

GENERAL PRACTITIONERS' PERCEPTIONS OF DEMENTIA CARE AND MANAGEMENT IN SINGAPORE

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ABSTRACT

Objective: The current study explored the perceptions of General Practitioners (GPs) on barriers to care for dementia patients, reasons for referring them to tertiary hospitals for dementia-related symptoms, and the types of training and support that GPs would like to have to provide better dementia care in Singapore.

Method: A total of 400 respondents completed the barriers to care in dementia management and training needs questionnaire, yielding a response rate of 52.3 percent. An invitation letter with a web link to the online survey form and a hardcopy of the questionnaires were mailed to GP clinics. The survey form was completed either online or by mailing back the hardcopy questionnaire.

Results: Most GPs (n=391; 98 percent) agreed that the main barrier was that dementia patients tend to require more consultation time. The most common reason cited by GPs (n= 327; 82 percent) for referring patients to tertiary hospitals was the severity of symptoms. Out of 226 GPs who were agreeable to managing dementia patients, 75 percent (n=170) of them identified the fact that having direct access to a multidisciplinary team would support them in providing dementia care. Web-based training on the management of dementia patients (n=148; 65 percent) was the top training need recognised.

Conclusion: GPs play a crucial role in managing dementia care in Singapore. The main difficulty they face is the longer consultation that a dementia patient requires and the need for support through multidisciplinary care. Web-based training programmes on diagnosis and management of dementia patients would address GPs' uncertainties and equip them to better promote dementia care in Singapore.

Keywords: Dementia; General Practitioners; Barriers; Management; Training

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INTRODUCTION

Singapore has one of the fastest-ageing populations in the Asia-Pacific region with 15–20 percent of the total population expected to be above the age of 65 by the year 2030.¹ The Well-being of the Singapore Elderly (WiSE) study found that the prevalence of dementia was 10 percent among those aged 60 years and above in Singapore.² It was estimated that 22,000 people in Singapore had dementia in 2005, and it is expected to increase to 53,000 by 2020 and 187,000 by 2050.³

General Practitioners (GPs) in private practice make up more than 80 percent of the primary healthcare services in Singapore. With 53 percent of older adults aged 65 and above visiting private GPs for primary care services, these GPs play an important role in the healthcare sector.^{4,5} GPs in Singapore are at the forefront of early detection of dementia and have a large influence on the timeliness of clinical care that patients with dementia receive as they are the first point of contact in the community.⁶ They also play an important role in referring their patients to specialist care.⁷

Dementia patients have complicated medical, social, and behavioural needs that require optimal dementia care from health professionals who also assist caregivers in the management of these patients.⁸ Moreover, at the advanced stages of dementia, difficulties in communication during consultation limit the patient's participation in his or her own care plan.⁹

The critical "healthcare triad" consisting of the GP, patient, and caregiver is very important for optimal dementia care and management.¹⁰ However many GPs feel that they have inadequate knowledge and skills in diagnosing and treating dementia patients and they require clear diagnostic guidelines.¹¹ Hence, this prevents them from initiating the process of diagnosing dementia in their patients.^{12–14} Uncertainties pertaining to optimal dementia management,¹⁵ absence of resources such as structured training on diagnosis, lack of awareness of available community resources,¹⁶ and inadequate support from multidisciplinary teams are some of the barriers that GPs face in treating these patients.^{13,14}

A systematic review which examined the barriers to detection and management of dementia found that these barriers fall into 3 main factors: doctor factors, patient/societal factors, and system factors.¹⁶ Doctor factors include diagnostic uncertainty or insufficient knowledge or experience, concerns about disclosing diagnosis, therapeutic nihilism, and stigma towards dementia. Patient/societal factors include stigma and delayed presentation which could be due to perceiving memory loss as normal ageing, lack of knowledge about dementia and the available treatments, and the cultural beliefs held by family members.¹¹ Healthcare system factors include time constraints, financial and remuneration issues, and lack of support (e.g., inadequate access to secondary services, lack of interdisciplinary

teams to assist in management). These barriers often lead to delayed care planning, opportunities for treatment, and support for patient or family education.^{17,18} Moreover, despite evidences that partnering primary care of dementia with various community-based services (e.g., multidisciplinary teams, the voluntary sector, and non-profit organisations) reduces the admission rates to nursing homes,¹⁹ as well as caregiver burden²⁰ and improves the quality of care,²¹ many GPs often report poor knowledge of the resources available. This results in the low referral rates to social services.^{22,23} Hence, community resources are often underutilised.^{19,24}

A recent landscape survey among GPs in Singapore explored how GPs perceived the management of mental illness as well as their professional development needs to enable better management.⁵ GPs indicated that the availability of more allied health support services in the neighbourhood would encourage them to see more mental health patients. They also indicated mental illness as a priority area for training, with general geriatrics and dementia as their top 2 choices.⁵ With such training, GPs would have higher confidence in diagnosing and managing dementia.¹⁴ To prepare for the increasing number of older adults in the community who would develop dementia in the future, it is important to first elucidate the barriers that GPs in Singapore face in providing dementia care which can subsequently be addressed and resolved.

As part of the General Practitioners and Dementia Care in Singapore Study, the current study aims to explore the perceptions of GPs on barriers to providing care for dementia patients at GP clinics, their reasons for referring patients to tertiary hospitals for dementia-related symptoms, and the types of training and support that these GPs would like to receive which will enable them to provide care for people with dementia.

METHODS

Data was collected from August 2016 to January 2017 from GPs across Singapore (Central, North, North-East, East, and West districts) from a list of clinic addresses provided by the Ministry of Health, Singapore. The government-run polyclinics and specialist clinics were excluded. Participation in this study was voluntary. Ethics approval for the study was given by the National Healthcare Group Domain Specific Review Board.

In the pilot phase of the survey, an invitation letter was sent by post to the selected GP clinics, with a web link to the online survey form. A unique participant ID number was generated and indicated on each letter to avoid duplication. QuestionPro was used for the web-based survey. Participation was anonymous as the letter was not addressed to a particular GP, and if there were more than 1 GP interested in participating in the study, they were asked to e-mail the research team who would then provide them with another unique participant ID. Research assistants were also dispatched to hand deliver the invitation letter and a hardcopy of the questionnaire with a self-addressed return envelope to the clinics when the response rate from the first wave of invitation to participate via mail was low. Upon completion of the questionnaires, respondents were reimbursed with a voucher amounting to Singapore Dollars

(SGD) 40 as an inconvenience fee through registered mail to the address used for the mailing of the invitation letter, unless respondents indicated an alternate address.

A study by Pathak and Montgomery³⁸ found that about 46.8 percent of GPs reported themselves as being somewhat confident towards the diagnosis of dementia. Based on a single proportion formula with 5 percent precision, our study will require about 383 cases as an effective sample size to replicate this finding in our sample. Taking 383 cases and a 4 percent attrition rate, we would have required about 400 participants. A total of 1,009 randomly selected GPs were approached, of which a total of 400 GPs completed the survey, yielding a response rate of 52.3 percent. One of the respondents was excluded due to extensive missing data, thus 399 GPs were included in the final analyses. The respondents were administered a number of questionnaires of which the following are relevant to the aims of this paper.

The socio-demographic questionnaire obtained each GP's age, gender, ethnicity, education, as well as information pertaining to the type of practice and years in general practice.

The respondents were asked 3 specific questions on barriers to care in dementia management and training needs developed by adapting input based from a psychogeriatrician (Dr Ng Li Ling) and a GP (Dr Lum Alvin). The first was: "What do you think are some of the possible barriers to you looking after patients with dementia?" Participants were asked to rate 9 statements where they could choose from a 4-point Likert scale: "Strongly Agree", "Agree", "Disagree" and "Strongly Disagree". These responses were collapsed into "Agree" and "Disagree" for the purpose of the analysis. An example of a statement was: "Patients with dementia tend to require more consultation time". Participants could also specify any other reason not mentioned in the 9 statements under "Other, please specify".

The second question was: "Please select the reasons as to why you would refer patients to tertiary hospitals for dementia related symptoms and behavior?" Five reasons were provided for this question, for example "Failure to respond to medication", and they could also specify any other reason not mentioned under "Other, please specify". Participants were allowed to select more than 1 response option that applied to them.

The third question was: "Would you be agreeable to managing dementia patients?" If they answered "Yes", the follow-up question was "What training or support would help you in providing this care?" Twelve different statements on training and support were provided, for example "Web based Training on Diagnosis", "Funding for longer consultations", and they could select more than 1 response option that applied to them. In addition, they could specify any other answer not mentioned. If they answered "No", the next question would be "If the following training/options for care were easily available, would you be agreeable to managing dementia patients?" The same 12 statements on training and support were provided for this question as well.

Statistical Analyses

Statistical Analyses were performed using Statistical Package for Social Sciences (SPSS, Chicago IL, USA) version 23. Descriptive statistics and frequency distribution were tabulated for the responses to the questions.

RESULTS

The socio-demographic characteristics of the respondents (n=399) are shown in Table 1. They were aged between 28 to 83 years with a mean (SD) age of 50.1 (10.9) years, and majority were males (71.4%), Chinese (91.2%), had MBBS (only) education (61.4%) and were in general practice for 20 to 29 years (32.8%). Among the GPs who were seeing patients with dementia, 42.1 percent reported seeing more patients with dementia presently compared to 5 years ago (Table 2).

Table 1: Socio-demographic Characteristics of GPs (N=399)

	N	%
Gender		
Male	285	72.2
Female	110	27.8
Race		
Chinese	364	92.2
Malay	7	1.8
Indian	16	4.0
Others	8	2.0
Education		
MBBS (only)	224	56.1
MBBS & MMED	67	16.8
MBBS & Post Grad	72	18.1
Diploma		
Others	36	9.0
Years of service		
<5	29	7.3
5 to 9	39	9.8
10 to 14	38	9.6
15 to 20	74	18.6
20 to 29	131	33.0
>=30	86	21.7
		Mean (SD)
Age		50.1 (10.9)
Years in GP		20.3 (10.7)

Table 2: GPs See More Patients with Dementia Compared to 5 Years Ago

	N	%
Yes	168	42.1
No	199	49.9
NA – (I have not been in primary care for >5 years)	31	7.8
Total	398	99.7

Barriers to Caring for Dementia Patients

Almost all respondents (98.0%) agreed that patients with dementia tend to require more consultation time (Table 3). The other 2 top reasons for barriers to dementia care were that respondents did not stock appropriate medications (88.5%) and that they lacked support services to manage dementia patients (81.4%). On the other hand, almost 8 out of 10 respondents disagreed with the statement that other patients may avoid their clinic due to their negative perceptions. Some of the other reasons specified by GPs as barriers include difficulties they faced in diagnosing dementia, “medical legal implications (e.g., Lasting Power of Attorney, Advance Medical Directive) of primary care diagnosis without specialist validation”, strict regulations related to dispensing medication, “lack of trained staff to assist”,

financial issues faced by patients and their family with regards to cost of medication and caregivers' issues (e.g., denial, “hesitant to bring patient to consult specialist”, “lack confidence that patient will benefit”).

Table 3: Barriers to Caring for Patients with Dementia

	Agree (%)	Disagree (%)
1. Patients with dementia tend to require more consultation time	391 (98.0)	7 (1.8)
2. Patients and family members are upset and agitated when given a diagnosis of dementia.	231 (57.9)	166 (41.7)
3. Negative perceptions of other patients, who may avoid my clinic	80 (20.0)	316 (79.2)
4. Lack of support services available for me to manage them	325 (81.4)	71 (17.8)
5. I do not stock the appropriate medication in the clinic	353 (88.5)	44 (11.1)
6. They may be difficult/disruptive in their behaviour	262 (65.7)	136 (34.1)
7. Lack of financial incentive	202 (50.6)	194 (48.7)
8. Lack of knowledge to manage patients with dementia	277 (69.4)	120 (30.1)
9. Lack of direct access to specialist support (i.e., direct access to geriatrician or psycho-geriatrician)	277 (69.4)	120 (30.1)

Reasons for Referring Patients to Tertiary Hospitals for Dementia-related Symptoms

The most common reason for referring patients to tertiary hospitals was the severity of symptoms (82.0%), followed by definitive diagnosis from a specialist (74.9%), and patient's request (70.2%) (Table 4). Some of the other reasons specified by the respondents were: lack of finance and resources (e.g., manpower, imaging services, cost of medications, investigations); difficulty in diagnosis of early onset of dementia, to rule out other causes; long time required for consultation; regulations regarding medications; patients' need for specialist treatment; medical-legal specialist assessment and also caregivers' request.

Table 4: Reasons for Referring Patients to Tertiary Hospitals for Dementia-related Symptoms and Behaviour (N=399)

	Yes (%)	No (%)
1. Patient's request	280 (70.2)	119 (29.8)
2. Severity of symptoms	327 (82.0)	72 (18.0)
3. Failure to respond to medication	184 (46.1)	215 (53.9)
4. Side effects of medication	117 (29.3)	282 (70.7)
5. Definitive diagnosis from specialist	299 (74.9)	100 (25.1)
6. Other, please specify	44 (11.0)	355 (89.0)

Multiple responses

Training and Support Needed for Them to Provide Care for People with Dementia

Out of the 12 statements provided (Table 5), the following training/support needs were identified by most GPs: having direct access to multidisciplinary team (75.2%), such as case discussion with specialist or case managers in dementia care; web-based training on diagnosis and management of dementia patients (65.5%); and incentives for longer consultations (65%).

Of the 165 respondents who were not agreeable to manage dementia patients, 53 percent (n= 88) were agreeable if relevant training and support were easily available to them (Table 6).

Table 5: Training or Support That Would Help GP in Providing Dementia Care (N=226)

	N (%)
Web based Training on Diagnosis	142 (62.8)
Web-based training on Management of dementia patients	148 (65.5)
Face to face and Structured Training on Diagnosis	106 (46.9)
Face to face and Structured Training on Management of dementia patients	119 (52.7)
Funding for longer consultations	147 (65.0)
Direct access to multidisciplinary team	170 (75.2)
Direct links with ADA	83 (36.7)
Link to Regional Dementia Network	77 (34.1)
Ability to refer directly for diagnostic services e.g. CT scan	127 (56.2)
Ability to dispense dementia specific medications	144 (63.7)
Access to case manager	132 (58.4)
Ability to conduct case discussions with specialist in dementia care	132 (58.4)
Other	10 (4.4)

Multiple responses

Percentages are rounded off to the nearest whole number

Table 6: Would GPs be Agreeable to Provide Dementia Care If Training and Support Were Easily Available? (N=165)

	N	%
Yes	88	53.3
No	77	46.7

DISCUSSION

With regards to the barriers of care, “more consultation time needed for patients with dementia” was the most common reason cited. One possible explanation could be that GPs may have a preference to attend to minor physical complaints, which are less time consuming and have a standard charge, as they do not receive any additional compensation for complex cases like dementia which require more consultation time.

Other common barriers reported by GPs in this study were not stocking medications specific for dementia, lack of support services and direct access to specialists as well as the lack of compensation for the longer consultations that such patients need. Studies elsewhere have found that inadequate payment models²⁴ and lack of expertise²⁵ hinder GPs in providing dementia care. Public stigma is not a barrier faced by GPs in providing care as about 80 percent of GPs disagreed that other patients would avoid their clinic due to negative perceptions of dementia.

The main reason for referring patients to specialist care was the severity of symptoms of the patient. The other 2 common reasons were for the specialist to make a definitive diagnosis and the patient's specific request to be referred to a specialist. The

other reasons for referring the patients to specialist care corresponded to those barriers that were reported by the GPs that prevented them from providing dementia care. This concordance suggests some common issues such as the lack of resources, including the need for specialist care for those patients with severe symptoms that GPs are unable to treat. Another reason why GPs refer patients to a specialist upon request of caregivers is perhaps due to the onset of behavioural and psychological symptoms in dementia (BPSD) that the caregivers are not able to manage. It has been shown that BPSD is a major source of distress to caregivers and family members^{26,27} which contributes to poor quality of life in both patients and caregivers,²⁸ and increases the risk of institutionalisation.^{27,29}

The GPs reported that they would like to have direct access to multidisciplinary teams, be able to directly refer patients to diagnostic services (such as CT scans), and conduct case discussions with a specialist in dementia care. These results are consistent with the findings by Chong et al⁵ suggesting that the availability of direct access to a multidisciplinary team in the community is deemed to be crucial for these GPs to provide an appropriate and sufficient care plan, especially for more complicated cases.²⁴ Koch and Iliffe¹⁶ also stressed the importance of having a case manager to assist with care planning, management, assessment, and coordinating care services, which would in turn reduce the burden of detection and management of dementia on GPs.

Further training and continuing professional development are important and there are a number of studies which have utilised web-based training to equip GPs with the necessary knowledge for dementia management.^{30,31} In line with this, the GPs in our study have reported that web-based training for diagnosing and managing dementia patients would be helpful for them. Compared to traditional training methods, web-based training is flexible in terms of time, because GPs are able to access these resources at their own convenience. In addition, without being confined to a physical space, a larger number of GPs in Singapore are able to access this web-based training, which would eliminate the cost of travelling and other related costs.

Educational measures should be integrated with financial reimbursement to improve GPs' performance in dementia care.³² Thus, for future development in dementia care, it is important to look into the financial compensation of GPs to further support them. Also, subsidies such as the Community Health Assist Scheme (CHAS)³³ and the Pioneer Generation Package³⁴ would help to ease the financial burden faced by patients. Another measure would be to assist GPs through case management by multidisciplinary teams. Recently, the Ministry of Health launched the Primary Care Networks (PCN) for GPs to utilise funding and administrative support to better monitor and manage their patients' healthcare needs through multidisciplinary care.³⁵ More specifically related to dementia, in 2015, Tan Tock Seng Hospital (TTSH) started its Geriatric Integrated Network for Dementia (GerIND), which is a community-based network where TTSH collaborates with GPs to better care for patients with dementia and their caregivers.³⁶ It also allows GPs to refer dementia patients who require tertiary services through a streamlined process thus reducing delay in treatment.

Overall, dementia care management support³⁷ and further training on dementia can help address GPs' uncertainties. These would allow GPs to be more comfortable with initiating the diagnostic process, thus reducing the barriers of delayed care planning, more opportunities for treatment, and support for patient or family members.^{13,14}

The relatively high non-response rate may limit the generalisability of the results. However, the strength of the study is that it is the first study in Singapore that explored the perception of GPs on dementia care, providing much-needed information for targeted training and policy formulation. Further research using qualitative interviews would be useful in obtaining more in-depth insights into the difficulties that GPs in Singapore face in the management of patients with dementia.

CONCLUSION

In conclusion, GPs play a crucial role in managing dementia care in Singapore. The issues that they identified pertain to the need for multidisciplinary care, and the lack of compensation for additional time needed to diagnose and treat patients in dementia care. Training programmes such as web-based training on the diagnosis and management of dementia patients for GPs would address their uncertainties and equip them to provide better care, reduce the delay in diagnosis, and ensure adequate management of these patients in the primary care setting.

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Conflict of Interest

The author(s) declare(s) that he/she/they has/have no conflict of interest in relation to this article.

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