%), skin (15.1%) and general (12.4%) were the most common diagnoses. The graph in figure 4 shows that we saw similar numbers of diagnoses in each category to the GPs in the WaiMedCa study. We saw fewer patients with general, ear and urological diagnoses and more patients with musculoskeletal, blood, neurological, psychological,

Figure 3. Ethnicity of patients seen



cal and social problems than were seen in the WaiMedCa study.

The percentages in this graph do not add to 100% as for some consultations there was more than one diagnosis.

43.3% of patients presented with a new problem; this was the most common consultation type (figure 5).

Prescription was the most common outcome of consultations, with

55.8% of patients in our study receiving a prescription, similar to the 59.3% in the WaiMedCa study. Health advice/counselling (32.5%) and investigations (30.0%) were the next most common outcomes. The 'other' category in our study included ACC claims, corticosteroid injections, wedge resection and nebulisation (figure 6).

Figure 4. Diagnosis

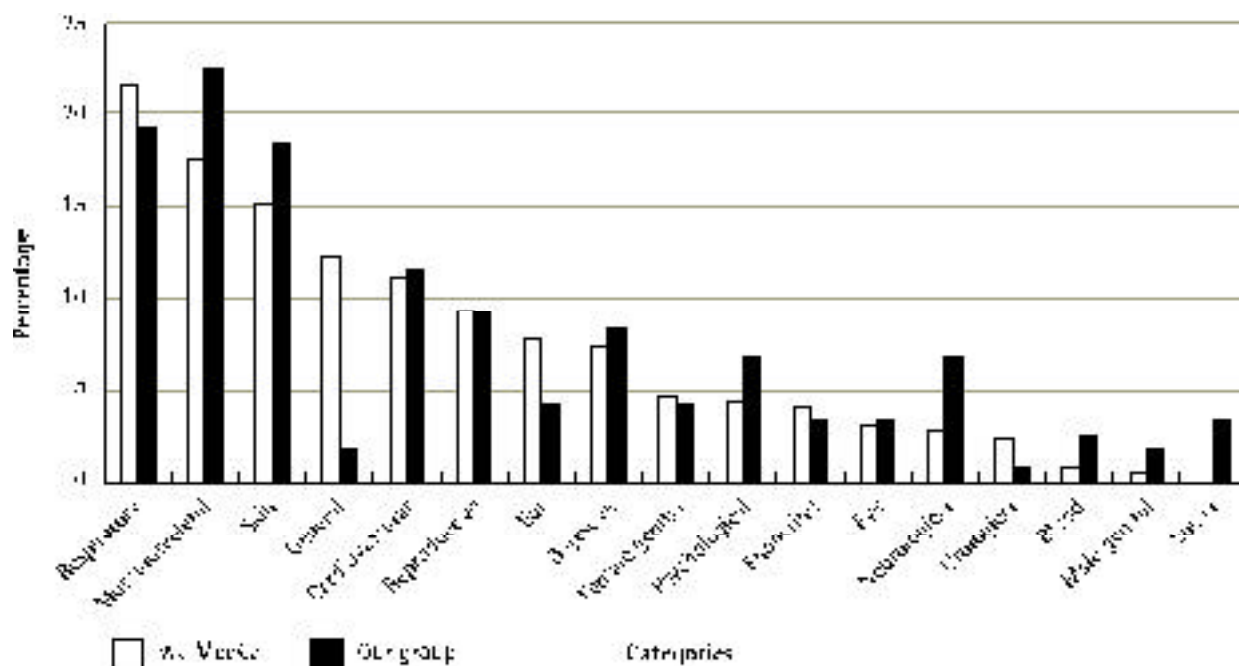
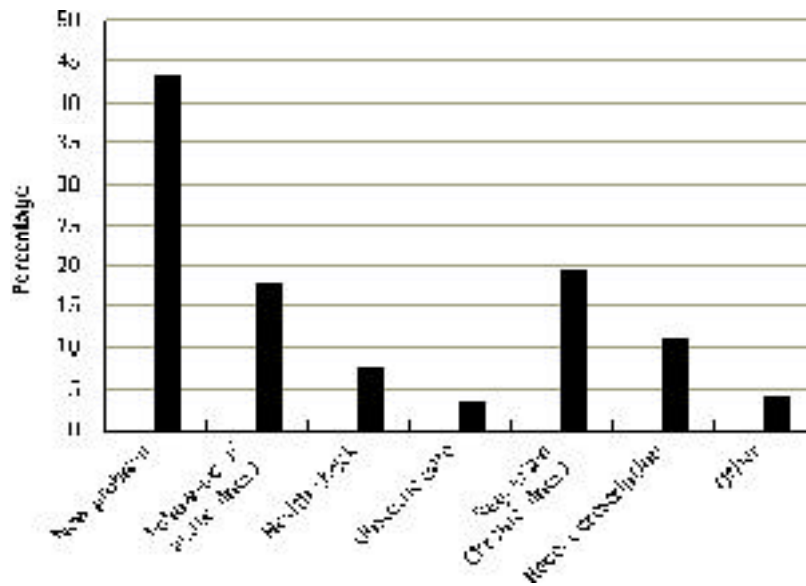


Figure 5. Consultation type



The graph in figure 7 shows what consultation outcomes trainee interns were responsible for. The GP, nurse or other health professional the trainee interns were working with, were responsible for more prescriptions, minor surgery, health advice/counselling, health certificates, investigations, referrals, and 'other' or 'no' outcomes. Trainee interns were responsible for more dressings and immunisations.

Teaching was done by both the doctors and nurses of the clinic. In 62% of cases seen by the TIs teaching did occur (figure 8).

For the first 120 patients that TIs saw, 57% of consultations were primarily done by the TI. In comparison, in the St George study 42% of TI consultations were primary. In our study 32% of the time the TIs were observing, and 12% of the time TIs assisted within the consultation (figure 9).

Conclusions

There were no radical differences between our results and those of the WaiMedCa and St George studies. Any discrepancies could be explained by our small sample size and the fact that we were in different regions to that of our reference studies. Other explanations are mentioned in the following paragraphs.

Our results showed the patient encounters that TIs had during our GP attachment were similar to what GPs see. The difference in our ethnicity results may be explained by the fact that our study was based in different areas around New Zealand. The population of the only urban GP practice in our study produced all the Polynesian and 'other' data.

The discrepancies in the diagnostic categories between the WaiMedCa study and our study could be due to the practice populations that were sampled. The musculoskeletal category was more common in our study, possibly because we sampled a large rural population where manual labour and hence accidental musculoskeletal injury is more common. This conclusion was also reached by the St George study. The larger proportion of neurological, psychological, blood and social diagnostic categories could be due to GPs trying to provide their TIs with 'interesting' cases. Social orientated consultations may be more common in the rural practices of our study, as patients in these small communities could know their GP particularly well, these GPs being active and well known also in other aspects of the community. The reduced numbers in the general category of our study was probably due to misclassification error.

The high proportion of consultations for chronic illness examinations and lower proportion of repeat pre-

Figure 6. Outcomes of consultations

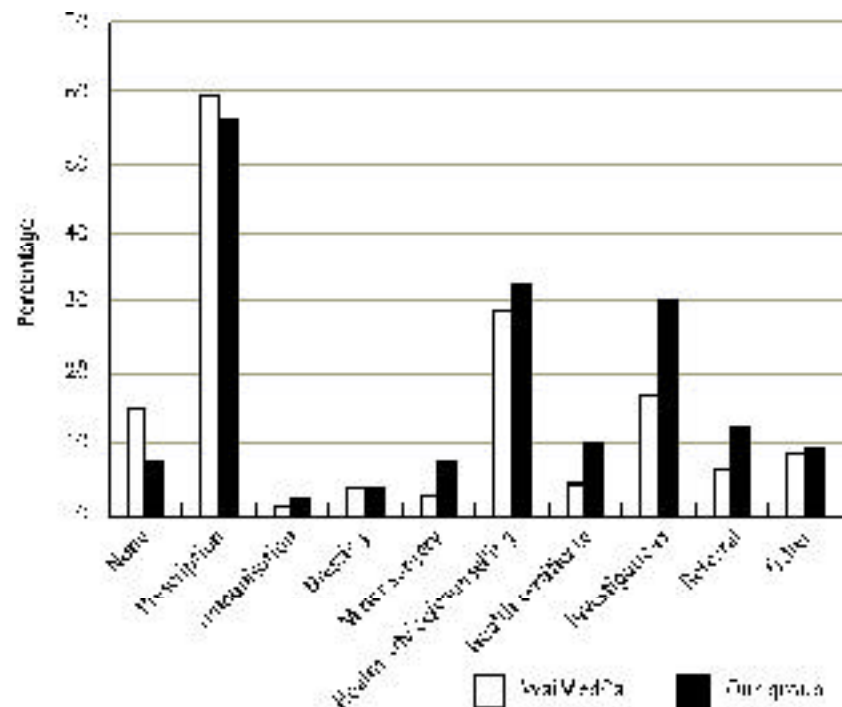
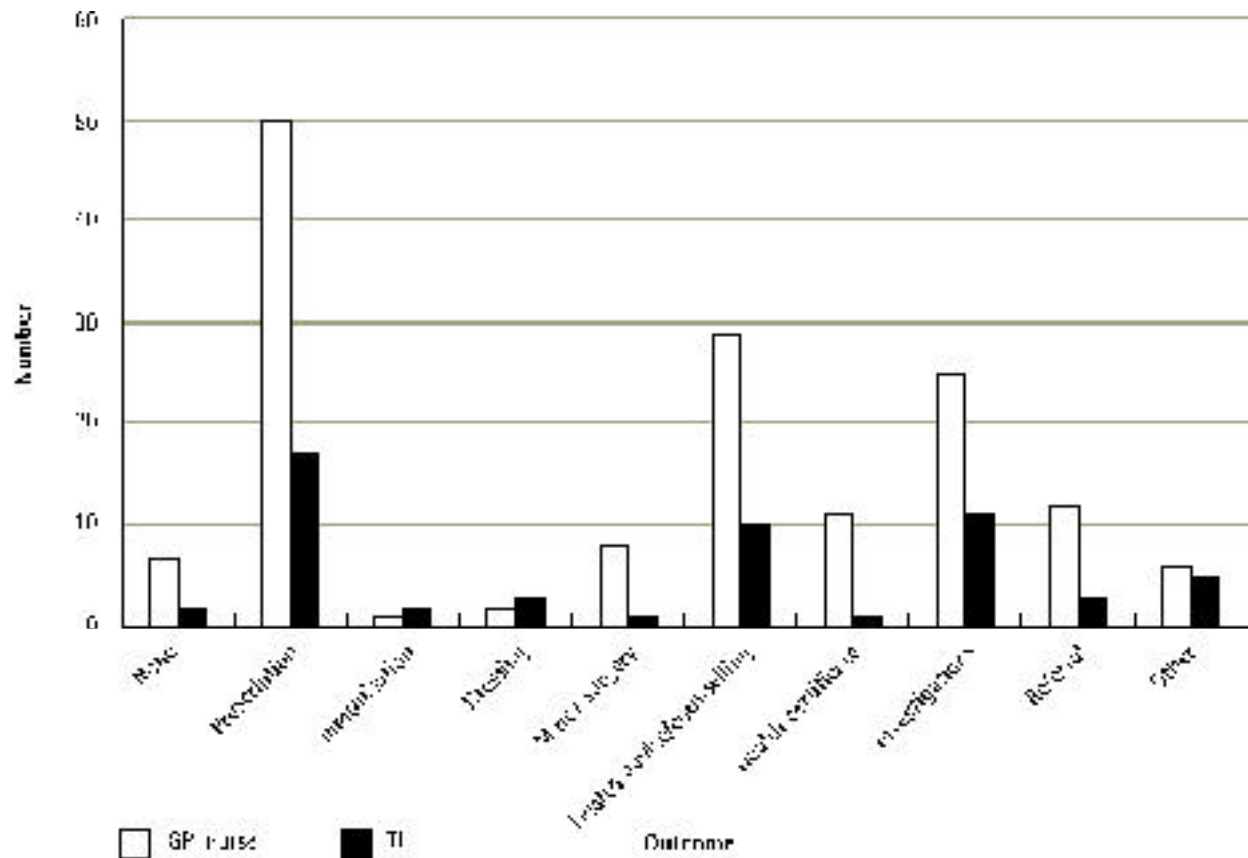


Figure 7. Who did what



scription consultations may be again due to the GPs trying to provide TIs with interesting cases. Also, TIs are not able to sign prescriptions, perhaps making repeat prescriptions sluggish for GPs who involved their TIs too much. It is difficult to comment on the seemingly low proportion of obstetric consultations seen in our study with nothing to compare it to. The rest of our consultation type results met our expectations.

The WaiMedCa study saw a greater proportion of consultations being classified as leading to no outcome compared to our group's results. This could again be due to GPs trying to provide the TI with patients that would need something done. Conversely, GPs may also be more prone to taking a course of action for a patient while being observed by a TI. This could also explain the

higher proportion of health counselling and referrals seen by our group. This would be consistent with the finding in the Holden and Pullon study that quality of care for patients was improved when TIs were present.

What the TIs got to do in this study was significantly less than what the GP and practice nurses did. This could be explained by the selection bias already mentioned. In later weeks of our attachment, we were able to participate more actively in practice procedures.

Prior to this run, we expected to have a higher proportion of teaching with the consultations. However, in retrospect, the group felt satisfied with the teaching received. The absence of formal teaching did not necessarily mean the absence of TI learning.

The TIs of our study were the primary consultants in a higher propor-

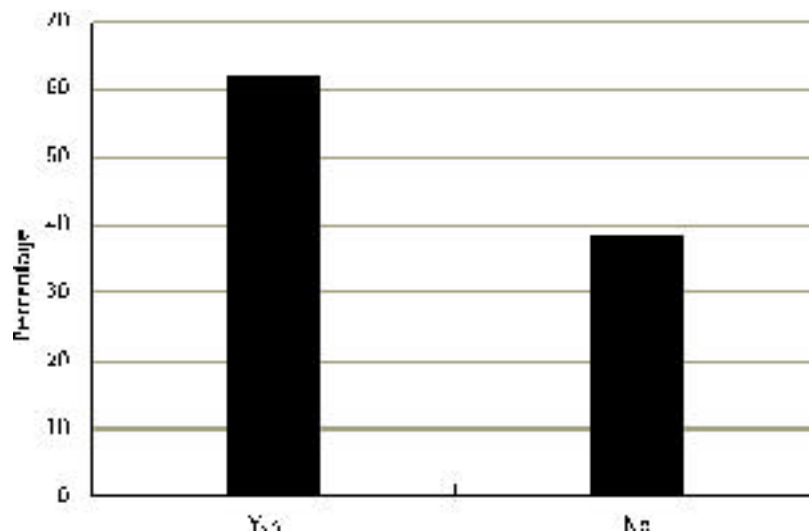
tion compared to the St George study. This is possibly because we all specifically asked to see patients by ourselves if possible. Also, the St George study is 19 years old, and since then it is conceivable that patients have become more accepting of seeing medical students.

In general, the experiences of TIs in our study were consistent with the experience of GPs documented in the WaiMedCa and St George studies.

Difficulties

The design of our study led to some selection bias. We recorded the first 30 patients that we encountered at our GP attachment. The first days of our attachments were somewhat different to later days, once we were established in the clinic. Initially most of us spent more time observing the GP. Later on in our attachment we were able to see

Figure 8. Was there teaching or discussion about the consultation?



and manage patients by our self more often. Thus our population sample may not be accurately representative of our whole three weeks experience.

We developed our questionnaire together so that we would all have the same classification criteria for data entry. We were a bit uncertain about the definition of primary, assisting and observing roles. Most of us defined a primary role as having seen the patient first, without the GP. Assisting was when the TI participated in the examination, while the GP was present. Observation was when the TI did not participate in the interview at all.

Another problem we encountered was how to classify patients' ethnicity. We had originally agreed to ask all patients their ethnicity, however in practice it was not always possible to do this. We tried to obtain the details of each patient off the computer, but if this was not possible we relied on visual assessment, which may not have been reliable.

Also, on the first day of our attachment we discussed our own spe-

cific goals with our GPs. This in turn influenced the type of patient consultations our GPs allowed/encouraged us to participate in. For example, several of us were keen to participate in/perform minor surgery, and smear taking. As a result some of us did not have

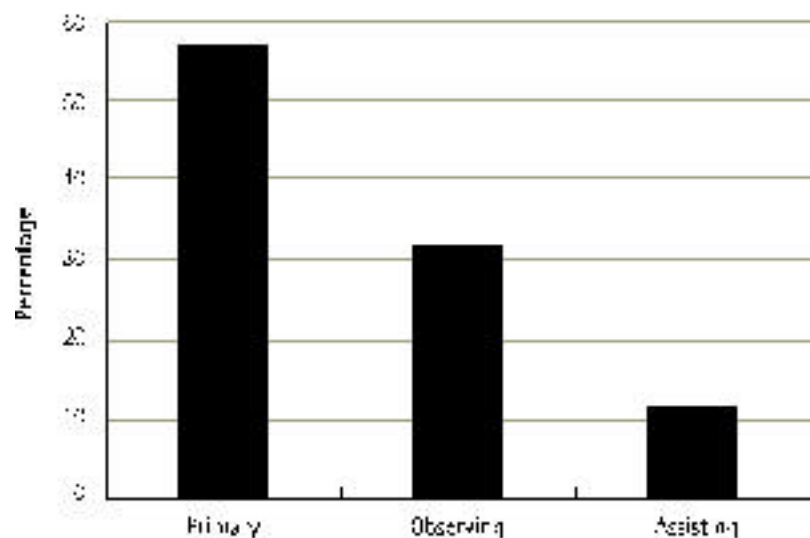
an average GP day, sometimes performing the tasks of the practice nurse to fulfil our specific goals.

Another bias that we identified was that three out of four people in our group were based in rural settings. This may have affected our sample population.

Recommendations

Our study concludes that what TIs experience during their GP attachment is representative of what GPs in New Zealand experience. It is a highly relevant and realistic run. It would be advisable for future groups of TIs to set goals for themselves, with the idea of focusing on individual interests in order to get the most effective learning experience. We recommend that TIs request to see patients on their own, as we found that by doing this we learnt the most. We found that by being enthusiastic GPs encouraged us to become involved in various aspects of the practice which allowed us to gain many clinical skills.

Figure 9. Role of TI in consultation



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