A qualitative study on general practitioners' perspectives on late-life depression in Singapore—part II: system- and physician-related factors

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Summary

Background Little is known about the practices and resources employed by general practitioners (GPs) in Singapore to manage late-life depression. As the country is stepping up its efforts to promote collaborative care across community mental health and geriatric care, understanding GPs' current practices when managing late-life depression appears timely.

Methods This qualitative descriptive study explored the perspectives on late-life depression of 28 private GPs practicing in Singapore through online semi-structured group and individual interviews. GPs were purposively sampled across age, gender, and ethnicity. Analysis followed a reflexive thematic approach and focused on physician- and system-related factors.

Findings Clinical instinct, experience, and knowledge of appropriate resources for specific patients played an important role for GPs during late-life depression care. GPs paid particular attention to communicating with patients tactfully during initial assessments and diagnosis, although some GPs chose to be upfront with patients with whom they had already established rapport. Using non-English languages when communicating about depression could mitigate stigma in some cases but added confusion in others. GPs relied primarily on their own professional support network to manage late-life depression. Although GPs acknowledged the usefulness of public care services, they felt that collaborative care was hindered by a lack of efficient communication channels between providers and appropriate financial coverage to coordinate the frequently complex care of depressed older adults.

Interpretation Current resources and practices to manage late-life depression vary greatly between private GPs in Singapore. This needs to be considered during ongoing reforms to achieve effective collaborative care.

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Introduction

Late-life depression, defined as a major depressive disorder occurring in adults aged ≥65 years, is an important public health issue, associated with, frailty,[1] suicidal behaviour,[2] reduced physical and social health[3] and higher healthcare costs.[4] Depression in older adults likely responds best to collaborative, multi-pronged approaches, in particular when these are

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Research in context

Evidence before this study

A growing body of evidence supports that collaborative care coordinated from primary care is an effective approach to manage late-life depression. Yet, private general practitioners (GPs) in Singapore—who represent 80% of all primary care professionals in the country—have varying access to mental health resources, making it unclear how they practice late-life depression care.

Added value of this study

This study employed qualitative description to explore GPs' perspectives on how they approach late-life depression care in their older patients. Findings highlighted that GPs' confidence to manage late-life depression depended on their level of experience with mental health care and on their awareness of resources they could rely on throughout the care process. GPs placed importance on finding the right tone when communicating about depression with older patients, and considered it sometimes challenging to investigate depressive symptoms, fearing to make patients ill at ease or lose face. GPs employed a wide range of approaches to manage late-life depression, but felt limited by short consultation times, insufficient remunerations, and a lack of communication channels with other providers when trying to engage in collaborative care.

Implications of all the available evidence

In 2023, Singapore has launched Healthier SG, a national healthcare initiative aiming to promote care coordination by a single primary care provider for each Singaporean resident and increase support and resources to meet its ageing population's geriatric and mental health needs in the community. While these our promising changes, our findings highlight the persisting need to build a shared understanding of late-life depression and its management among GPs and other stakeholders, which also considers the cultural specificities of local care practices.

coordinated from primary care.[5] Depressed older adults are less likely to utilise care outside of primary care than younger age groups with depression,[6] but tend to visit their general practitioner (GP) more frequently than their non-depressed counterparts.[7] Hence, the integration of late-life depression care into primary care has gained traction over the past decades.[8,9] As many other high-income countries, Singapore is anticipating an increase in late-life depression given its ageing population[10] and intends to rely increasingly on primary care to manage and coordinate depression care in older adults.

Based on our prior findings, GPs in Singapore described late-life depression care as manifesting with comparable complexity and heterogeneity to what is reported in other countries.[11] In particular, GPs in Singapore consider that mental health literacy, life experience, cultural beliefs, ageistic self-views, physical health, family context, treatment expectations, and patient-physician rapport influence patient needs and outcomes.[11] Despite GPs' awareness of the manifestations of late-life depression, treatment rates remain low in Singapore: population studies from 2011 to 2016 have found that only 5.6% of adults aged 60 years meeting criteria for depression have been formally diagnosed,[12] and that only 27% of depressed adults, all ages confounded, have received any depression care during the past 12 months.[13] Local randomised controlled evidence suggests that patient-level barriers, such as stigma and mistrust can be overcome by collaborative care encompassing specialised treatment advice to GPs, weekly patient follow-ups by nurse-educators, and care coordination by case managers.[14] In practice, however, such resources are not equally available to all primary care physicians in Singapore.

Since 2020, the public primary care system has implemented collaborative mental health clinics within polyclinics,[15] Singapore's public primary care institutions, where 20% of primary care physicians practice.[16] By contrast, the access to mental health resources of private GPs, the remaining 80% of all primary care physicians, greatly depends on whether their practice is part of a Primary Care Network (PCN) which provides access to specialty partner clinics, psychologists, nurses, and care coordinators. Not all PCNs possess equal resources. Furthermore, there is considerable variation in the level of GPs' training and experience in the field of mental health, with some GPs having acquired continuing education courses or the graduate diploma in mental health, some being actively involved in partnership programmes with public mental health services, and others having little specific involvement in mental health initiatives. Mental illness, including late-life depression, is often associated with complex needs in patients and some private GPs have reported to struggle to make such resource- and time-consuming care financially viable for their practice.[17]

Singapore is currently undergoing a major healthcare reform under Healthier SG, a national initiative launched in 2023 for more effective chronic disease prevention and management through care coordination by a patient-nominated single primary care provider, which can be a private GP or a polyclinic.[18] Healthier SG has also initiated measures specifically targeting elder care and mental health care by expanding the specialised and community care resources available to private GPs, as well as the subsidies allocated to complex care.[19] However, as there is no research on how GPs currently manage late-life depression in Singapore, it remains

difficult to evaluate whether the initiative is addressing all barriers related to late-life depression care in private primary care. Given the high variability of GPs' current level of training, exposure, and clinical resources regarding late-life depression care, it is likely that their perspectives, approaches, and challenges are also highly heterogeneous. This potential diversity needs to be understood in depth and considered for the ongoing policy reforms to ensure that they can be adapted to the situation of most GPs, not only to average GP situations.

The aim of this study was to explore GPs' perspectives on their practices, available resources, and needs related to late-life depression care. The study followed a qualitative design to be able to uncover care elements specific to Singapore's GP population.

Methods

Design

This study was a qualitative descriptive investigation of GPs' perspective on the physician- and system-related factors influencing late-life depression care in Singapore's private primary care setting. It is part of a broader study on private GPs' perspectives on late-life depression. Previous findings pertaining to patient presentations and reactions to late-life depression have been reported elsewhere.[11]

Participants and procedure

Ethics approval was obtained from the NUS Institutional Review Board, which approved all procedures (protocol number NUS-IRB-2022-306). Reporting followed the COREQ checklist (Supplementary Table S1). The role and characteristics of all team members are presented in Supplementary Table S2.

The study focused on Singapore's private primary care, a priority target of the ongoing healthcare reforms under the Healthier SG initiative.[18] Family physicians from public primary care clinics (polyclinics) were not included given the important differences in the nature of their practice, which is embedded in larger healthcare structures equipped with integrated mental health services. Eligibility criteria included being a GP, currently working in Singapore in a private primary care setting, and having five years or more of experience in primary care. Participants were recruited through professional mailing lists and WhatsApp groups of primary care physicians and through snowball sampling. Interested GPs needed to respond to the message or email received from the study team to sign up. Participant recruitment aimed to achieve maximum variation across GPs' age, gender, and the three major ethnicities in Singapore: Chinese, Malay, and Indian.

Data collection was conducted online and spanned from September 2022 to May 2023. All GPs who volunteered to participate were interviewed, except for one person who experienced technical problems with their microphone. After having provided written, informed consent to take part in the study, participants were interviewed once, for approximately 1 h, in a group of two to five participants or individually. Data collection prioritised group interviews with a heterogeneous mix of participants at its early stages to leverage participant interactions and generate a wide range of discussion points. Individual interviews were used later in data collection to facilitate inclusion of GPs who were not free at the time of group discussions or who possessed rarer combinations of individual characteristics and needed to be recruited through targeted searches. Supplementary Table S3 provides an overview of the combination of GP characteristics in group and individual interviews. The first author (AS) was present in all interviews and moderated all but one interview. LWKV moderated the first group interview. Interviews were semi-structured and based on a topic guide (Supplementary Table S4). After investigating GPs' overall exposure to late-life depression, the topic guide explored the factors related to late-life depression care at three levels commonly employed by patient-centred conceptualisations of quality of care,[20] namely at the patient level (patient presentations), GP level (practices and resources for clinical investigation and management), and system level (explored through their interplay with patient- and GP-level factors). The moderator took reflexive notes after each discussion. Instead of direct compensation, the study team donated SGD 20 to a Singaporean charity organisation working with older adults for each participating GP.

Data collection stopped once saturation had been achieved on key information (i.e., information contributing new meaning, dimensions or nuances to the investigated topics)[21] and the sample reached maximum variation by age, gender, and ethnicity.

Data analysis

Reflexive thematic analysis following Braun and Clarke's method[22] was carried out on the transcribed recordings in Excel and occurred in parallel of data collection. Five team members (AS, VMEL, AHO, ML, and FLL) participated in the creation of the initial set of codes based on the first two transcripts. Through regular meetings, the same team members further revised the coding tree by adding new codes and progressively organising initial descriptive codes into higher-level abstractive ones. Codes were then sorted into patient-, GP-, and system-level factors. Given the richness of the data, the study team analysed GP- and system-level factors (reported in the present work) separately from patient-level factors (reported in our "Part I" article[11]). This approach enabled to fill two distinct research gaps in Singapore, namely the clinical presentation of late-life depression and late-life depression management in private primary care without compromising the depth of either analysis.

During data analysis of the GP- and system-level factors, the first author (AS) and two other team members (VVL and LJG) organised the GP- and system-related codes into initial themes and subthemes, which were further refined with the help of other co-authors (TJH and AHO). Deriving main themes followed an iterative process refining the label and scope of preliminary themes based on underlying codes and two main axes of analysis, namely GP- vs system-level factors and earlier (investigative) vs later (management) stages of care. Codes within each theme were grouped into subthemes following a similar process. All authors approved the final set of themes and subthemes. The results below present all quotes verbatim, including local Singlish (Singaporean English) expressions such as "lah", a sentence tag marking emphasis.

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Results
Of the 28 GPs who completed the study (Table 1), male GPs and Chinese GPs were in majority, with a close to equal representation of GPs aged ≤45 years vs older GPs. Half of the GPs worked in solo practices and the other half in group practices. The clinics of all but four GPs were part of PCNs. GPs had been practicing primary care for 5–26 years, with an average of 16 years. Twelve GPs had never followed any mental health training, three had no recent training, whereas 13 GPs attended at least one mental health course within the past two years. Interviews comprised six group and seven individual discussions, with all categories of age, gender, ethnicity, years of experience in primary care, and mental health training being represented across both interview types (Table 2).

GPs' accounts of physician- and system-level constituents of late-life depression care addressed three categories of resources, illustrated in Fig. 1. Results are reported starting from "Knowledge and Experience", detailing GPs' individual know-how and system-level awareness leveraged at all stages of the care process, followed by "Communication with Patients", detailing GPs' individual approach to engage older patients into depression care, particularly during earlier or investigative stages of care, and finally by "Support Network", detailing collaborative care resources available within the system and most useful during later or management stages.

Total number of participants	28
Demographics	
Age in years	min–max = 29–59, mean = 46
Age >45 years (cut-off used for sampling)[a]	16
Age groups	
20–29 years	1
30–39 years	10
40–49 years	4
50–59 years	13
Gender	
Female	10
Male	18
Other	0
Ethnicity	
Chinese	18
Malay	5
Indian	5
Other	0
Clinical practice & experience	
Type of private practice	
Solo	14
Group	14
Private practice included in a PCN	24
Years of experience in primary care	min–max = 5–26, mean = 16
Primary care practice experience abroad	1 (Australia, 1 year)
Experience related to mental health & depression	
Mental health qualifications	
Graduate Diploma in Mental Health	5
Attendance of any mental health course	
Never	12
More than two years ago	3
In the past two years	13
Depression in private life experienced by self, a close friend, or a family member	20
Exposure to older patients and depression in older patients	
Estimated number of patients aged ≥65 years seen per week	mix-max = 1–150, mean = 51
Estimated number of patients aged ≥65 years seen per week with depressive symptoms	min–max = 0–40, mean = 4
Estimated number of patients aged ≥65 years seen per week with clinical depression	min–max = 0–20, mean = 2

Note. This Table was reproduced from its original occurrence in the "Part I: patient presentations and behaviours" article based on the same study.[11]
Numbers represent counts unless otherwise specified. Legend: PCN, Primary Care Network.

Table 1: **Sample characteristics.**

Knowledge and experience
GP's instinct
GPs explained that they often relied on their instinct to detect depression in their older patients.

> *"We may be seeing [an older patient] for the first time, but I think that any of us who have been in practice for a while, … instinctively know [if they are depressed]."*

GPs defined this instinct as a combination of lexical knowledge (textbook symptoms commonly associated

with depression, such as insomnia and loss of appetite), clinical experience built over years of exposure to late-life depression, and long-term acquaintance with their patients, which helped determine what constituted unusual changes in the mood or behavior of a particular patient.

> *"I would normally screen … by their body language, or by the way they normally are when [they] speak to me. When they come in for the consult in the regular visits, and you know something's a bit off. Something has changed, or they start saying, … 'I can't sleep properly anymore. … I've lost my appetite.' You know, things like that."*

Relying on clinical instinct was necessary, as GPs described not having the time to screen for depression more systematically.

> *"When you serve eighty patients a day, it's almost impossible to … run a screening questionnaire of any sort."*

GPs suggested that automated online tools could help with initial detection, for instance by prompting patients to answer screening questions upon registration at the clinic. Artificial intelligence (AI) was expected to acquire comparable clinical instincts to doctors'.

> *"AI can recognise loss of activity, right? I think something about depression … associates it with loss of activity. There's usually loss of function, and that can be definitely identified as depression."*

Confidence depending on experience

GPs who had a special interest in mental health were particularly at ease with managing late-life depression.

> *"I am in the … collaboration [scheme] with IMH (Singapore's Institute of Mental Health), so I am seeing quite a number of mental[ly ill] patients and I think I have a fairly big arsenal of psychiatric drugs. So by the time I need to send [the patients] out, … I tried a lot of things that didn't work."*

By contrast, GPs who were less frequently exposed to mentally ill patients did not always feel comfortable diagnosing and managing late-life depression.

> *"I personally don't really see so many of these suicidal or depressed patients. So I also … [lack] that clinical acumen. I think I'd rather have a psychiatrist look into it."*
>
> *"I'm not comfortable and … I don't think I have enough knowledge to … prescribe [medication to treat depression] on a chronic basis."*

Multiple GPs primarily treated late-life depression with nonpharmacological approaches, such as healthy nutrition, vitamin intake, sun exposure, and physical activity.

> *"By and large most of [the depressed older patients] don't need medication. It's just a matter of recognizing that this [depressive state] is going on and point it out so that they can make some changes in their lives to address it."*

Some GPs also engaged in counselling, although a younger GP noted that the patients' older age could feel intimidating:

> *"I find counselling is not easy for [older patients] because … I look up to their wisdom, … their lived experiences, and their years of experience. I don't think I'm very suited to really counsel them. … Rather than counselling it's more a matter of being present. So I … schedule regular follow ups with them. [It] gives them some sort of sense of hope and comfort."*

Seeking practical knowledge at multiple levels

Getting a full picture of older patients' needs and resources helped guide late-life depression care at all stages. GPs usually gathered knowledge on their older patients' social background, sources of support, activities, and level of functioning. Collateral history with family and home visits were particularly useful sources of information in this regard.

> *"You can easily call up the family, 'cause you know who's related to who, and who's the grandchild or grandparent*

Interview number	1	2	3	4	5	7	6, 8–13
Number of participants in interview	5	2	4	3	4	3	1 per interview
Age							
Age ≤45 years	+	–	–	+	+	+	+
Age >45 years	+	+	+	+	+	–	+
Gender							
Female	–	–	+	+	–	+	+
Male	+	+	+	+	+	–	+
Ethnicity							
Chinese	+	+	+	+	+	+	+
Malay	+	–	–	–	+	–	+
Indian	+	–	+	–	–	+	+
Years of experience in primary care							
5–10 years	+	–	–	+	–	+	+
11–20 years	+	+	+	–	+	–	+
>20 years	+	+	+	+	+	–	+
Any mental health course							
≤2 years ago	+	+	+	+	+	+	+
>2 years ago	–	–	–	–	+	–	+
Never	+	+	+	+	–	+	+

Note. The "+" symbol indicates that a given participant characteristic was represented by at least one of the participants. Data on individual interviews are presented as aggregates to minimise participant identifiability.

Table 2: **Interview characteristics.**

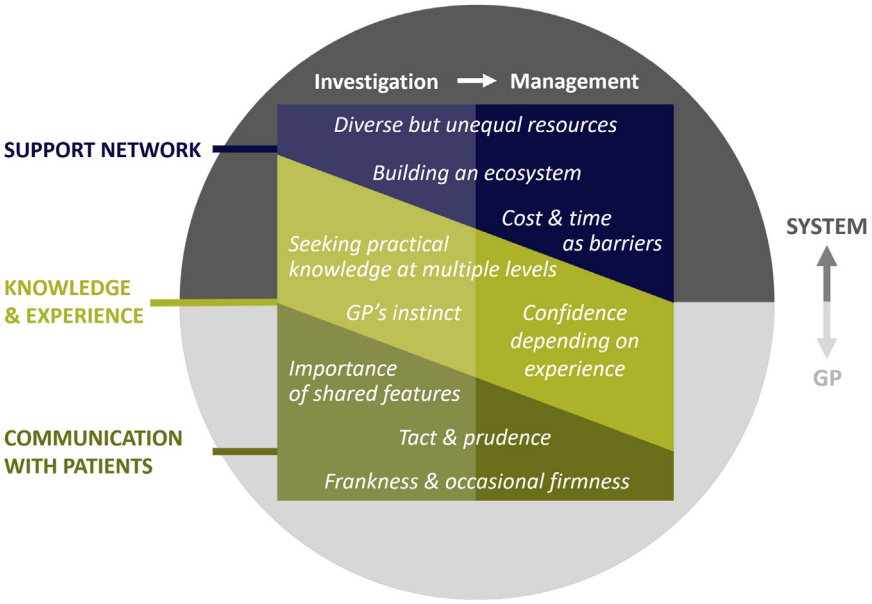

Fig. 1: **Schematic representation of physician- and system-related factors influencing late-life depression care in Singapore, according to GPs**. Note. Main themes in all capital letters on the left-hand side indicate three categories of resources discussed by GPs: Knowledge and Experience (GPs' individual know-how and a system-level awareness), Communication with Patients (GPs' approach to achieve care concordance), and Support Network (system-level, professional sources of help inside and outside the clinic's walls). As indicated by the area size of each category, Communication with Patients was described as more important in the investigative stages of clinical care than Support Network, whereas Support Network became more central than Communication with Patients during management stages. Knowledge and Experience retained the same importance during earlier and later stages of the care process. Subthemes are in white italics within each corresponding theme. Some subthemes were discussed in relation to both investigative and management stages of care; these subthemes cross the vertical boundary line in the centre of the diagram. As indicated by the outer circle, subthemes in the upper (dark grey) half represent system-related factors, and subthemes in the lower (light grey) half physician-related factors.

> *of whatever, and [you can] just ask them whether the family has noticed anything different. So, I think that is way more important than actually going through a set of protocols or questionnaires."*

> *"You can see the home environment, like whether [older patients] keep it … tidy and whether they are kempt … Because sometimes they will dress up when they come to [the] clinic, but at home they're in very bad shape. Also, nobody knows. … The home setting gives you a lot of clues."*

To connect with older populations and know of additional community resources at hand, some GPs spent time in their clinic's neighbourhood or got involved in extra-professional activities, such as volunteering.

> *"I was involved in a community group before, … a nonprofit organisation. … I did weekly exercises with mostly elderly group[s] so that's how I get to know about all [these community resources]."*

GPs felt that they would benefit from receiving more practical training and guidelines relevant to mental health for the management of depression in their everyday practice.

> *"Sometimes you want at hand a list of resources, … where … certain information [is] crystallised and put in a … line diagram [about] whom to refer to. … I wish we had that for mental health."*

Communication with patients

Tact and prudence

GPs considered it important to adopt a tactful and patient attitude during initial assessments of late-life depression. They explained that they often needed to revisit sensitive topics over several consultations and tailor communication to patients. Fearing that screening tools would put older patients on guard, GPs preferred weaving screening questions into the conversation more informally.

> *"I have to gauge patient to patient. Some patients are very, very anxiety prone … Then sometimes we choose not to ask so directly [about depression], more indirectly … : 'Do you feel satisfied? Do you feel that this is difficult for you?'."*

In some cases, tact could deter GPs from acting on their suspicion of depression in older patients altogether or to assess important associated symptoms, such as suicidal ideation.

> *"Moderator: Is … suicide risk something you usually also try to investigate?*
>
> *GP: Not so much for the elderly, to be honest. That I do find a bit hard to broach. … It's easier with younger people."*

When communicating the diagnosis, tact also prompted GPs to either complexify or normalise depression's causes to help alleviate patients' guilt about having the disorder.

> *"So, you have to explain it from … almost like a scientific point of view, even if [the depressed older patients] are not going to understand. You know, long explanations about dopamine and … serotonin. But you just got to twist it so … This is a justification almost for the reason why you have to start [them] on your meds."*
>
> *"Sometimes it makes [older patients] feel better when I … tell them that [depression] is actually very common, and older people do experience depression because of changes in their lives, loss of autonomy, and [that] it's manageable."*

GPs explained that they could feel reluctant to assess and diagnose late-life depression altogether in cases where this was likely to be unpleasant for the older patient, such as when depression might be experienced as losing face.

> *"When the patient comes to the clinic and they are in a good mood, when they see people around, [diagnosing depression] is really an uphill battle, both morally and dealing with time and resources to turn that around and then spend time to dissect [the patient's true feelings]. So, it is very difficult. It is what we call 'opening a can of worms'. It is something that nobody will want to challenge, and nobody wants to do."*

GPs tended to emphasise antidepressants' beneficial effects on somatic symptoms to convince depressed older patients reluctant to accept treatment for their mental illness.

> *"I always say that, 'Oh this is for your appetite and it helps for your sleep.' Why not? We give something, then they are happy with it, even though they are kind of not accepting this fact that they are having depression. But I think it's totally fine, at least they are taking medicine."*

Frankness and occasional firmness

Some GPs preferred to be upfront about their diagnosis and treatment recommendations, for example by leveraging the formal nature of a screening tool they routinely used, the Patient Health Questionnaire-9 (PHQ-9):

> *"For those patients [in] whom I strongly suspect depression … sometimes I show them the actual PHQ-9 table on the computer screen. I'll tell them …, 'Look, … we count the score together and it does show you may likely have depression … ' So, when they are faced with an objective measure, then they'll be confronted [to the fact] that 'Maybe I do have that diagnosis and I do need help … '"*

GPs combined frankness with firmness when informing older patients about their diagnosis or when discussing treatment.

> *"I don't lie. I would tell them: 'This is an anti-depressant, but what it does is hopefully it can … give you some calmness, and then you are able to think well … If you like it, we will just continue, otherwise you will just stop, taper and then slowly try to get other things that can help. But you cannot say 'I don't want', because you come to me, I'm giving you a professional opinion.' So usually they respect, lah."*

GPs sometimes chose to be blunt as a last resort. They relied on the strength of their relationship with the patient in such cases, as described by a GP whose longtime patient was rapidly deteriorating due to a combination of untreated physical illness and depression-induced self-neglect:

> *"I said 'I'm not going to be your doctor anymore if you don't take this [antidepressant].' I was very, very brutal with him. … And that worked. In a way we have the relationship. He then [said]: 'Ok doc, I will just try'. I think within two weeks he turned around and you know his mood was better and [he] was making better decisions."*

Importance of shared features

GPs pointed out that possessing shared characteristics with their patients helped them communicate and connect.

> *"If it's patients from your own ethnicity, your own culture, your own language, it's really much easier to speak to these patients."*
>
> *"I think it helps that I was a female. I don't know, I felt like the patient, the elderly lady, she was a bit more receptive."*

In particular, speaking the older patients' language and knowing their culture was an important facilitator when communicating about depression.

> *"Those who speak a different language, non-English, … I think they appreciate it even more, if I can speak their language. "*

Malay GPs mentioned that talking about depression was easier in their own language, in which the word did not bear as much stigma as in English.

> *"Somehow the word in Malay, 'depression' doesn't sound so bad ... In Malay it's 'kemurungan'. It's more like extreme sadness. ... Depression connotes like everything is ... down and gone but ... in the Malay language, 'kemurungan' is more like sadness. ... It's more acceptable than the word 'depression'."*

Language barriers could hamper communication about depressive symptoms. It was sometimes difficult to find translations for words describing certain emotions, as explained by a Chinese GP:

> *"I do have ... the Geriatric Depression Scale, and some of the questions are very difficult to translate, lah. ... [For example,] ... 'Do you think it's wonderful to be alive now?' ... Certain terms like ... 'wonderful', [are] difficult to translate into a [Chinese] dialect."*

Support network

Diverse but unequal resources

Formal healthcare resources were important to GPs at all stages of care, although access to them varied substantially. Working in a group practice provided access to more experienced peers for younger doctors. Working in some PCN member clinics ensured augmented resources, such as dedicated nurse-led depression screening or facilitated collaborative care with specialists. These resources made GPs feel supported during depression care.

> *"In my current place of practice, I feel quite supported. We have the medications available. We have contacts and partner clinics with psychologists.... There are also other more experienced GPs, like my colleagues who have GDMH (Graduate Diploma of Mental Health) .... So, I am quite comfortable to manage [late-life depression], if it comes up."*

By contrast, working independently could make it challenging for GPs to access mental health resources.

> *"I think that support is something that is quite lacking. ... When I was doing locum as a solo GP ..., it [was] really very difficult."*

A Malay GP pointed out a need for more ethnic-specific resources:

> *"For my ethnic group, sometimes the approach ... has to be quite ethnic-oriented. Jamiyah (Singapore's Muslim Missionary Society) is doing a little bit, but [it's] not good enough."*

Multiple GPs felt that resources should be increased or better adapted to general practice.

> *"My hope is that ... the decision makers ... will decide ... to listen to the GPs a bit more ... on how to get the right tools for us. Because what we practice is really quite different from how it is done in say the institution."*

For other GPs, it was more a question of awareness of existing resources and how to utilise them for efficient care coordination.

> *"When we have patients [with depression], we ideally would just like to have one hotline number to call or refer the patient to. And then the person behind the number should be able to direct the patient to the relevant community partners, lah. Like ... psychologists or ... family services and welfare or something like that."*

Building an ecosystem

GPs stressed the importance of an interconnected support network –an "ecosystem"– to successfully investigate and manage late-life depression. As a main resource, GPs mentioned Singapore's Agency for Integrated Care, the national agency responsible for community services for older adults encompassing:

> *"... the FSCs (Family Service Centres) and the [Active] Ageing Centres, where they have case workers or social workers who will develop the long-term relationship with the patients and clients and follow them up, give them safety netting advice, call them regularly, visit their houses, send them befrienders, etc. ..."*

Solo GPs also tended to refer depressed older patients to their personal network of social workers, physiotherapists, counsellors, and psychologists, as well as to less classic mental health care providers, such as non-profits, religious organisations, and tele-counsellors.

> *"So, we refer a lot of cases to Club HEAL (a Muslim mental healthcare organisation), ... especially the Malay Muslim ones. ... When you lace the spiritual and religious into mental health, it's more accepted. ... It's a non-profit too, [with] very minimal charge."*

GPs referred urgent cases, such as those with severe depression or suicidal ideation, to the IMH or to psychiatric departments in other public hospitals, although some preferred referring these cases to geriatric internal medicine for a more comprehensive medical evaluation and to circumvent psychiatry-related stigma, frequently encountered in older patients.

> *"Most of the time, I send to geriatricians because [older patients] have a host of other problems. Sometimes you're*

not sure whether it's just depression per se or some other medical problem. So, I tend to send to geriatricians, you know, rather than send to IMH. Because everybody has this thing about IMH."

However, GPs found it challenging not to hear back after referrals to specialists, community services, or hospitals.

"... A lot of times, when we refer patients for certain services, we don't know what's going on. The community partners may not know what we want to follow up [on] as well."

As such, GPs suggested that one improvement would be using online tools to connect and discuss cases more directly with other healthcare providers and community services.

"I wonder whether we could also have a system where you're in constant communication with [community care partners] ... I think they are the ones that do a lot of the important work in the community."

Cost and time as barriers

GPs explained that cost could limit options for referrals considerably, as many older patients could not afford private specialised care.

"Therapy [in the private sector] is terribly expensive. I'm very cheap compared to the therapies. Honestly, ... we just charge a very basic consultation fee, but the therapists charge like a few hundred [dollars] each time. It's crazy. ... So I think I'm a very cheap therapist. ... [Patients] often say: 'Yeah, I'd rather come back to you.'"

Even though depression was subsidised under Singapore's Chronic Disease Management Programme, these subsidies were often not sufficient to cover depression care in the private sector, especially for older patients who had multiple chronic conditions.

"There's an annual cap for ... chronic diseases under the ... Chronic Disease Management Programme. So because [depressed older patients] may have multi-morbidities, sometimes they have to dig out of pocket and that's when they find it difficult."

Referring cases to the public sector was in turn challenging due to long waiting times, often spanning months without the possibility of contacting the providers directly.

"Sometimes ... [older patients] prefer to be seen in the government system [because] the cost is an issue. [It] can be quite a struggle, because then there's no communication, there's no way of contacting [the providers], there's no way of getting quick appointments. It's a nightmare."

GPs tried to avoid charging patients for longer consultations, but not all of them could afford extending their consultation time *pro bono* for mental health care.

"It's almost like, in primary care, everybody expects it to be a ... cheap and fast consult. ... In Singapore, [consultation fees] can be [as] low as fifteen dollars. So, ... you're forced to churn the volume."

GPs expressed hope that Healthier SG would help find ways to remunerate depression care in primary care more fairly.

"Especially with Healthier SG, ... the government is also looking into the finance structure. ... By ... rewarding GPs who have good outcomes ... that may ... in turn lead to better patient care and cost-effective care for the patient."

Yet, they also felt that the quality of mental health care in primary care had crucial subjective components that were challenging to operationalise, such as the patient-doctor rapport.

"It's very difficult to quantify that relationship [with patients]. ... If we grind it down to whether or not ... depression questionnaire is filled, whether or not your exercise prescription has been given, which unfortunately seems to be the direction that Healthier SG is heading in, ... it remains very challenging. And a concern is that ... finally we're moving in the right direction, and if they don't see the results in the key performance indicators ... then they'll say, 'Oh well, it doesn't work, so let's not do it anymore.'"

Discussion

GPs viewed late-life depression care as multidimensional, requiring not only general knowledge about mental health but also patient-specific knowledge to reach the right tone when discussing depression and align available resources with patient needs. GPs' main suggestions for improving late-life depression care at the primary care level in Singapore included obtaining more practical tips and guidelines, streamlining screening and referral procedures, establishing more communication between relevant partners in the healthcare system, and increasing patient subsidies and GP remunerations for depression care.

These results echo more general points voiced by private GPs in Singapore about insufficient chronic care coordination and subsidisation in a high-resource but sometimes disjointed system of care.[17] They also align

with the perspectives of GPs in Canada and the United States, who find collaborative care effective at improving late-life depression care.[23,24] These issues have been central to the Healthier SG initiative,[18,19] yet some of the challenges reported in the present study are not reflected in the current design of Healthier SG. Primary care consultations in Singapore last 9 min on average, which is half as much as in the United States,[25] where most collaborative care interventions for late-life depression were studied.[5] More comprehensive provision of care for late-life depression inevitably increases consultation time and consequently decreases the number of patients seen per day.[26] In the Singaporean context, this may make it difficult for private GPs to make late-life depression care financially sustainable without substantial targeted remunerations.

As highlighted by participants in the present study and by prior research,[27] key performance indicators used to allocate targeted remunerations to clinical care are most often quantity-based (e.g., number of patients treated), making the evaluation of late-life depression care challenging. Patient-reported outcome measures may constitute more nuanced markers of the care provided, although they come with their own set of biases, as more severely depressed patients or patients with more complex needs may perceive the provided care as less effective despite a higher objective use of resources.[28]

Most importantly, however, there likely needs to be a fundamental first level of consensus between healthcare professionals and policy makers in order to implement effective systemic change in care practices, which includes agreeing on the boundaries of what constitutes late-life depression, how to manage it, and that it is indeed an important public health issue to manage.[29] Our findings underscore that such a consensus is for now missing among GPs in Singapore, and possibly more broadly in the healthcare system. Delphi consensus methods have been used to involve multiple stakeholders in the development of quality measures for mental healthcare[30] and may offer a valuable approach to tackle the above questions in Singapore.

Asian values likely influence local GPs' conceptualisation of late-life depression care, similarly to how they influence patient representations.[11] Considerations reported by study participants, such as respect for older adults' lived experience, reluctance of making patients lose face, and avoidance or attenuation of notions related to mental suffering, reflect values observed elsewhere in Asia and in Asian diasporas.[31–33] These cultural values and –in some cases– language-related nuances in the meaning of affective terms can make it challenging for local GPs to apply some of the standard recommendations for late-life depression care,[34,35] such as the assessment of suicide risk or the use of formal rating scales. They may also contribute to the lack of confidence in managing late-life depression voiced by some Singaporean GPs, which contrasts with the high level of confidence found among GPs in the United States and United Kingdom even in absence of formal mental health training.[36,37] These findings advocate for adapted local mental health training, which considers the cultural characteristics of GPs and patients. Practical educational methods such as role-playing and tailored documentation have been found useful by GPs in rural China to improve their skillset in late-life depression care and could constitute valuable tools in Singapore as well.[38]

The present study is the first to describe private GPs' resources, practice, and needs related to late-life depression care in Singapore. The study's sample encompasses perspectives of GPs with a varied set of characteristics regarding their age, gender, ethnicity, and their clinic's setting, which increases the likelihood of the results having broad applicability.

Regarding its limitations, the study focused on the private sector and does not allow for an understanding of the perspectives of primary care providers working in public clinics. Further, self-selection bias among private GPs could not be excluded, as those with negative attitudes towards or a lack of ease with treating late-life depression may have not volunteered to participate. As a result, we may have obtained overly positive perspectives on late-life depression care, and available support from the healthcare system. While we advertised our study broadly across Singapore and across GP networks, we do not know if all GPs had equal opportunity to be aware of the study and consider participating. Other forms of biases such as recall bias and social conformity bias may have also occurred, although the inclusion of individual discussions likely decreased the latter.

This work may serve as baseline to assess the progress brought about by the significant changes to primary care and the wider system which are underway in Singapore. Its findings suggest that Singapore needs to increase accessibility to community mental health care but also simplify and streamline existing services into more straightforward care pathways to better connect them to patients and GPs. Future research should assess progress in these areas through data from a broad range of stakeholders including patients, families, caregivers, community partners, primary and specialised care providers, and policy makers. Approaches to measure the impact of community resources on late-life depression care employed in other countries[39,40] can serve as basis for the development of a set of quantitative indicators to assess longitudinally in Singapore.

Contributors

Anna Szücs: conceptualisation, data curation, formal analysis, investigation, methodology, project administration, visualisation, writing–original draft; **V Vien Lee**: data curation, formal analysis, methodology, writing–review & editing; **Laurie J. Goldsmith**: methodology, formal analysis, writing–review & editing; **Alicia H. Ong**: investigation, formal analysis, writing–review & editing; **Tim J. Hart**: formal analysis, writing

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All authors had full access to all the data in the study and accept responsibility to submit for publication.

Data sharing statement

The data that support the findings of this study are available on request from the corresponding author, AS. The data are not publicly available as they contain information that could compromise the anonymity of research participants.

Declaration of interests

The authors have no conflicting interests to declare.

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Appendix A. Supplementary data

Supplementary data related to this article can be found at https://doi.org/10.1016/j.lanwpc.2024.101280.

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