Rural and Remote Health

ISSN 1445-6354

The International Electronic Journal of Rural and Remote Health Research, Education, Practice and Policy

ORIGINAL RESEARCH

General practitioners' perceptions of after hours primary medical care services: a Toowoomba, Queensland, Australia study

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Submitted: *23 March 2004;* ***Revised:*** *10 May 2004;* ***Published:*** *24 June 2004*

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Rural and Remote Health **4 (online), 2004: no 287**

Available from: http://rrh.deakin.edu.au

ABSTRACT

Introduction: This article reports on a project, undertaken in 2002 in the regional city of Toowoomba, Queensland, Australia, that investigated the viability of establishing an after-hours primary medical care (AHPMC) service. Objectives: To ascertain GPs' perceptions of the adequacy of AHPMC services in Toowoomba. Design: Thirty GPs were randomly selected to participate in face-to-face interviews using a semi-structured interview tool. Setting: Toowoomba, Australia is the largest inland non-capital city in Australia. It is located approximately 130 km west of Brisbane, the State capital city and is a referral centre for patients from the rural and remote communities of south-west Queensland. Participants: 15 male and 15 female GPs.

Results: While the majority of participants believed the current provision of AHPMC in Toowoomba was adequate, they stated that the provision of AHPMC services was onerous and, given a choice, they would prefer to refer all patients seeking care between 2200 and 0800 hours to an Emergency Department (ED). Similar to GPs who work in rural and remote areas of Australia, they believed that AHPMC work was poorly remunerated, had an adverse effect on their lifestyle and could endanger their personal and their patient's safety.

Conclusion: The findings of this study confirm previous studies into the perceptions of GPs to the provision of AHPMC in a regional city. Additionally, while the GPs in Toowoomba have the options of referring after-hours patients to an ED and being part

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of a large GP after hours cooperative, their opinions on after-hours work did not differ significantly from those expressed by GPs working in rural and remote areas of Australia. The GPs in this study, given the option, would prefer not to undertake an AHMPC service provision between 2200 and 0800 and many had chosen not to do so, instead directing their patients at this time to one of the two EDs located in Toowoomba.

Keywords: after hours primary medical care, Australia, general practitioners, lifestyle, patient safety, personal safety, regional.

Introduction

This project, undertaken in 2002 in Toowoomba, Queensland, Australia investigated the viability of establishing an after hours primary medical care (AHPMC) service within the grounds of St Andrew's Toowoomba Hospital (SATH). Toowoomba is the largest inland non-capital city in Australia and in June 2000 had a population of 87 644[1]. In Australia, population centres of 25 000 to 100 000 are classified 'regional' but are included as rural in any rural-urban dichotomy. The city of Toowoomba has two private and one public hospitals, and approximately 50% of the patients treated in these hospitals come from the rural and remote areas of south-west Queensland and northern New South Wales. The GPs in Toowoomba do not have any referral rights to the public hospital, but do have admitting rights to the two private hospitals. There are two Emergency Departments (ED) – one public and one private, both of which are experiencing growth in presentations to the ED.

At the time of the study, AHPMC was available through:

- Two EDs, one public and one private
- Two large AHPMC cooperative services
- A variety of smaller (8 doctors or less) general practice consortiums and sole GP providers.

Toowoomba is divided into five Statistical Local Areas (SLAs). The major GP consortiums which provide after-hours services are located in east or central Toowoomba, with few services available in the western or north-western SLAs. Additionally, the private hospital ED is located on the eastern side of the city and the public hospital ED is located close to the central business district.

The needs analysis for the AHPMC service at SATH, which is located in the western section of Toowoomba, targeted the residents of the two SLAs (west and north-west) concerned as well as groups identified by the Australian Government as having special needs, including palliative care patients, female GPs, junior medical officers and ED attendees triaged as Category 4 and 5. The results are reported in full in the project report[2]. This article reports the perceptions of AHMPC services in Toowoomba from the perspective of the 30 GPs interviewed during the needs analysis.

Methods

Ethical approval for this study was obtained from the Human Research and Ethics Committee of the University of Southern Queensland and from Toowoomba Health Service District.

The Toowoomba and District Division of General Practice (TDDGP) provided a list of all GPs in Toowoomba. From the total of 112 GPs (82 males and 40 females), 15 female GPs and 15 male GPs were purposively chosen to participate. Purposive sampling was used to ensure rich data were available, thus allowing an in-depth analysis of the phenomena of concern[3]. Equal numbers of males and females were chosen because previous literature suggest that female GPs have different work place needs from male GPs[4]. Additionally, they are more likely to work part-time and

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have greater concerns about personal safety when providing after-hours work[4,5].

Study inclusion criteria for all GPs included the age of the GP, the type of practice in which they were employed (solo, cooperative), whether they worked full time or part time, if they were a partner or an employee of the practice, and the Toowoomba SLA in which their practice was located. Each GP was contacted by telephone, the study explained and, if they consented, a plain language statement and consent form was posted to them. A suitable venue and time were arranged for the interview. Each interview took approximately 30 min, although some interviews were as long as 60 min. During these interviews GP perceptions were sought on:

- The type of AHPMC they provided
- Gaps in AHPMC service provision
- Barriers to AHPMC service provision
- Preferred models for AHPMC service provision.

Each semi-structured interview was tape-recorded and the tapes were transcribed verbatim. The GPs were reimbursed for their time at the rate of AU$100 per hour.

Qualitative data analysis

The aim of data analysis was to identify common themes and patterns of meaning emerging from the data. Data were analysed using six cycles: (i) content analysis; (ii)coding of interview texts; (iii) comparison through the process of indexing; (iv) re-analysis through text search and study of the index nodes; (v) re-interpretation of the data; and (vi) reconfirming preliminary analysis. To increase the reliability of the emergent themes, two people conducted separate analyses and compared findings.

Limitations of the study

The GPs interviewed were not an entirely random sample of all GPs in Toowoomba. Female GPs were deliberately over-sampled (due to their special concerns about the provision of AHPMC services)[4,6] and there was some self-selection bias with a number of GPs declining to participate. However, given the range of views collected during the interviews there is no obvious bias.

Despite this it is clear that views were obtained from a large proportion of the GP population (30 of 122) and also a wide range of views were obtained from these participants. The authors feel confident that this sample is sufficiently large and varied to allow all major issues to be discussed.

Results

Type of after hours service offered

In the majority of cases, the participants worked in one of the two large cooperative AHPMC services in Toowoomba. Others had smaller consortia, which were combinations of several practices. Within the participants, there were differing levels of AHPMC service provision. For example, several participants stated they provided their own AHPMC solely for patients of their own practice. For these participants, all services after 2000 hours were limited to telephone advice (mostly to visit one of the ED); however, the participants also provided home visits. As one participant stated:

> *... we stay at home and patients call to the mobile phone ... we usually advise them to go to the emergency department, but sometimes we do ... house visits.*

Four of the 30 participants stated they did not provide any AHPMC service. Of these, two were employed part time on a sessional basis and their contract excluded them from after-hours service provision. However, two other participants did not believe that they needed to provide any after-hours services and used answering machines directing patients to the ED. For example, as one participant stated:

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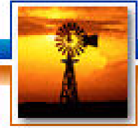

> *... after hours everyone* [in my practice] *goes to the emergency department at the hospital if they are really desperate or they can't wait until the next day.*

Gaps in services and barriers to service provision

These two questions were analysed together because there was considerable cross-over in the themes emerging from the data analysis.

Appropriateness of current service provision: More than half of the participants stated they were happy with the current services they offered and believed their patients were adequately covered. As one stated: 'I actually think the people in Toowoomba are very well serviced'.

Many of the participants stated that the opening of the ED at St Vincent's Hospital had decreased their AHPMC workload. For example as one participant stated: '… certainly the St Vincent's [ED] centre [has] … relieved us of quite a few phone calls at night time ….'

The majority of participants believed that it was better to direct people to call an ambulance rather than ring their GP at night. As one stated:

> *Technically we cannot cope, or cannot compete, ... with the excellence of care ... By the time I got out of bed ... got myself dressed, got my car out of the garage and drove halfway across the city to find this patient ... examine the patient, discover the patient's got acute pulmonary oedema. ... You've got no oxygen, you call for an ambulance, which is silly ...* [because] *the patients should be instructed to call for paramedical help immediately ...*

Several GP respondents believed that the ED was the most appropriate service because 'after hours is … supposed to be an emergency.'

The participants gave four major reasons for not wishing to provide after hours services: (i) lifestyle; (ii) remuneration; (iii) standards of care; and (iv) personal health and safety. For example, one participant stated:

> *The after-hours medical care I offer at the present time is extremely limited. The reasons for that are, that I am a solo practitioner and there's only so many hours I can work per day, per week. ... that places quite a lot of strain on me, physically and psychologically, emotionally as well and also on my family.*

With regard to remuneration for AHPMC work, the majority of participants held views such as:

> *...there's never any joy in getting up in the middle of the night and you're not reimbursed financially for it. And: ... it's a very uneconomical unfinancial proposition. I am sure that is an issue for people.*

As a result of the impact of lifestyle and remuneration, the majority of the participants believed that they would cease AHPMC work if this was an option. As one participant stated:

> *GPs do not want to do more work, ... we do enough now. ... We don't do after-hours work for the love of it, or for the money ... we do it because we have to do it, if we want to stay accredited.*

Eight participants believed that AHPMC can result in unsafe standards of care for patients. As one participant stated:

> *... one of my patients has said to me after I'd been on call* [that I looked very tired] *... and I said, 'I am. I was on call', and she got very angry because she said, 'I pay you to be here during the day and attend to me and you should be awake. ... so the one or two people who were inconsiderate enough to get you out of bed last night have disadvantaged 30 to 40 people the next day.' It's a very valid point. And I don't like getting out of bed anyway.*

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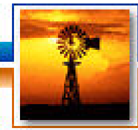

Other participants believed that GPs who are working long hours are not providing care that is safe. For example:

> *... there should be… strong limitations on the number of hours that a doctor ... should be permitted to work each week… irrespective of whether he* [sic] *thinks he can do it or not ... because his clinical judgement is compromised, he gets fatigued.*

Eight participants were also concerned about their own personal safety when undertaking home visits or leaving their surgeries late at night. For example, one participant stated: '… security is a problem if you're doing house calls'.

In contrast, another participant was not concerned about home visits, rather the safety of accessing the surgery late at night. For example:

> *...going to a person's house? For a male it's not an issue, really… I find it scarier going out the back here* [the surgery] *at night than going to anyone's house.*

With regard to home visits, a further three respondents argued that in most cases it was unproductive to do a home visit. For example:

> *... going to people's homes ... is a political hot potato, but it's really quite useless. Because it's dangerous medicine. There are very few things you can actually do well ...and the morbidity and mortality rates are not going to go up because people are not seen in their own homes.*

Fourteen GPs believed that if there were gaps in AHPMC in Toowoomba it was because 'some GPs provide virtually no service at all and bludge off the others'.

Nine participants stated that they would not provide AHPMC to patients who did not normally attend their surgery or one of the participating surgeries. For example:

> *... we generally ask early on in a consultation, in the phone call, we say 'Who's your doctor?'. And if they don't know we just apologise and then obviously you make it clear what is available and leave it at that.*

This means that often those who do not live in Toowoomba have no choice but to attend one of the ED for treatment.

Six GP participants stated that a major issue with the demand for AHPMC was that people now demand a service when it is convenient for them. For example:

> *... people don't want to lose any time off work and they don't want to lose any time off play and they see the early evenings as a convenient time for them to come, for anything.*

One respondent noted that he did not agree with providing services for the patient's convenience, stating:

> *... It should be strongly discouraged. ... If a patient is sick enough to need the services of a doctor, they should be finding the time to seek out their own GP or medical attendant during normal working hours ... I think it's very mischievous of government and of the public to regard us ... as being their slaves and that we work at their expense. Right? We happen to be human beings too with wives and children.*

Eight participants believed that the poor organisation of AHPMC service was due to a lack of trust amongst GPs in the town. In some cases they believed that should their patient be seen by another GP after hours, that the patient may be encouraged to change GPs. However, as another noted:

> *... a lot of the doctors are very insecure, they don't like to lose their patients. We are all so busy what would it matter if we lost a few patients* [to another GP]*?*

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In fact, six participants noted that one issue for the provision of AHPMC was the shortages of GPs in Toowoomba and the ageing medical workforce. For example as one GP noted: 'There's only a few GPs under 40 years of age practising and … doctors have closed their books'.

Finally, 11 participants noted that there were geographical inequities in AHPMC services as one large AHPMC and the private ED was located on the eastern side of Toowoomba. Further, the other large AHPMC cooperative was located near the central business district. The geographical inequities were perceived quite differently. Some GPs stated that this was a major issue if the patient had to travel to the opposite side of town. As one participant stated, '… why should someone who lives over the other side near St Andrew's have to come all the way into town here?'

In contrast, others believed it was 'no chore' for patients to drive from one side of town to another. For example: '… how long does it take from the furthest point? Fifteen minutes at the most'.

Satisfaction with current models: Eleven participants stated they were very happy with the current system, particularly since the ED at St. Vincent's Hospital had been opened which had lessened their AHPMC work. For example: '[In] … the last few years its been a lot lighter since the A&E at St Vincent's has opened up. ... Prior to that it was very heavy.'

Some participants who were unhappy with the current models believed that a large co-operative model would suit them best. In particular they believed that one AHPMC service located at each of the two hospitals would be preferable because it would be:

> *... easier for the client because they have a defined place that they could go to, they would feel confident with the fact that they would be able to been seen, with ... no ... feelings of guilt for disturbing the poor old hard-working general practitioner after hours.*

This model, these participants believed, would mean that after-hours work was diminished. As one participant explained: 'I would love to be on one night a week or whatever, it would only come around once in a blue moon'. Other participants believed that the preferred model was an ED-only. As one GP explained: '… it's easier to stabilize them in hospital than to get them to the surgery or go out to see them'.

In contrast, two participants believed that a deputising service would be a better system. For example:

> *I would like to see a system like they have got in* [town]. *Staffed by someone who specifically chooses to do that job ... and is happy to work evening hours ….*

The participants also identified characteristics that would be necessary in any model to make it attractive. These were one which was: adequately remunerated; used telephone triage as a first port of call; in which the GP received feedback early the next day about the patient's visit; and which was in conjunction with colleagues whom they trusted. For example:

> *... there has to be some sort of financial incentive for people to stick around. I'm not going to do it for nothing.*

> *... and the feedback that's important too ... you get a note the next morning saying so and so visited and this was the problem and this was the actions ...*

> *... you've got to trust these people and you've got to know them. We all know each other, we've all worked together for years ... and there's no-one in that group that I would not be happy for my family to be looked after by ... At* [ED] *we know the doctors.*

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Discussion

In the present study the authors obtained local GPs opinions on gaps in AHPMC service, barriers to AHPMC service and preferred models for AHPMC service.

Gaps in service delivery

GPs' opinions of the current gaps in the AHPMC in Toowoomba varied. A considerable proportion of GPs believed that current services were adequate. Where there were inadequacies in service provision these were perceived as:

- GPs not providing any AHMPC service
- GPs leaving messages on their answering machine and telling patients to present to one of the EDs, particularly between 2000 and 0800 hours
- Geographical inconsistencies because the major AHPMC and ED services were located centrally or on the eastern side of Toowoomba
- There were no deputising services practising in Toowoomba.

These findings are consistent with other research both nationally and internationally which has examined AHPMC services in regional cities such as Toowoomba[2,7-9]. The data suggest, however, that because of the large number of GPs in Toowoomba these gaps are due to GP choice, rather than GP workload. Unlike GPs who work in small rural and remote communities, where there are few options in the provision of AHPMC[10,11] the GPs in the regional city of Toowoomba, like other larger centres, have options to decrease their AHPMC service provision, such as joining large cooperatives[12-14].

While some GPs noted that some provision of AHPMC service was necessary for them to maintain their accreditation, many believed that an answering machine directing people to the ED was sufficient to maintain accreditation. This option would not be available to GPs working in smaller rural towns and in remote centres, because the same GP would be required to attend to the patient presenting to the ED at the small rural hospital.

Another difference between the GPs in regional centres such as Toowoomba and GPs working in smaller rural and in remote areas, is that the GPs in Toowoomba have less need to have up-to-date emergency management skills because they have the ability to refer all emergencies to one of the EDs in the town[15,16].

Barriers to the provision of AHPMC Services

Lifestyle: Several GPs in the present study noted that a major reason for not wishing to provide AHPMC service was the workload this placed on them and the stress of this high workload on both themselves and their family. This theme was particularly evident in those GPs who chose not to join a large GP cooperative.

The findings of the present study are similar to the studies of workload issues of rural and remote area GPs[10-14] suggesting that workload issues are not unique to rural and remote area GPs. However, it was apparent that the GPs in Toowoomba, unlike GPs who are in sole practice in rural and remote areas who find it impossible to pool resources, had the choice of decreasing their AHPMC work by joining a large cooperative[12,14].

Remuneration for after hours work: The majority of GPs in the present study believed that they were inadequately remunerated for after-hours work. This finding is also consistent with published studies on the GP workforce, regardless of geographical location, where GPs believe that AHPMC work is poorly remunerated [7-9,11].

Provision of care to patients: A new finding of the present study that is not strongly evident in other published studies relating to GP after hours work, is the potential the long hours have for unsafe medical care. It is apparent that the lack of organised AHMPC results in GPs working long hours, thus compromising patient safety.

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Personal safety: Similar to other studies, the GPs in the present study expressed concern about the provision of after-hours work and their personal safety[4-9]. However, it was apparent that while there has been a focus on female GPs and their concerns about the safety of AHPMC work[4,5], in the present study the majority of the male GPs also expressed concern about either returning to practices or undertaking home visits at night. The data from this study suggest that concerns for personal safety, are an issue which is not gender specific, and planning for AHPMC services should take personal safety into consideration regardless of the gender of the GP.

Preferred models of AHMPC services

GPs opinions of preferred models for AHPMC service centred on ED services between 2200 and 0800 hours. Other suggestions to minimise AHPMC work included two large cooperative services – one each located at the two private hospitals; or a continuation of current service provision. Again, these findings are consistent with previous research that suggests that a co-operative model of AHPMC service is more likely to be found in regional and larger rural centres[12]. Only four of the GPs believed that a deputising service would be of benefit, despite the fact that all of the GPs would prefer to deliver no AHPMC service[7,17,18].

Conclusion

The authors conclude that GPs in the regional city of Toowoomba have many similarities to GPs working larger rural centres in that they have the ability to organise large co-operative rosters for the provision of AHMPC services. In contrast, GPs who work in smaller rural centres and remote areas do not have the same ability to share after-hours work. It is apparent, therefore, that different models of after-hours work have been influenced by two main parameters: (i) the ability of GPs to trust each other and form large cooperatives; and (ii) the actual number of GPs located within a town or within close enough proximity to form a viable AHPMC service.

A finding that links the regional GP to their rural and remote colleagues is their reluctance to surrender AHPMC service provision to a deputising service. While many of the participants in the study would refer patients to the EDs of the two hospitals where they knew the medical practitioners or were aware of the standard of care available, they were reluctant to use a deputising service, particularly when the doctors providing the deputising services were not known to them.

It is apparent from the results of this study that the long hours worked by GPs providing AHMPC does compromise patient safety. However, some of the GPs in the present study who had the opportunity to join a large cooperative were reluctant to do so, thus perpetuating their own high workload and long hours. Additionally, it is apparent that personal safety is a concern of GP regardless of the gender of the GP and that threats to personal safety are not necessarily linked with home visits. In this study it was apparent that returning to open a surgery late at night, was also perceived as a threat to personal safety.

The study demonstrates that the delivery of AHPMC is complicated. There is no doubt that factors such as remuneration, the need for an acceptable lifestyle, personal safety and patient safety all impact on the decision of each individual GP to provide or not to provide AHMPC. Additionally, it is also apparent that trust between GPs is also a contributing factor to decisions to decrease AHPMC work.

Acknowledgement

This study was funded by the then Department of Health and Aged Care as an After Hours Primary Medical Care Seeding Grant. The grant was awarded to St Andrew's Toowoomba Hospital and the authors were contracted to undertake the needs analysis on their behalf.

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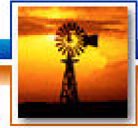

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