

Contents lists available at ScienceDirect

Exploratory Research in Clinical and Social Pharmacy



journal homepage: www.elsevier.com/locate/rcsop

Potential roles for pharmacists within youth mental health services: A qualitative exploration of staff views

Sanam Fathabadi^a, Claire L. O'Reilly^a, Jack C. Collins^a, Blake Hamilton^{b,c}, Donna Fowler^{b,c}, Connie M.S. Janiszewski^{b,c}, Sara S. McMillan^d, Sarira El-Den^{a,*}

^a The University of Sydney, School of Pharmacy, Faculty of Medicine and Health, Camperdown, New South Wales, Australia

^b Brain and Mind Centre, The University of Sydney, Camperdown, New South Wales, Australia

^c Camperdown, Brain and Mind Centre, The University of Sydney, Camperdown, New South Wales, Australia

^d School of Pharmacy and Medical Sciences, Griffith University, Gold Coast Campus, Southport, Queensland, Australia

ARTICLE INFO

Keywords: Youth mental health services Pharmacist Interviews

ABSTRACT

Background: The prevalence and burden of mental illness among young people is rising, globally. Youth mental health services, such as *headspace*, offer young people access to multidisciplinary mental healthcare, specifically designed to address their needs. Pharmacists are medicines experts and possess a skillset increasingly being utilised in expanded areas of practice. There is potential for pharmacists to perform roles within youth mental health services, however sparse literature exploring pharmacist-delivered mental healthcare for young people exists.

Objective: To explore views of *headspace* staff on medication use among young people who use youth mental health services and pharmacists' potential roles within the *headspace* youth mental health service model.

Methods: Individual semi-structured interviews were conducted with staff from one inner city *headspace* centre in Sydney, Australia. An interview guide was developed to capture participants' views on medication use among young people using youth mental health services and potential roles for pharmacists within this context. Reflexive thematic analysis was conducted to analyse the findings of this exploratory pilot study.

Results: Twelve staff members were interviewed, allowing for a range of multidisciplinary perspectives. Four themes were identified from the data: (i) gaps in medication-related care, (ii) potential roles for pharmacists at *headspace* (iii) collaboration between pharmacists and general practitioners, and (iv) a "one-stop shop".

Conclusions: There are opportunities for pharmacists to improve young peoples' experiences using psychotropic medications through the provision of medication information to clients and caregivers. Pharmacists have a potential role to play in contributing to multidisciplinary case reviews but clarifying their specific roles when working alongside general practitioners is necessary. Uncertainty regarding the feasibility of pharmacist-led services within the *headspace* youth mental health service model and a lack of awareness regarding pharmacists' full scope of practice are barriers to pharmacists' potential roles within the *headspace* model.

1. Introduction

It is estimated that globally, one in seven young people aged 10 to 19 years old experiences a mental illness, with conditions such as depression and anxiety contributing to the leading causes of disability and illness in this age group.¹ Young people experiencing mental illness are more likely to face adversities such as social exclusion, discrimination and stigma, partake in risk-taking behaviours, and are more vulnerable to poor physical health and human rights violations.¹ Early intervention

is important in improving young peoples' quality of life and reducing the potential chronicity of mental illnesses. 2

Globally, youth mental healthcare is currently provided in a variety of settings including primary care services, community mental health services and specialised hospital inpatient environments.³ In response to the rising prevalence and burden of mental illness among young people, policies surrounding implementing and reforming youth mental health services have emerged in many developed countries.⁴ Youth mental health services such as *headspace*, established by the Australian

* Corresponding author at: The University of Sydney, School of Pharmacy, Building A15, 2006, NSW, Australia. *E-mail address:* sarira.el-den@sydney.edu.au (S. El-Den).

https://doi.org/10.1016/j.rcsop.2024.100480

Received 30 December 2023; Received in revised form 6 July 2024; Accepted 16 July 2024 Available online 17 July 2024

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government in 2006, are among service structures specifically designed to address the mental health needs of young people considering the evidence around the benefits of early detection and management.

The current management of mental health conditions in young people includes psychological treatments, and for some, the use of psychotropic medication/s.⁶ In 2021–22, 10% of Australians between the ages of 12 to 17 years and 15% of those between 18 and 24 years were dispensed one or more mental-health related medication at community and/or hospital pharmacies.⁷ Pharmacists are experts in medicines, allowing them to promote the safe and effective use of medications, solve medication-related issues, offer comprehensive medication information, and more.⁸ In Australia and internationally, there have been calls for expanded roles for pharmacists in mental health care, and the need for their integration within mental healthcare teams has been recognised.⁹

Nonetheless, current literature exploring pharmacists' roles in youth mental healthcare specifically is limited. One Australian study explored pharmacist-delivered mental health care to young people in a community pharmacy setting, outlining a need to move away from a reactive or transactional approach to create greater opportunities to support young peoples' medication needs.¹⁰ Though also limited, emerging data on youth mental health centres as a setting for pharmacist-delivered care appears promising. For example, Shah et al.¹¹ explored the impact of integrating pharmacists into a multidisciplinary team at child and adolescent mental health services in the United Kingdom (UK), revealing clear roles in areas such as prescribing, the provision of medication education to colleagues and monitoring patients' biometrics. Importantly, pharmacists' contributions were found to be associated with a reduction in costs for the service. Further exploration of potential roles for pharmacists in the youth mental health care setting is warranted. As such, an exploratory pilot study was designed to achieve this purpose with the intention of expanding the evidence base in this area and guiding future research. Thus, this study aims to explore staff views of medication use among young people who use youth mental health services and pharmacists' potential roles within the headspace youth mental health service model.

2. Methods

This study is reported in accordance with the Standards for Reporting Qualitative Research (SRQR) checklist.¹

2.1. Ethics approval

Ethics approval was granted from The University of Sydney Human Research Ethics Committee prior to commencing the study (HREC Approval No. 2023/454).

2.2. Design

An exploratory qualitative study consisting of semi-structured interviews with headspace staff was used to explore their views on medication use among young people who use youth mental health services and pharmacists' potential roles within the headspace youth mental health service model. Due to the nature of the headspace workforce model, a participant was considered a staff member eligible to participate if they worked at and/or provided services within headspace.

2.3. Study setting, recruitment and participants

Staff were recruited from one headspace centre in inner Sydney. headspace has over 150 centres across Australia and provides support to young people between the ages of 12 to 25 years.¹³ headspace centres provide a range of services targeting mental health and wellbeing, physical and sexual health, alcohol and other drugs, and work and study support.¹³ They provide early intervention mental health services and utilise a multidisciplinary approach in providing care, offering young people access to teams

of various health care professionals at their centres and remotely.¹³ The current study is an exploratory pilot study, whereby a convenience sample from one headspace centre was recruited. It is anticipated that the findings of this study will inform further research in this area.

Flyers advertising the study were displayed in 'staff-only' areas on the premises of the headspace centre, such as the staff break room, to recruit participants. These flyers directed interested staff members to fill out an 'expression of interest' survey, built and managed using the REDCap electronic data capture tool hosted at The University of Sydney.14,15 Staff members working at the selected headspace centre were also invited to voluntarily participate via email, with the practice manager providing their email addresses. Staff members that registered their interest were contacted to confirm their eligibility to participate, provide further information, and arrange a time to conduct the interview. Written and verbal consent to participate in and audio-record the interviews were obtained from participants. Participants received a gift card (\$50 AUD) after their interview.

2.4. Data collection and management

A semi-structured interview guide consisting of three main topics of discussion (Table 1) was developed by four pharmacists (SE, COR, JC and SSM), who work as academics with expertise in mental health research, and an undergraduate pharmacy research student (SF), who was conducting research on pharmacists' roles in youth health at the time. headspace staff including a clinical services manager who is a clinical psychologist (BH), a practice manager (DF), and a research assistant in youth mental health (CJ) were also involved in this process. The interview guide development was guided by published literature in this area.^{16–18} One pilot interview was conducted by SF with SSM roleplaying as the interviewee in preparation for actual interviews with participants, with no amendments to the interview guide being made.

Interviews were conducted online using Zoom¹⁹ (Zoom Video Communications, San Jose, USA) or in-person in a private consultation room at the headspace centre. All interviews were conducted by SF between September 2023-November 2023. Audio-recordings from the interviews were transcribed verbatim. This was done using Zoom 'Live Transcription' initially, then Zoom-generated transcripts were reviewed by SF while listening to the audio-recording, for quality assurance and modifications were made where needed, to ensure verbatim transcription. All data was de-identified and each participant was assigned a number for data management and privacy purposes.

2.5. Data analysis

One researcher (SF) independently led reflexive thematic analysis,²⁰ whereby the researchers' individual biases are integral to the thematic analysis process. To acknowledge the reflexive nature of this analysis, it

Table 1

Key components of	the interview	guide.

Main topic	Key questions/prompts
Personal and professional demographics Medication use at <i>headspace</i>	 Role at <i>headspace</i> Time working at <i>headspace</i> Role in treatment and management Staff roles in medication use, choice, and prescribing
Pharmacists' potential roles at headspace	 Concerns and support Sources of medication information Medication supply Roles pharmacists could potentially play at <i>headspace</i>
-	 Acceptability of pharmacists' potential roles at <i>headspace</i> Barriers to and facilitators of potential roles Details of potential roles at <i>headspace</i> Impact and value of potential roles at <i>headspace</i>

should be noted that the researcher leading the analysis (SF) closely interacted with the data, bringing forth their background as a pharmacy student, as well as experiences working in community and hospital pharmacies and currently being a young person (aged 22 years old at the time of analysis) accessing healthcare. The six phases outlined in Braun and Clarke's framework for reflexive thematic analysis were utilised in this study and an inductive approach was adopted²¹: (i) Familiarisation with the data was gained by reading and re-reading the transcripts; (ii) Data coding was driven by the data and took place manually, wherein one researcher (SF) colour-coded the data to represent different codes at the end of each interview; (iii) Mind-maps were then utilised to create visual representations of initial themes from the coded data; (iv) These initial themes were then presented to. and reviewed and refined in consultation with SE, COR, and JC. During regular meetings SF, SE, COR, and JC assessed whether the extracts forming each potential theme coherently did so, and judged whether the themes generated accurately reflected the data set as a whole; (v) Themes were then defined and named by analysing the data within them and determining the essence of what they captured; (vi) A final analysis of the data and writing-up of the report then took place. A second researcher (SE) independently familiarised themselves with 50% of the data set. At each stage, discussions with SE, COR, JC and feedback they left electronically on the analysis report informed new iterations of the data analysis.

3. Results

All 23 staff members who were identified as eligible for recruitment by the headspace practice manager (who is a member of the research team) were emailed information about the study, of which 12 expressed their interest in participating in this study and consented to be interviewed (mean interview time; 19.65 min, range: 10.42 to 25.17 min). At the time of their interviews, participants had worked at headspace for periods ranging from two months to six years, with a median duration of approximately five-and-a-half months. Eleven participants worked solely at the *headspace* centre contacted in this study, one participant provided care at an additional two headspace centres, and no participants reported working at other youth mental health services at the time of the study. Participant ages ranged from 23 to 38 years old, with a mean age of 31.2 years, and 10 participants identified as female. A range of roles at headspace were held by the participants, with the most reported job titles being psychologist (n = 4), administrative assistant (n =3), and general practitioner (GP) (n = 2). Other reported job titles related to various roles pertaining to youth work such as "youth access clinician". All except one participant (n = 11) elected to be interviewed over Zoom.

Four themes were generated from the data, reflecting staff views on medication use among clients and potential roles for pharmacists within the *headspace* youth mental health service model: (i) gaps in medication-related care, (ii) potential roles for pharmacists at *headspace*, (iii) collaboration between pharmacists and general practitioners, and (iv) a "one-stop shop".

3.1.1. Gaps in medication-related care

Participants with a non-administrative role at *headspace* described experiences of working with young people who had faced difficulties in navigating the side effects associated with psychotropic medication/s. Some reported a lack of medication education being offered to *headspace* clients, contributing to challenges in managing side effects and adhering to medication.

"... I came across so many [clients] that went off their medication in the first two weeks because the side effects were too much for them to handle and they were not educated enough to know that most antidepressants or anti-anxiety [medications] take more than two or three weeks to actually see the results." (P2).

A lack of education for the caregivers of *headspace* clients regarding psychotropic medications was also highlighted by some participants, with calls for "*extra support*" (P9) from pharmacists in this area. Caregivers' limited knowledge of psychotropic medications was described by some to create challenges, such as medication hesitancy from family members.

"Sometimes [parents/caregivers] probably don't have much information about antidepressants, or you know, they may be a bit resistant in getting medication for the young person, which sometimes, will be kind of difficult for us to like make sure that the care that we're providing is the best possible care for the young person." (P11).

Gaps in the care received by *headspace* clients at community pharmacies, where they obtain their medications, were also discussed. These included missed opportunities for pharmacists to support young people with their mental health and pharmacological treatment/s, through services such as medication counselling, due to barriers including the busy environment of community pharmacies and a lack of understanding of pharmacists' roles.

"...I think like these days with the high-volume sort of community pharmacy kind of churn, I would say that most people ... don't really understand that they can ask questions of the pharmacist of how to take [medication] and that kind of thing." (P9).

Some participants also described difficulties young people experiencing mental illness may have in obtaining their medications from community pharmacies.

"... Because we know that sometimes it's hard for young people to you know do basic things like fill a script..." (P5).

3.1.2. Roles for pharmacists at headspace

Despite some participants (from both clinical and non-clinical backgrounds) expressing a lack of awareness around what a pharmacist's role entailed, all suggested that pharmacists had expertise in medications that could potentially be utilised at *headspace*.

"I assume that [pharmacists] have a huge knowledge about different medications and also side effects and probably can help young people weigh that up and make some of those really difficult decisions. So that's I guess what I assume the role could be really helpful for, but again I feel like I don't know enough to really answer that question." (P1).

Participants commonly reported that pharmacists could use their medication knowledge to answer related queries for young people. For example, education on how to take a medicine, interactions with other drugs, nicotine and alcohol, as well as how a medicine works was perceived to be information that young people using psychotropic medications may find useful to receive from a pharmacist, rather than booking an appointment with a GP to discuss.

"... helping people with the little questions that they might have you know like 'oh how do I take it? I've forgotten' ... 'Can I take it again like three hours later?' ... These kinds of little questions that you don't have to sort of wait another week or two before they can even get that answered [by the GP]." (P9).

It was suggested that pharmacists could help address caregivers' concerns around the use of psychotropic medications, such as "*a ten*dency to over-prescribe" (P12), by playing a role in educating them.

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"I think it'd be really helpful if [pharmacists] could talk to the parents that, you know, the medication is actually not that scary. And sort of maybe can give some like data and statistics in terms of how effectively this medication could work, or how beneficial it could be for their children. And I feel like that will provide more clarity in terms of the medication, and why, we sort of like want them to be on medication in that case" (P11).

It was also widely recommended that pharmacists contribute to multidisciplinary case reviews if integrated into the *headspace* team as adding *"another background in that mix would be really beneficial"* (P6), and could provide important insights:

"I think the most useful time for them to come in would be during case reviews, so like when clinicians all sit down once a day and talk about the young people and plan together, I think input there would be most important." (P4).

Dispensing and providing medications to young people onsite at *headspace* was another potential role for pharmacists identified by participants: "*it feels natural to me that that* [dispensing medication] *would be their primary role almost*" (P1). However, issues surrounding the feasibility of this service given perceived barriers, such as challenges establishing a dispensary and costs, led to some participants discounting onsite dispensing.

"I think [pharmacists dispensing medications onsite is] like probably too much to ask because I don't think, funding wise, that would be viable. That would be quite a big kind of project." (P9).

3.1.3. Collaboration between pharmacists and general practitioners (GPs) Interviews revealed that this *headspace* centre had multiple GPs working on a part-time basis, as well as psychiatry registrars in the past, but not currently. However, the composition of teams present at different *headspace* centres is not homogenous, and participants identified that not all *headspace* centres have GPs onsite. In terms of pharmacists, one participant stated:

"... there isn't [a pharmacist] at any of the headspaces" (P9).

Participants described GPs to be the healthcare professionals responsible for medication management at their centre and identified them as the team member young people are referred to for medicationrelated matters.

"... I would always refer [young people] to the GP if it's medication related." (P5).

Given the established role of GPs in medication management within the *headspace* youth mental health model, participants described pharmacists and the care they could provide as being complementary to that of the GP.

"I think they could play a really big role in the management of medication outside of the GP - that would be the main sort of role that I could see is being able to manage medication and manage that really effectively so then the GP can focus on other things..." (P10).

However, some participants believed that young people may lack awareness of what services could be offered by a pharmacist as opposed to a GP.

"I think that often [young people] just assume that the GP can help with everything. I think if there is clear information about why you should see the pharmacist and not the GP, they would see the benefit." (P4).

Concerns regarding young people not being able to differentiate the respective roles of these two healthcare professionals were also expressed, highlighting that it could lead to confusion and an unnecessary overlap in care.

"I guess the only problem I can see for a young person is whether that process could be confusing for them in terms of who is managing what and that would just need to be really clear in terms of processes - when they can access the pharmacist, how they access the pharmacist, when do they access the GP versus when do they access a pharmacist - that sort of thing that would just need to be really clear." (P10).

Similar concerns around delineating between the roles of GPs and pharmacists, if integrated into the service, were noted as being a potential challenge for staff members.

"I feel like there would be a lot of people like me that think what would I go to [pharmacists] with? What kind of concerns would I go to a pharmacist for rather than to a GP?" (P1).

Additionally, despite acknowledging ways in which pharmacists could potentially contribute, some participants, including a GP, expressed that GPs were sufficiently managing medications at this *headspace* centre.

"My personal experience at headspace has been that the GPs are generally underworked and under-utilised. So, I think while we can't do a complete pharmacist role, I think there's still plenty of opportunity to use [GPs] to have those talks with young people." (P8).

However, these participants also noted that pharmacists could be better utilised at centres with fewer or no GPs, where demand for their services would be greater.

"...I feel as though there's definitely scope if we didn't have the GP support that we had, so I think other headspace centres might not have a GP, and I think that would be invaluable to have a pharmacist on site to kind of do that education on some medications." (P12).

Perceived overlaps between the roles of GPs and pharmacists at this *headspace* centre also factored into some participants' views on whether there would be justification for integrating a pharmacist into the service, considering the costs associated with adding more healthcare professionals to the team.

"I feel like there'll be an overlap between what a pharmacist can do as well as the GP can do, and I just don't think we have enough funding to fund both at the same time." (P6).

3.1.4. A "one-stop shop"

Participants highlighted that while *headspace* is a one-stop shop for multidisciplinary services, where young people can access care from a variety of health care professionals, they do not have access to pharmacists' services at *headspace* and this could be important in improving ease of access to comprehensive multi-disciplinary care.

"... I do like the idea of headspace being a comprehensive, one-stop shop for social work, general practice, psychology, psychiatry, and pharmacy is another branch to be involved if you're formulating a one-stop shop." (P8).

Having a pharmacist onsite was perceived to bypass difficulties associated with accessing medications at community pharmacies, improve young peoples' access to care and make for a more holistic experience at *headspace*.

"I think it would just accommodate a more accessible, holistic service as a whole because sometimes what I've seen in practice is the difficulty of the patients having to go through the community, their own communities, to access these medications, and find the pharmacists that they feel comfortable with. So having that on site as a whole will just give it that streamline service for the patient overall. Consequences of that would be less stress for the client and the patient and a more peaceful way of delivering service as a whole, I think." (P7).

Participants expressed that access to pharmacist-delivered services would be made easier by having pharmacists at *headspace*. Participants felt that filling prescriptions onsite and *"having someone to talk to about it"* (P1) would be valued by young people and/or their caregivers, as this would remove the need to visit a community pharmacy in addition to all the appointments they attend.

"... I guess just the ease of everything, and I feel like with young people there's always so many appointments and they have to go from one to another, and the parents have to accompany them." (P1).

Conversely, when considering pharmacists performing services outside of providing medication onsite, participants identified that it could lead to more appointments and interactions with healthcare professionals for young people, which may be burdensome.

"I think sometimes [young people] feel a little bit over-serviced and a little bit burnt out from having a lot of appointments frequently ... but to the people who really need it, the big value of [pharmacist services] may outweigh the quantity [of appointments]." (P8).

As such, there was a trend towards participants recommending that pharmacists work onsite at *headspace* on a part-time or ad hoc basis and anticipation for relatively low demand for their services at this centre.

"I don't think there would be enough [demand] necessarily for a full-time role. I think it would be like part time, or consultation, like yeah, as kind of like a contractor." (P12).

4. Discussion

To our knowledge, this exploratory study is the first to explore staff views of medication use among young people who use youth mental health services and potential roles for pharmacists within the headspace youth mental health service model. Understanding the medicationrelated care offered to clients of youth mental health services and how pharmacists could contribute may lead to avenues for enhancing the mental health care available for young people. This study revealed a need for increased psychotropic medication information for headspace clients and their caregivers and suggests that pharmacists could play a key role in its provision. The findings also suggest that pharmacists could utilise their expertise in medications to contribute to multidisciplinary collaboration within youth mental health teams and work alongside GPs in medication management. However, uncertainties around potential roles for pharmacists within the headspace youth mental health service model were also uncovered, given that some participants reported a lack of understanding of what pharmacists' roles entailed and had concerns that pharmacists' roles may overlap with roles already performed by GPs. The feasibility of pharmacist-led services such as dispensing medications onsite and obtaining funding for the integration of pharmacists were thought to limit their potential roles within the *headspace* youth mental health service model.

Many studies concur that psychotropic medication use can be optimised through access to quality information as adherence is often greater when individuals are empowered with the knowledge necessary to navigate side effects.^{22–24} The need for increased medication information at youth mental health services may not be surprising considering that a study exploring the views of young people using community pharmacies reported that participants were frustrated by the lack of high quality medicines information being provided.²⁵ The literature also supports findings that community pharmacists often have little rapport with young people, limiting opportunities for them to support young people in their journey of using psychotropic medication/s.¹⁰ Hence, it is evident that access to quality information about psychotropic medications should be made more available to young people and based on this study and others,^{10,22,25} pharmacists can play an important role in facilitating this.

Despite identifying that pharmacists could have roles in medication education, responding to medication-related queries, and onsite medication supply, it was concerning that some participants reported not knowing what pharmacists do. There is literature examining the perceptions and awareness of pharmacists' roles among GPs, such as a systematic review highlighting that GP's awareness of community pharmacy services in the UK was low.²⁶ However, there is little documented regarding awareness of pharmacists' roles among health care providers besides GPs, potentially reflecting limited interactions and communication with pharmacists.

Participants suggested potential roles for pharmacists in medication management alongside GPs at their centre, despite some uncertainties regarding this collaboration. The literature highlights the utility of pharmacists in providing medication education to colleagues^{11,27} and improving prescribing practices when integrated into mental health teams.¹¹ A study highlighting pharmacists' roles alongside GPs in general practices reported pharmacists performing services such as conducting clinical audits, updating medical records and providing information to patients and staff.²⁸ Interestingly, the current study reports perceived overlaps between GPs' roles and potential roles for pharmacists within the headspace youth mental health service model and suggests that clear outlining of, and delineating between, their respective roles is necessary if pharmacists are to be integrated in the service. Participants also highlighted that an overlap of roles could limit the justification for employing a pharmacist at centres where GPs are available, given challenges in obtaining funding for services. Whilst Shah et al.¹¹ reported that medication interventions performed by pharmacists at youth mental health services in the UK led to reduced service costs, it is important to investigate what financial impact the integration of pharmacists into other youth mental health services such as *headspace* would have, given the diversity of service funding models. Further investigation into what roles pharmacists can play in youth mental health services where GPs are available, as well as in those where they are not, is also warranted to better understand opportunities for pharmacist-delivered care in these contexts.

The provision of pharmacy services, especially dispensing of medications onsite, at *headspace* as opposed to in a community pharmacy setting was viewed to make accessing care easier for clients. Literature pertaining to barriers young people face when trying to access health care demonstrate practical challenges such as scheduling appointments, transportation to services and costs incurred to be among the primary issues.^{29,30} Whilst the *headspace* youth mental health service model mitigates some of these barriers, it should be noted that community pharmacies are highly accessible points of health care.9 Though challenges for young people in receiving mental healthcare from community pharmacies have been identified, concerns regarding the feasibility of dispensing medications onsite at headspace and the potential for overservicing young people makes it worthwhile to evaluate ways in which community-based pharmacists could collaborate with youth mental health services. The expanding roles of community-based pharmacists into new settings such as aged-care facilities³¹ and patients' homes, through multidisciplinary initiatives such as Home Medicines Reviews,³² may pave the way for further research into potential opportunities at youth mental health services.

4.1. Strengths and limitations

Strategies were employed to strengthen the rigour of data analysis; a second reviewer independently familarised themselves with half of the

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dataset and an iterative process consisting of multiple meetings over two months wherein four authors discussed, interpreted and synthesised the findings was used. Despite its strengths, potential limitations of the current study must be considered. This exploratory study only explores the views of staff from one centre which employs the headspace youth mental health care service model. Thus, the findings may not be representative of the perspectives of staff working at other *headspace* centres, as well as those of staff from youth mental health services besides headspace. Nonetheless, as an exploratory pilot study, the findings of the current study provide important insights where literature is currently lacking. This study provides the first evidence for a greater understanding of why pharmacists have been omitted from a multidisciplinary healthcare initiative and their potential roles in supporting young peoples' mental health and medication-related needs. As such, findings from this initial study may be used to design and conduct more substantive, representative research in this area moving forward, to inform the development of roles for pharmacists in youth mental healthcare. Future research investigating roles for pharmacists from the perspectives of a wider range of youth mental health service staff and other stakeholder groups such as pharmacists, young people and/or their carers is needed.

5. Conclusions

This qualitative study offers insights into the views of staff regarding medication use among young people using mental health services and potential roles for pharmacists within the headspace youth mental health service model, available to young people at centres across Australia. Study findings highlight opportunities for pharmacists to support young people using psychotropic medications through the provision of medication information and utilising their expertise in medications to answer medication-related queries. Pharmacists were also perceived to have a role in offering education on psychotropic medications to caregivers and contributing to multidisciplinary case reviews. Some participants expressed a lack of clarity as to what pharmacists' roles entail and how they differ from those of GPs. Nonetheless, collaboration with GPs was viewed to be integral to many potential roles for pharmacists, with a need to clearly define and delineate what roles are to be performed by each health care professional, if pharmacists are to be integrated into the service. The feasibility of potential services, such as dispensing medications onsite, and uncertainty regarding pharmacists' scope of practice limited potential roles suggested for them within the headspace youth mental health service model. These findings warrant further investigation into how pharmacists can contribute to supporting the mental health of young people, as well as other stakeholders' views of potential roles for pharmacists with youth mental health services.

Disclosure statement

Three co-authors work at *headspace* but in line with our Ethics approval were not directly involved in the recruitment, data collection or analysis process of this study.

Funding

This study was funded by The University of Sydney Faculty of Health and Medicine FMH Bright Ideas Grant. SF was an undergraduate research candidate at the time of this study and was supported by the 2023 Andrew Tu Scholarship in Pharmacy.

CRediT authorship contribution statement

Sanam Fathabadi: Writing – review & editing, Writing – original draft, Investigation. Claire L. O'Reilly: Writing – review & editing, Methodology. Jack C. Collins: Writing – review & editing. Blake Hamilton: Writing – review & editing, Project administration. Donna Fowler: Writing – review & editing, Project administration. Connie M. S. Janiszewski: Writing – review & editing, Project administration. Sara S. McMillan: Writing – review & editing, Methodology. Sarira El-Den: Writing – review & editing, Writing – original draft, Project administration, Methodology.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We thank all participants for sharing their views with us during interviews.

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