

HOUSE CALLS IN SINGAPORE – A QUALITATIVE STUDY

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ABSTRACT

Background

Historically, physicians routinely delivered medical care to sick patients in patients' homes. While house calls accounted for 40% of all doctor-patient encounters in the 1940s, the rate has since dwindled to less than 1%. Based on some studies done overseas, the reasons for the unpopularity of house calls were the lack of time and unsatisfactory remuneration.

The aim of this study was to explore the attitudes of general practitioners (GPs) currently practicing in Singapore towards house calls.

Design

A qualitative study using phenomenological methodology was done by conducting one-to-one in-depth interviews with 12 GPs.

Results

All the GPs interviewed were aware of the benefits of house calls in the healthcare scene of Singapore. The commonest barrier was concern about the limitations perceived to be present during a house call and their possible medicolegal implications. GPs also struggled with charging appropriately for house calls and found them disruptive to their practices.

Conclusion:

The study shows that GPs recognize the value of making house calls but at the same time struggle with perceived limitations in the home setting as well as remuneration issues.

Keywords:

House calls; Attitudes; General practitioners;

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BACKGROUND

Historically, physicians routinely delivered medical care to sick patients in patients' homes, with house calls accounting for 40% of all doctor-patient encounters in the 1940s.¹ Today, the

proportion has dwindled to less than 1%.² Although there are no official statistics, it is probably not unreasonable to assume that a similar situation exists in Singapore. Studies done in Germany, the United States and Canada report that the commonest reasons for the unpopularity house calls are the lack of time and unsatisfactory remuneration.³⁻⁵ Similarly in Singapore, the opportunity cost of leaving the clinic unattended, and not being able to see any patients, while travelling to and from a house call visit, is high.⁶

Singapore's population is one of the most rapidly ageing in Asia and an estimated one million or 20% of the country's population will be 65 years or older by 2030.⁷ With increasing numbers of elderly, there will be an increase in the number of patients who are frail with multiple medical conditions and impaired ability to travel to the clinic. Following this reasoning, there will likely be an increasing need for patients to be cared for in the home.

In Singapore, house calls are made by general practitioners (GPs) in private practice. These house calls are usually for the treatment of acute medical conditions. Doctors in the public primary healthcare clinics (polyclinics) do not make house calls. Elderly, home-bound patients with chronic medical issues are cared for by doctors and nurses in specialized organizations that provide home medical care. Home Medical care services generally do not attend to acute medical conditions and function primarily on an appointment basis. This means that GPs in Singapore might still be called upon to make house calls in the event the frail elderly develop acute medical conditions. GPs in Singapore are almost always the point of first contact with patients and they will be a valuable resource to tap upon to care for patients in the home.

To date, there have not been any studies done in Singapore to explore how GPs view house calls, especially the barriers (if any) that might be preventing them from embracing house calls.

Therefore, the aim of this study is to explore the attitudes of GPs practicing in Singapore towards house calls.

METHODS

A phenomenological approach was chosen because this study focused on the subjective attitudes of GPs towards the phenomenon of house calls. One-to-one in-depth semi-structured interviews were conducted by the primary investigator (PI) at the convenience of the GPs in a setting they chose (clinics or homes), so to create an unhurried atmosphere to allow the GPs to speak freely.

Participants

Purposive sampling was carried out among the GPs known to be doing, or not doing house calls. Some care was taken to ensure a mix of both genders and years of experience working as

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a GP. The GPs were invited verbally or through a phone message and consent was taken from those willing to be interviewed. An appointment for an interview was then scheduled based on their convenience. One of the GPs (O1) was approached again for clarifications about some statements that had been made during the initial interview.

Procedure

The interview was structured to obtain the GP's opinions about house calls. GPs who were actively doing house calls and those who were not were asked similar questions (Figure 1, Pg 40). Each interview was digitally recorded and transcribed verbatim by the interviewer (PI). Iterative content analysis of the verbatim transcripts of the audiotape interviews was carried out. Manually without the help of any computer software initially by the PI. The Co-Investigators (Co-I) analyzed the transcripts independently. Discussion with the Co-Is was carried out and then a list of themes representing benefits, barriers and facilitators of house calls was identified from each transcript. Interviews were stopped when no new themes emerged, i.e., when data saturation was reached.

RESULTS

Demographics of participants

12 (7 male, 5 female) GPs practicing in Singapore agreed to be interviewed. 5 out of the 12 GPs were currently making house calls. Of these, 1 GP made house calls fulltime and the other 4 ran solo practices. Of the 7 GPs who were not making house calls, 2 GPs were employees of a group practice and the other 5 GPs ran solo practices. Among them, 2 GPs had never made any house calls before. One of the GPs who runs a solo practice expressed interest in making house calls in the future. The years in practice as a general practitioner ranged from 3 years to 38 years. The GPs who made house calls charged between S\$80 to S\$400 for a house call.

See Table 1 for the demographics of the GPs who were interviewed.

Table 1: Demographics of the GPs interviewed

	Gender	Nature of practice	Number of years as GP	Have made house calls before	Currently making house calls
O1	Male	Fulltime house call practice	10	Yes	Yes
O2	Male	Solo practice	3	Yes	No
O3	Female	Solo practice	17	Yes	Yes
O4	Female	Group practice	15	Yes	No
O5	Female	Group practice	11	No	No
O6	Male	Solo practice	7	No	Not yet
O7	Male	Solo practice	38	Yes	Yes
O8	Male	Solo practice	28	Yes	No
O9	Male	Solo practice	16	Yes	Yes
O10	Male	Solo practice	25	Yes	Yes
O11	Female	Solo Practice	18	Yes	No
O12	Female	Solo Practice	16	Yes	No

Benefits of house calls (Table 2)

The GPs interviewed were aware of the role that house calls played in the healthcare scene of Singapore. They believe that house calls were relevant and important in Singapore because they help to meet the needs of patients who were not well enough to get to the clinic and yet not sick enough to present at the Emergency Department. GPs believed that house calls were for the convenience of patients especially for the elderly who may have difficulty making their way to the clinic. House calls were commonly perceived to be a more holistic way of managing a patient. GPs recognized the benefits of being able to treat a patient in their home environment and at the same time meeting the family members and caregivers of the patient. GPs believed that house calls help build rapport between the doctor and his patient and thus strengthens the doctor-patient relationship. The GPs who had made house calls expressed a greater willingness to make house calls if the patient requesting for the house call is an existing patient of their practice.

O11: “(It is a) good service for the cohort of patients that you are serving around the clinic... Because you have built a rapport with them... It will be good to see them in their own home environment because you are their family physician...”

GPs who made house calls consider them rewarding and satisfying. It was described as “good medicine” by one GP and a few believed that all family physicians should make house calls.

O1: “...(it is) an opportunity for a more personalized consultation. There is more time, or perception of more time and being in the patient's environment; a lot more information is more readily available... It is also more rewarding, because I don't feel the stress (from the) need to clear these patient's quickly, so I have the opportunity to do a better job ... so I think it is more satisfying this way.”

Table 2: Benefits of house calls

Benefits of house calls	
To Doctor	<ul style="list-style-type: none"> • Enjoy clinical practice of medicine more/ more rewarding • Satisfaction in being able to manage patient holistically • Less pressure because of absence of physical queue • Strengthens doctor-patient relationship • Opportunity for a more personalized consultation • More information about patient is readily available
To Patient	<ul style="list-style-type: none"> • Convenience especially for elderly patients who are not so mobile • No waiting time
To Healthcare system	<ul style="list-style-type: none"> • Fills a gap in healthcare system

BARRIERS TO HOUSE CALLS (TABLE 3, PG 41)

Professional concerns

GPs felt the pressure of not being able to meet the patient's or family's expectations during a house call. The perception that there are limitations in the setting of a medical consult in the home was unanimous.

Firstly, there was the concern that the information given about the patient's condition over the telephone was not sufficient and that the patient might be sicker than what was described to them by the requestor of the house call.

O2: "... you always don't know what to expect and how sick the patient will be, no matter what the family describes to you."

This concern partly arose from the perception that the standard of care that one can achieve during a house call was limited. The environment in the home of the patient was generally perceived to be uncondusive and GPs were concerned about missing signs in less than ideal conditions when examining the patient during a house call. The presence of family members could be distracting and add pressure to the GP, at the same time cause difficulties in maintaining the privacy of the patient.

It was quite common for the GPs to realize that they had not brought sufficient equipment or did not have the available instruments or equipment to make a proper diagnosis or administer treatment.

The GPs were also concerned that they would not be able to manage the patient's condition resulting in the need of sending the patient to the Emergency Department despite making the house call. GPs were also concerned that the care of a patient would be compromised because of delays in the management of a medical emergency. This was especially well-appreciated in Singapore where the nearest hospital is usually less than half an hour away.

A GP in a group practice who no longer made house calls shared her story about how she treated a patient at her neighbor's home. (See Figure 1)

Given the above limitations, the GPs interviewed believed that they were not able to do much for the patient during a house call, making them reluctant to make them. Adding to the discomfort was the uncertainty of an unknown environment as opposed to the familiar surroundings of their practice.

O8: "I am not keen on doing (house calls) because what if I go there and I can't do anything... and they are more serious than what I can handle... and most of them, you know, may be more serious...."

Some GPs stated that the lack of specific training in-house calls caused them to be hesitant to make house calls. They cited being unsure of what type of medical conditions warrant a house call and how to assess if patients were well enough to be cared for in the home. Some claimed that they did not know the essentials of a house call bag, which reiterated the concern above about not having sufficient instruments to diagnose and treat the patient.

Medicolegal concerns

Arising naturally from professional concerns was the medico-legal implications of not managing the patient optimally. Having missed signs during physical examination because of an uncondusive environment and not having the

proper instruments could give rise to an inaccurate diagnosis and/or treatment. The lack of equipment and manpower might lead to inadequate management of the patient. Adding to the discomfort, GPs who were interviewed were also unaware if there were guidelines that indemnified doctors when they are making house calls.

O4: "...the medicolegal aspect to the patient that you are seeing is that you can limited by your lack of instruments... by the environment and you may actually miss signs depending on the lighting and how the patient is positioned."

A few GPs felt that there might also be medico-legal implications for not attending to patients who walk into the clinic while they were doing a house call. They believed that they owed a duty of care to every patient who walks through their clinic doors.

Payment concerns

There was a consensus that the remuneration for house calls was not good enough. The GPs interviewed charged a rate of S\$80 to S\$400 per house call. When asked what will be a reasonable charge for a house call, most GPs suggested a higher amount, ranging from S\$300 to S\$1000.

A few GPs mentioned that they did not have the heart to charge patients for the house call, especially when the patient required frequent visits. There was also the tendency to waive off the charges or charge less when the patient seen was too sick.

O9: "...collecting payment... that will be a difficulty... sometimes we don't have the heart to charge and don't have the heart to collect."

Encounters with patients who refused to pay for a house call after they had been seen were also not uncommon.

Time-related concerns

The time-consuming nature of house calls was commonly acknowledged. Even in a small city like Singapore, making a house call will take an average of one hour out of the GP's time. House calls were perceived as being disruptive to the clinic practice and challenging to the business of running the clinic. GPs usually have to carve out time during lunch breaks or even after clinic-opening hours or to make house calls.

O11: "So at least there's a minimum of one hour the doctor will be out of the clinic together with the nurse, so during that hour that we are out of the clinic, we cannot accept any new walk-in patients to the clinic, so it's as good as closing the clinic."

GPs also claimed to have received requests for house calls which were deemed not necessary. Given the existing time constraints in a busy practice this made them reluctant to make house calls.

O7: "When I was doing the house call as a business, 90% was not necessary...they were lonely... and there was a lady who was a bit depressed, who heard noises. She wants you to just reassure her, that's all."

Other barriers

Personal safety was, surprisingly, a common theme among the GPs who were interviewed despite the low crime rates in Singapore. There were concerns about personal safety when GPs needed to venture into an environment they were not familiar with.

Having heard unpleasant stories from colleagues could be a barrier to house calls as well. There were stories about medical situations which took a turn for the worse and another story about a doctor being robbed although it had happened a long time ago.

One of the GPs interviewed believed that lack of interest was the reason that GPs are not making house calls.

O9: "... the reason (why) people are not doing house call is not the (lack of) skill kind of thing... it's really the circumstances so ... and the interest."

Lack of physical fitness and stamina were also cited as a barrier to making house calls by a few of the senior GPs who used to make house calls when they first started their practices but no longer did so.

POSSIBLE SOLUTIONS TO BARRIERS (TABLE 4)

In the course of the interviews, a few ideas came up about dealing with the current issues with making house calls.

Inadequacy of care in the home was the commonest barrier cited by the GPs who were interviewed. One way to overcome this might be to manage the expectations of the patient and/or family even before making the house call.

O12: "...a phone call to ask the patient what is the problem and then to advise them, to tell them the limitations of a house call..."

The GPs who were concerned about the liability of house calls wanted guidelines and regulations that can provide some form of medico-legal protection to doctors.

Additional subvention from authorities was also welcomed by most GPs who were interviewed. GPs who were currently doing house calls believed that it will help them to afford staff to accompany them for house calls as well as provide administrative support like answering phone calls.

O3: "... if there's more remuneration, it will be a carrot... because then we can hire more staff you see, correct? The staff can come along with us and help our house calls and assist us."

However, when asked directly if increased subvention will make them more willing to make house calls, the GPs who were not making house calls did not think they will.

A training program where doctors can tag along for house calls with someone more experienced in that area might help increase the confidence of GPs who have yet to do house calls.

A practice where there is more than one doctor present in the clinic at any one time will be able to free the other doctor up to do house calls during clinic hours. An existing relationship with a patient will make GPs more willing to make house calls to that patient. The reason is presumably a strong doctor-patient relationship with that particular patient and also perhaps elimination of the element of the unknown in a house call for the GP.

O11: "so I hardly do house call for patient that is unknown to us, because the challenges are much more if it's an unknown patient. So, I think the selection part is very important..."

There was also the suggestion of charging patients remotely e.g. through online funds transfers on request of the house call can also help GPs avoid the inconvenience of having to bring up the issue of money during a house call.

Table 4: Possible solutions to perceived barriers

- Guidelines on
 - Medical conditions that can be managed during house calls
 - List of equipment/instruments to bring for house calls
 - Medical indemnity during a house call
- Training for house calls
 - Skills course on house calls
 - How to pack a house call bag
 - How to screen patients who request for a house call
- Making House calls on an appointment basis – after clinic opening hours
- Multi-doctor practice
- Remote payment methods

DISCUSSION

The findings of this study show that the GPs who had been interviewed generally viewed house calls positively but they seemed to struggle with actually making the house calls. Interestingly, the barriers mentioned by the GPs were similar to those faced by fellow GPs in other parts of the world. Despite cultural differences and differences in context of practices, barriers like limitations of consultation in the home, opportunity costs of house calls, lack of time and medical liability among miscellaneous reasons like lack of training were also cited as reasons why primary care practitioners are not making house calls by doctors in other parts of the world³⁻⁵.

Why the struggle? Analysis of the responses of the GPs seems to suggest that the barriers cited were inter-related. The expressed concerns about clinical inadequacy in the home probably arose from the pressure of having to fulfill the patient's or family's expectations of the house call which in turn can be related to the cost of the house call. Perhaps the guilt of being unable to fulfill expectations led to the practice of not charging what is perceived to be an adequate amount for leaving the clinic unattended and the time taken to make the house call. Deeper analysis of the limitations in the home setting cited by the GPs revealed that some like the lack of adequate equipment are actually also present in the outpatient clinic setting albeit to a lesser extent.

Besides, GPs continue making house calls despite recognizing these limitations. It is highly plausible that interest and circumstances play a significant part in the decision-making process of making house calls.

Managing identified barriers

Addressing some of the identified barriers may be a step to reduce the struggle GPs face in making house calls.

Informing and reminding the requestor of house calls about the limitations of what a doctor can do in the home may help to reduce the pressure felt by the GPs to fulfill the expectations of the patients or family members requesting for the house call. At the same time, informing the requestors of the house call about the cost at the time of request might reduce some of the awkwardness that GPs feel when asking for payment. The idea suggested by one of the GPs about making the payment process a remote one is also worth considering.

Attending to an acute medical situation in the home does come with a certain amount of uncertainty and GPs cannot be faulted for feeling unprepared and insecure especially in this increasingly litigation climate. Some form of guidance and information regarding the medical liability of doctors when making house calls is definitely reassuring and might encourage more GPs to make house calls.

Additional monetary subvention from authorities was welcomed by all the GPs who were interviewed. However, when asked if this monetary incentive will encourage them to make house calls, the GPs who were not making house calls did not think so. This seems to be consistent with the finding in one study that only 50% of physicians would be willing to do house calls if reimbursement was improved.¹¹ Insufficient reimbursement does not seem to be the only reason why GPs are not keen on making house calls.

Attitudes often affect perceptions and one's perceptions affects behavior. It might be worth the while to work on the attitudes of GPs towards making house calls. Exposing medical students to house calls might be a way to foster positive attitudes¹². There is little, if any, emphasis and exposure to the concept of house calls in the medical school curriculum at present. Incorporating house calls into the medical curriculum will go hand-in-hand with addressing the issue of physician's feeling of being untrained and lacking role models in the area of house calls.³⁻⁵

Another opportunity to expose doctors to house calls will be during residency training, especially of family medicine residents. One study that evaluated the exposure of home visits to family medicine residents showed that the confidence level of making house calls in graduating residents was 80% compared to the 40% of entering residents.¹³ Another study showed that graduates of programs in which faculty made house calls and those in which residents made house calls on a longitudinal basis were significantly more likely to offer house calls in their practices¹⁴. This suggests that resident education can offer positive experiences that might encourage future physicians to include house calls in their practices.

Attending to patients in their homes was one of the deepest experiences of family practice according to Dr. McWhinney¹⁵. It seems that family physicians today still believe so but encounter challenges practicing it.

Limitations

The GPs interviewed were mainly referring to house calls for acute medical issues in the context of Singapore as GPs in Singapore traditionally made house calls for acute medical issues. GPs were not asked directly about house calls in the context of long-term home care which in Singapore, are mostly carried out by specialized home care organizations and not by the regular GPs. As this is a qualitative study, the results only apply to the group of GPs interviewed and are not generalizable though they seem fairly consistent among those interviewed.

CONCLUSION

The study shows that GPs recognize the value of making house calls but at the same time struggle with perceived limitations in the home setting as well as remuneration issues. House calls take up precious time. Busy clinic practices together with suboptimal remuneration make it impractical to make house calls. Effort needs to be made to cultivate positive attitudes towards house calls and one way may be to expose medical students and residents to house calls through mentorship. More studies need to be done to investigate the prevalence of these issues among GPs in Singapore so that ways to tackle these reservations can be implemented. This will be necessary as we anticipate the increase in the numbers of frail and home-bound elderly patients in the future who will require medical care in their homes.

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Figure 1

Case study 1

A GP was called to see a neighbor who had “collapsed”. After advising the neighbor to call for an ambulance, she rushed to the scene. On examination, the patient had indeed collapsed, the pupils were already fixed and dilated and there was no pulse or respiration. As it was four days before the Chinese New Year, the family requested for the patient to be revived. Thus, cardiopulmonary resuscitation was commenced immediately on a soft and “lumpy” bed. There was no time to move the patient and the room had barely any floor space.

The doctor fortunately had a Laerdal pocket mask in the car boot. As the only other person present was the helper, she had to assist with the airway management of the patient by blowing into it. With every chest compression, the sound of ribs cracking can be heard and coffee ground vomitus came out of the patient’s mouth. The doctor had to clean up the fluid pooling on the mattress before continuing with the CPR after every 10 chest compressions. Soon the bed was flooded with fluid. Bath towels had to be used to soak up the fluid.

Despite all the effort, the patient did not respond. The ambulance arrived after 40 min of CPR and she was pronounced dead.

Table 3: Perceived barriers to house calls

Perceived barriers to house calls	
Main Themes	Sub themes
Professional barriers	<ul style="list-style-type: none"> ▪ Unable to solve patient's problems/meet family's expectations because: <ul style="list-style-type: none"> ○ Unable to apply/meet standard of care as in the clinic/hospital ○ Lack of equipment and investigations make diagnosis and management more difficult ○ Fear of being unable to do much for patient when patient is too sick or deteriorates ○ Environment/setting to examine patient not conducive <ul style="list-style-type: none"> - bed type/height - adequate exposure for examination - noisy environment - stress of being observed by family members ○ Unable to gather sufficient information about the patient <ul style="list-style-type: none"> - Lack of training in the area of house calls - assessing suitable patients, - packing house call bag - experience in area of house calls ○ Unable to get to patient in time
Medicolegal barriers – fear of liability	<ul style="list-style-type: none"> • When not doing enough for patients seen during house calls • For not seeing patients who walk into clinic while absent doing house calls • When unable to cope with deterioration of medical condition • Inadequate documentation during a house call • Lack of a chaperone • Lack of clear guidelines which indemnify doctors when doing house calls
Payment barriers	<ul style="list-style-type: none"> • Remuneration not attractive enough because hard to charge more • No heart to charge when patient is too sick or when frequent visits needed • No heart to charge when not able to do much to help patient • Patients refuse to pay
Time barriers	<ul style="list-style-type: none"> • Time consuming to do a house call • Clinic too busy
Other barriers	<ul style="list-style-type: none"> • Physical danger in an unknown environment • Stories about unpleasant encounters during house calls • False alarms (patients not really that sick) • Lack of interest in house calls • Lack of stamina for older GPs