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Nurses' experience of managing adults living with multimorbidity: A qualitative study

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Abstract

Background: The number of adults living with two or more chronic conditions is increasing worldwide. Adults living with multimorbidity have complex physical, psychosocial and self-management care needs.

Aim: This study aimed to describe Australian nurses' experience of care provision for adults living with multimorbidity, their perceived education needs and future opportunities for nurses in the management of multimorbidity.

Design: Qualitative exploratory.

Methods: Nurses providing care to adults living with multimorbidity in any setting were invited to take part in a semi-structured interview in August 2020. Twenty-four registered nurses took part in a semi-structured telephone interview.

Results: Three main themes were developed: (1) The care of adults living with multimorbidity requires skilled collaborative and holistic care; (2) nurses' practice in multimorbidity care is evolving; and (3) nurses value education and training in multimorbidity care.

Conclusion: Nurses recognize the challenge and the need for change in the system to support them to respond to the increasing demands they face.

Impact: The complexity and prevalence of multimorbidity creates challenges for a healthcare system configured to treat individual disease. Nurses are key in providing care for this population, but little is known about nurses' experiences and perceptions of their role. Nurses believe a person-centred approach is important to address the complex needs of adults living with multimorbidity. Nurses described their role as evolving in response to the growing demand for quality care and believed inter-professional approaches achieve the best outcomes for adults living with multimorbidity. The research has relevance for all healthcare providers seeking to provide effective care for adults living with multimorbidity. Understanding how best to equip and support the workforce to meet the issues and demands of managing the care of adults living with multimorbidity has the potential to improve patient outcomes.

Patient or Public Contribution: There was no patient or public contribution. The study only concerned the providers of the service.

KEYWORDS

experiences, multimorbidity, multiple chronic conditions, nursing, qualitative

1 | INTRODUCTION

Adults living with multimorbidity have complex physical, psychosocial and self-management care needs requiring skilled health and nursing care. Multimorbidity is defined as the co-occurrence of two or more chronic physical or mental health conditions (NIHR, 2021). The prevalence of multimorbidity increases with age and is now commonplace in community and clinical healthcare settings (AIHW, 2020). Between 20% and 40% of adults are thought to be living with multimorbidity worldwide (Stokes et al., 2021). Adults with multimorbidity challenge healthcare systems because multiple services are required and care transitions between services are typically complex and not well integrated.

Despite the central position of nurses in supporting integrated care and self-management for adults with multimorbidity, few studies have been conducted to describe their roles. A recent systematic review of nurses' perceptions and beliefs related to the care of adults living with multimorbidity (Whitehead et al., 2021) reported data from eleven qualitative studies undertaken in Australia (Byrne et al., 2020; Mc Namara et al., 2017; Peart et al., 2020), the United Kingdom (O'Brien et al., 2011; O'Connor et al., 2018), Sweden (Grundberg et al., 2016; Karlsson & Karlsson, 2019), Canada (Heale et al., 2018; MacDonald et al., 2018), Italy (Saiani et al., 2008) and New Zealand (Stokes et al., 2017). Four synthesized findings were generated that highlighted: the challenge of providing nursing care for this population, a strong belief among nurses in the need to deliver holistic and person-centred nursing care, the importance of developing a therapeutic nurse-patient relationship and the importance of delivering nursing care as part of an interprofessional care team. The complexity of managing multiple conditions and the predominant single-disease model of chronic care were described as challenges for nurses across the studies. The lack of evidence about nursing roles in multimorbidity care is a significant gap for health planners and policy makers aiming to optimize efficient and high-quality care into the future. In this qualitative study, we aimed to describe Australian nurses' experience of care provision for adults living with multimorbidity, their perceived education needs and future opportunities for nurses in the management of multimorbidity.

2 | BACKGROUND

Adults living with multimorbidity are high users of healthcare services. They experience high hospital admission rates and long

periods of hospitalization and they are frequent users of general practitioner services (Cassell et al., 2018). Adults living with multimorbidity commonly experience fragmented and uncoordinated care between the multiple health services that they use (Gordon et al., 2020) and conflicting advice about treatments for their health conditions (Ørtenblad et al., 2018). Balancing self-management requirements of multimorbidity against the demands of everyday life is challenging for adults with multimorbidity (Ørtenblad et al., 2018). Adults living with multimorbidity experience an overall lower quality of life than adults living with no chronic illnesses (Pati et al., 2019), and they are at increased risk of mortality compared with adults with no chronic illness (Schäfer et al., 2018).

Numerous studies have been conducted about the effectiveness of interventions that address the complex care needs of adults living with multimorbidity in discharge care and integrated care across health services indicating some reductions on length of hospital stay (Goncalves-Bradley et al., 2022; Liljas et al., 2019). Other research has been conducted about the effectiveness of interventions for people living with multimorbidity in primary care and community care settings indicating benefit where interventions target risk factors such as prevention of mental health difficulties (Smith et al., 2021). O'Connor et al. (2018) collected data from an online discussion that explored 24 nurses' views about effective prevention and care of multimorbidity in the future. They identified five themes of (1) improved supports for nurses to cope with treatment burden, (2) the need for the delivery of holistic care, (3) the need for an evidence base to support multimorbidity practice, (4) improved teaching and learning for nurses and (5) the need to redesign health services. Despite these important studies, there is limited understanding of current nursing roles in multimorbidity care. Nursing roles in acute, sub-acute and community care settings are critical to well-coordinated multidisciplinary care to optimize service integration and efficiency, self-management and health literacy. However, additional research is required to inform evidence to support nurses' future roles in this growing area of care.

3 | THE STUDY

3.1 | Aim

This study aimed to describe Australian nurses' experience of care provision for adults living with multimorbidity, their perceived education needs and future opportunities for nurses in the management of multimorbidity.

3.2 | Methodology

The study was a qualitative exploratory design using semi-structured interviews. The research aims of this study were addressed in a paradigmatic framework of interpretivism and constructivism. Key principles were to reflect the nurses' own accounts of their experiences as faithfully as possible whilst also accounting for the reflexive nature of the research team's own interpretations of the data. The theoretical assumptions underpinning the approach to the study were considered and are set out below; these are important considerations that precede any form of thematic analysis (Braun & Clarke, 2019).

In the conceptualization of the study, ontological and epistemological considerations were discussed. The study was framed as constructionist in that meaning and experience were interpreted as socially produced and reproduced through an interplay of subjective and intersubjective construction. An experiential orientation to data interpretation was adopted to emphasize meaning and meaningfulness as ascribed by the participants. A predominantly inductive approach was adopted, meaning data were open-coded, and meanings ascribed by respondents were emphasized. Both semantic and latent coding were used. Semantic codes (descriptive analysis of the data, presenting the data as communicated by the participant) were produced when meaningful semantic information was interpreted and latent codes (which goes beyond the descriptive level and attempts to identify hidden meanings or underlying assumptions) were produced when meaningful latent information was interpreted.

3.3 | Participants

Nurses providing clinical care to adults living with multimorbidity in any Australian healthcare setting were eligible to take part in a semi-structured telephone interview and were recruited following their participation in a preceding online survey. An Australian professional nursing organization with approximately 10,000 members and 47,000 social media followers supported the recruitment of nurses to the initial survey study. The organization posted an invitation to take part in the study on their social media sites and emailed the invitation to all members of the organization. One reminder email was sent approximately 4 weeks after the initial email. In addition, the study authors requested that management at their organizations send the invitation to nursing colleagues to further promote recruitment.

Participants for the current interview study were purposively selected from those who took part in the earlier survey study and indicated interest in taking part in a follow-up interview. Purposive sampling was employed with maximum variation by healthcare setting, nursing specialization, years of experience, residential location and perceived confidence to provide care to adults with multimorbidity to optimize a diverse sample of interview participants.

Interview participants were contacted by a member of the research team who explained the study to them as guided by the Study Information and Participation Sheet and explained their interest in and role in the study. With their permission, participants were sent a copy of the Study Information and Participant Sheet and Consent Form by email. Interview participants were required to sign and return the Study Consent Form prior to being interviewed.

3.4 | Data collection

Using a systematic review of the literature conducted in the beginning stages of this research (Whitehead et al., 2021), we developed an interview guide to explore participants' past and current clinical experience in caring for adults with multimorbidity, education about multimorbidity care and their perceptions of the role of nurses in multimorbidity care. We also developed a demographic questionnaire to collect information about participants' age, gender and nursing practice background.

Following the study protocol and interview guide, semi-structured interviews were conducted by telephone. The interviews were conducted by six researchers, five females and one male. None of the interviewers had a previous relationship with any participant. All telephone interviews were conducted in the researcher's home or work-place office in privacy. Each researcher undertook between three and five interviews during August 2020. Follow-up interviews were not undertaken, nor were transcripts returned to interviewees for checking. Five of the researchers (JA, OS, CG, JB and NF) were nurses working in either clinical practice or tertiary education settings as a nurse academic or researcher; the other (PP) was a health sciences researcher working in a tertiary setting. Three of the five researchers have PhDs and three have postgraduate qualifications up to Masters level. All researchers had undertaken research training as part of their education and had previous experience in undertaking qualitative research. All maintained a professional interest in the nursing care of chronic disease. The six interviewers met regularly by videoconference to discuss the conduct of the telephone interviews and to promote a standardized approach. Interviews continued until through discussion the team agreed that no new information was generated in the interviews. With the participant's permission, the interviews were audio-recorded and then transcribed verbatim. All participant identifying information (e.g., name, place of work) was removed from the data (demographic questionnaire and interview transcripts) to ensure anonymity.

3.5 | Ethical considerations

The Human Research Ethics Committee of the university of the lead investigator approved the study on the 5th June 2020 (HREC #2020-01423). Informed consent was sought from all study participants.

3.6 | Data analysis

A reflexive thematic analysis was conducted involving six phases (Braun & Clarke, 2020). The process started with familiarization of the data, followed by the generation of initial codes. The generation of themes followed after all data items had been coded. The process moved between the interpretation of individual items to the interpretation of aggregated meaning and meaningfulness across the dataset. The researchers actively construed the relationship between the codes and how the relationship between them informed the narrative of a given theme. A review of the potential themes was then undertaken in relation to the coded data items and the full dataset. The potential themes were reviewed using the five questions that Braun and Clarke (2012, p. 65) propose to support the process (Is this a theme? If it is a theme, what is the quality of this theme? What are the boundaries of this theme? Are there enough meaningful data to support this theme? Are the data too diverse and wide ranging?). The themes and subthemes that remained were then named and the relationship between the themes reviewed. In the final phase, the write-up of the analysis, attention was paid to presentation of the themes including whether the presentation was logical and meaningful.

3.7 | Validity and reliability

Data analysis was iterative and continued until all members of the research team agreed on a relevant and trustworthy formulation of the data. To promote trustworthiness, the consistency and dependability of data analysis was optimized by two members of the research team (the interviewer and one other) who independently coded interview transcripts and managed the coding using Microsoft Excel and Word datasets. Discrepancies in coding were resolved through discussion. The themes and subthemes were identified by two researchers (LW & PP) and these were assessed, verified and amended by the members of the research team.

4 | FINDINGS

Twenty-four registered nurses took part in a semi-structured telephone interview. One participant who initially agreed to participate was not able to complete an interview due to commitments. The participants were predominantly female ($n = 22$), aged 26–49 years ($n = 16$), with up to 20 years of nursing experience ($n = 13$). Participants mostly worked in a tertiary hospital setting ($n = 8$), followed by community care ($n = 7$), and aged care ($n = 4$). Participants practised nursing across all Australian states and territories except for Tasmania. Twenty participants undertook their primary nursing education and training in Australia. The median time taken for each interview was 30 min. Selected demographic details for each participant are presented in Table 1.

4.1 | Main themes

Three main themes were developed through the thematic analysis of the data: (1) The care of adults living with multimorbidity requires skilled collaborative and holistic care; (2) nurses' roles in multimorbidity care are evolving; and (3) nurses value education and training in multimorbidity care. A summary of these themes and sub-themes is presented in Table 2.

4.1.1 | Theme 1: The care of adults living with multimorbidity requires skilled collaboration and holistic nursing care

Multimorbidity requires complex nursing care

All nurse described the field of multimorbidity as complex. In part, the complexity arose from the necessity of working in a healthcare team. Nurses characterized complex nursing care as advocacy, care coordination and case management. Nurse participants described the important role they played as advocates for the patient with multimorbidity and as coordinators to facilitate planning between different healthcare practitioners:

“...nurses are the ones that see the patients the most. So if we can have the right conversations with patients and patients identify that as part of our role should be that we can link patients to the right services and give them the right information to better manage their care and not miss silly gaps.” (Nurse ID77).

Seven nurses described multimorbidity as potentially creating conflict between management plans because the adult experienced multiple chronic conditions. Three nurses felt that management plans should target multiple conditions rather than individual plans targeting individual conditions. One nurse described the need to have a good clinical understanding of individual disease states. Another nurse noted the importance for nurses to identify abnormal health rather than have a depth understanding of individual diseases. Other nurses noted that it was important to know when to refer patients for a second opinion.

Four nurses reported that a team response was necessary for coordinated care and that the nursing role was an important part of an effective care team. When the team did not work effectively together, co-ordination of care was challenging:

“we've had a person who just has multiple... physical health conditions and the junior medical officer who's trying to assess them all gets the run-around from each (specialist).....trying to get the support sometimes can end up kind of bouncing around within the health service, where at the centre of it is a person who isn't getting seen by anyone because everyone is saying that it's someone else's bundle to carry.” (Nurse ID100)

TABLE 1 Demographic characteristics.

Participant number	Gender	Age group (years)	Current work area	Location
3	Female	50-59	Aged Care	New South Wales
5	Female	50-59	Aged Care	New South Wales
15	Female	40-49	Tertiary Hospital	Queensland
17	Female	40-49	Community Care	Queensland
22	Female	50-59	Community Care	Queensland
27	Female	60-69	Community Care	Australian Capital Territory
34	Female	26-39	Tertiary Hospital	Victoria
47	Female	26-39	Tertiary Hospital	Queensland
48	Female	26-39	Aged Care	Western Australia
52	Female	40-49	Tertiary Hospital	Victoria
61	Female	50-59	Community Care	Queensland
67	Female	60-69	Tertiary Education	New South Wales
71	Male	40-49	Primary Health	Victoria
72	Female	26-39	Tertiary Hospital	New South Wales
73	Female	40-49	Tertiary Hospital	Queensland
74	Female	26-39	Community Care	New South Wales
76	Female	26-39	Community Care	New South Wales
77	Female	26-39	Tertiary Hospital	Western Australia
82	Female	60-69	Disability Care	New South Wales
84	Female	26-39	Corrective Services	Victoria
86	Female	40-49	Aged Care	Victoria
87	Female	50-59	Community Care	Northern Territory
91	Female	40-49	Community Care	South Australia
100	Female	26-39	Tertiary Hospital	New South Wales

TABLE 2 Themes and sub-themes.

Theme	Sub-theme
The care of adults living with multimorbidity requires skilled collaboration and holistic nursing care	Multimorbidity requires complex nursing care
	Person-centred nursing assessment and communication
Nurses' roles in multimorbidity care are evolving	
Nurses value education and training in multimorbidity care	

Person-centred assessment and communication

Nineteen nurses described the importance of person-centred assessment and communication. Seven nurses described the need for assessment and care management plans to have a person-centred approach:

“...taking each patient on board individually and you don't see a patient as a disease. You see the patient first.....not treat the disease. You have to treat the patient. You have to treat the person...” (Nurse ID52)

Holistic assessment allowed nurses to develop strategies to empower patients. Four nurses reported that they undertake thorough assessments of the patient's experience and knowledge of their condition to determine the most appropriate information to provide. One nurse stated:

“...definitely I think the most important learning is being able to integrate the patient's knowledge and experience with their disease to know what to teach them.” (Nurse ID77)

This nurse further commented that assessment of a patient's knowledge could be challenging and that providing information that a patient already knew could lead to disengagement:

"...sometimes that can be particularly difficult to gauge and so you might be just giving them information that they know already. Which I think could affect their engagement...just hearing the same thing over and over again." (Nurse ID77)

Four nurses described the value of empowering patients to become active self-managers:

"...trying to empower people to become self-managers. They're the ones that succeed" (Nurse ID 73)

Engaging the patient in their care by using person-centred communication was described. Three nurses discussed the importance of using active listening and personal reflection with the patient to enhance engagement. Four nurses described the importance of engagement between the nurse and the patient to develop a shared understanding of the patient's illness and preferred treatment goals:

"...try to understand with them what they might be wanting to achieve. So what they understand is their illness and what it is they're really trying to achieve so that we can better balance how we can actually go to assist them with those things..." (Nurse ID61)

Three nurses described how engagement can assist with the identification of patient priorities alongside disease focused priorities. Striking a balance between the two was vital to promote long-term patient engagement:

I've seen what my nurses were able to do and I've seen results from the clinics that my nurses were running... We had a great culture within the practices because people were working as a team. They knew who was in that patient support team. And sure you know, there was the tea room where they could sort of, oh, I saw Mrs. Smith yesterday. Thanks for sending her to me. Yes, we did talk about that issue that you highlighted. So there was a good culture of caring for the patients, seeing the patient get the best result. It was a proper care plan... Nursing could keep promoting it, you know, promoting that attitude, promoting that culture... Let's make sure they (patients) are here for a long time. But let's make sure that they have a quality of life so that they want to, you know, keep going (Nurse ID82).

4.1.2 | Theme 2: Nurses' roles in multimorbidity care are evolving

All nurses described the need for expanded nursing roles to improve the value of health care, efficiencies for health services and outcomes for adults with multimorbidity. Some nurses commented on the need for nurses to have focussed roles in primary health care, for example, nurse-led clinics in general practice:

"...we have to stop thinking about the acute sector all the time. We are so acute sector focused. You know, there's a whole lot of really good work that happens out in communities driven by nurses and nurse led clinics." (Nurse ID5)

Nurses advocated for the need for advanced practice nurses in multimorbidity care. Six nurses described an increasing need for nurse practitioners in the management of multimorbidity:

"... There will be lots of opportunities for people who want to work more autonomously and to work at a specialized level, we'll see that.... There's a lot of room for nurses to have autonomy in this particular area. I can see greater evolution of the nurse practitioner role. Looking for it in complex care, because there is the opportunity..." (Nurse ID67)

Other nurses commented on the increasing need for other advanced practice nurses including nurse navigators, coordinators of care and advocates to ensure that patients received high quality person-centred care.

"...having a specific nurse navigator in charge of them [patients], if you want to say that, has helped and it's also moved throughout the hospital system and also through patient clinics. That has been really, really successful. It's an extra layer of almost middle management. But it's got a specific role. So that patients have someone they can go to who is not an admin officer who is not bothering their specialist all of the time as well, or the specialist team... And if you're a complex case, you'll be assigned a nurse navigator and that is your go to contact person in the hospital system." (Nurse ID15)

Two nurses considered that the coordination role for nurses could expand to managing staff and improving multimorbidity management with a team focus.

Nurses reported several barriers to expanded nursing roles in multimorbidity care. One nurse commented that some medical practitioners may wish to retain full responsibility of care and this would

be a barrier to nurses expanding their roles. Another nurse commented that a lack of support and training for nurses in expanded roles was a barrier.

"I think nurses are very much under-utilised and I think that the doctors don't really want to give up their turf. They should [be utilised more] because people have got more complex problems or multi morbidities and they need to be assessed without delay. All this waiting around to see doctors." (Nurse ID27)

"I feel that nurses have to do way more in terms of responsibility and caring for patients with multiple morbidity... I feel that the cost of health services and the number of unwanted admissions, all that would come down if there is training in important roles being assigned to nurses in relation to co morbidity." (Nurse ID34)

4.1.3 | Theme 3: Nurses value education and training in multimorbidity care

Twenty-three nurses described the need for, and value of, ongoing education on multimorbidity. They described the need for nurses to keep updated on contemporary evidence-based knowledge and technological advances in care through clinical practice guidelines and care pathways. Updates and refresher training related to pathophysiology, physiology and pharmacology in relation to common chronic diseases and multimorbidity were felt to be important by the majority of nurses interviewed. In addition, a smaller number felt that training in relation to screening and assessment of adults with multimorbidity and how to access relevant sources of information about specific chronic conditions were important. Nurses also described the need to better understand common drug actions and interactions and polypharmacy to strengthen their skills in multimorbidity care.

Holistic health care was again highlighted in this theme with a focus on the value of bringing specific areas of knowledge and training together and applying these to the broader health and social care setting:

Any information, any content needs to hone in on the target morbidity, for example, how it relates to the person as a whole, holistically. So we never just see a person as a disease but change to see how the whole thing impacts on the whole person." (Nurse ID52)

Beyond specific training and education in the field of multimorbidity, nurses also described the value and need for education or awareness of the imperative to work together to provide the best patient care possible either through training or awareness raising:

"I think we need to be really mindful about the fact we don't work unless in isolation or we work as part of a multidisciplinary team- having that relationship between those other disciplines and being able to speak to those other disciplines with what we know." (Nurse ID5)

"That's what the issue is, teams not talking to one another." (Nurse ID22)

"...(We need to know) who you can expect information from and as a team you work together." (Nurse ID91)

Education and training through online delivery was favoured. Training and access to resources needed to be flexible:

"...need to have the flexibility to be able to come and go with because we're all busy working. You're not always promised you're going to get that day off every week, to go and attend school; you've gotta have the flexibility." (Nurse ID73)

The need for clinically based training in the workplace with a focus on multimorbidity with preceptors and through case studies was also described. There was some support for training and development in relation to multimorbidity to lead to 'certification' through an educational institution, for example, postgraduate university-based courses and some support for training and development to be delivered by professional nursing organizations and through professional events such as conferences.

5 | DISCUSSION

Three main themes were developed in the analysis: The care of adults living with multimorbidity requires skilled collaboration and holistic nursing care; nurses' roles in multimorbidity care are evolving; and nurses' value education and knowledge and see these as important in the provision of quality care. The findings provide insight into nurses' experiences and perceptions of their role.

Nurses in this study recognized the multiple issues faced by patients and they wanted to find solutions to reduce the ongoing challenges patients faced. A 'whole of person' approach to care was described by nurses as important in supporting adults to live well with multimorbidity. The findings resonate with the outcomes of a review of qualitative studies on nurses' perceptions and beliefs related to the care of adults with multimorbidity (Whitehead et al., 2021), which found that nurses recognized and acknowledged the multiple factors at play for patients and the impact these had on the ability of adults living with multimorbidity to actively engage in self-management.

In this study, the importance of a 'whole of person' approach to support adults living with multimorbidity was described by nurses and reflected the work of O'Brien et al. (2011) who found that general practitioners (GPs) and nurses advocated for the adoption of a 'whole of person' approach to improve support and care. Similar to O'Brien et al.'s (2011) study, the definition of a 'whole of person' approach differed between clinicians and the operationalization of the concept was described as variable. There could be value in advocating for the adoption of a model of care to support nurses and the wider team to align their definitions and approach to practice, for example, patient-centred care. Whilst there is mixed evidence on the improvement of outcomes through patient centred models of care for adults living with multimorbidity (Salisbury et al., 2018) interest in exploring this further continues. Understanding the interplay between the organization and delivery of primary care and the complexity of multimorbidity, the underlying causes of which are often deeply rooted in socioeconomic factors, creates the potential to draw together patient-centred care with public health policy level interventions to address behavioural, environmental and occupational determinants of long-term illness and inequity (Dowrick, 2018).

The burden of multimorbidity on the healthcare system and associated implications for the management of multimorbidity has been highlighted (Luijckx et al., 2012; Moffat & Mercer, 2015) and was acknowledged by nurses in this study who reported that complex combinations of social, psychological and medical symptoms cannot be easily accommodated in the system and the patient was perceived to suffer as a result. However, nurses in this study also reported employing strategies to find solutions including the adaptation of existing practice systems, particularly extending the length of appointments and promoting continuity in relationships. Patients attending multiple appointments are more likely to experience issues such as conflicting medical advice and duplication of tests (Liddy et al., 2014) and in common with an earlier study (Doessing & Burau, 2015) nurses in this study reported the need for better communication across service providers and advocated for the role of the nurse navigator. There are several studies on the role of the nurse navigator in complex and chronic care (e.g. Harvey et al., 2019). Nurse navigators have demonstrated that they can transcend boundaries to facilitate care and establish trusting relationships to promote patient self-management (Byrne et al., 2020). However, the success of nurse navigators, who strive to integrate care, continues to be balanced against the complexity of the healthcare system with multiple services and specialists involved (Sheridan et al., 2019).

The lack of an evidence base to inform practice was described by nurses in this study reflecting studies conducted with GPs that also identified the lack of evidence to inform practice as impacting on the ability to provide best practice (Sinnott et al., 2013). However, GPs have described mixed feelings about the clinical utility of existing guidelines where these have not been developed with patients living with multimorbidity (Sinnott et al., 2013). Internationally, few guidelines offer modified advice for patients with multimorbidity

(Fortin et al., 2011). Chronic diseases can occur in combinations that create synergies in treatment but can also create conflicts (Aga et al., 2019). Nurses in this study described examples where conditions created discordance in management plans that may generate conflicting medical and self-management practices. It is important that guidelines, educational initiatives and prioritization tools support safe approaches to the management of disease (Guthrie et al., 2012).

Crucial to supporting nurses working with adults living with multimorbidity are the creation of and access to training, education and research on the prevention and management of multimorbidity including the opportunity to pilot innovative nurse-led approaches to manage multimorbidity and the provision of funding to incentivize the set-up of nurse-led clinics and models of care (Australian College of Nursing, 2020).

5.1 | Strengths and limitations of this study

A key strength of the study is that it was conducted nationally with representation from nurses working in all States and Territories in Australia except for Tasmania. The study represents one of the few qualitative studies that has examined nurses' accounts of the work they do in supporting adults living with multimorbidity. Several limitations have been noted and these are areas for consideration for future studies in the area. These include attention to diversity in the sample by ethnicity, culture and gender. The majority of participants were female, and whilst the proportions of male and female participants reflect the nursing workforce, further data from male nurses are required to understand whether their experience is congruent with the main study findings. The interviews ranged in length from 19 min to 45 min and followed a semi-structured approach. The interviewers all described being able to cover the questions adequately in this time and interviewees were always given the opportunity to add further information. Those with less experience of working in the field of multimorbidity did not have as much information to share; however, their responses relating to their experience and training were important in this study.

In future studies, researchers may wish to consider employing a theory, framework or lens such as person-centred care, the social ecological model or a critical feminist lens to inform the development of the study and/or the analysis of data.

Further work to develop interventions that engage with and address issues across the levels of patients, professionals and systems is needed. The data presented in this study underline the need to develop appropriate support for nurses that considers what supporting patients means for them in practice. We recommend a review of existing tools and models to enable health professionals to support the 'whole person'. The time-cost required to support patient self-management will potentially create time-saving elements where patient-initiated creative and temporally bound strategies also empower patients.

6 | CONCLUSION

This exploratory study of Australian nurses' experience of care provision for adults living with multimorbidity, their perceived education needs and future opportunities for nurses in the management of multimorbidity identified nurses' recognition that adults living with multimorbidity face multiple issues that require a whole of person approach to care. Nurses described their roles as diverse, challenging and evolving. Models of care that support nurses to evolve as practitioners of person-centred, holistic care in multidisciplinary teams are needed.

This study is the first to describe how nurses envisage their role and provides insight into how care can be aligned and the support nurses need to achieve this goal. This is the conversation the discipline needs to have with policy makers and health service planners to shape and adapt the healthcare system to align with the changing healthcare needs of the community.

AUTHOR CONTRIBUTIONS

Lisa Whitehead: Project administration, Conceptualization, Methodology, Formal analysis, Writing - Original Draft, Writing-Review & Editing. Peter Palamara: Project administration, Conceptualization, Methodology, Investigation Formal analysis, Writing - Original Draft, Writing-Review & Editing. Olutoyin Oluwakemi Babatunde-Sowole: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing-Review & Editing. Jennifer Boak: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing-Review & Editing. Natasha Franklin: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing-Review & Editing. Robyn Quinn: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing-Review & Editing. Cobie George: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing-Review & Editing. Jacqueline Allen: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing-Review & Editing.

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Author elects to not share data.

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