


SYSTEMATIC REVIEW

Ageism directed at older nurses in their workplace: A systematic review

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Abstract

Aims: To identify and synthesise evidence related to ageism in older regulated nurses' practice settings.

Design: A systematic review following Joanna Briggs Institute methodology.

Methods: The review included empirical studies that involved older nurses as the primary study population and studies that focused on ageism in older nurses' work environments, including strategies or interventions to address ageism within the workplace. Following the initial screening, all relevant studies were critically appraised by two reviewers to ensure they were appropriate to include in the review. A synthesis without meta-analysis reporting (SWiM) guideline was employed in the review.

Data Sources: Medical Literature Analysis and Retrieval Systems Online, Scopus, Psychological Information Database and Cumulative Index to Nursing and Allied Health Literature and Google Scholar were searched to identify empirical studies and a range of academic institutional websites were accessed for master's and doctoral dissertations and theses. The search covered the period from January 2022 to May 2022, and only publications in English from 2000 onwards were considered.

Results: Nineteen studies were included, ten qualitative studies, seven quantitative studies and two mixed methods secondary analyses. Our results revealed that negative perceptions and beliefs about older nurses' competencies and skills prevail in their practice settings, which influences older nurses' health and well-being as well as their continuation of practice. Further, older nurses' continuation of practice can be facilitated by having a positive personal outlook on ageing, meaningful relationships in their practice settings and working in an environment that is age-inclusive.

Conclusion: To combat ageism in older nurses' practice settings and support their continuation of practice, effective interventions should be organisational-led. The interventions should focus on fostering meaningful relationships between older nurses and their colleagues and managers. Further, healthcare institutions should implement initiatives to promote an age-inclusive work environment that supports an age-diverse nursing workforce.

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Implications for the profession and/or patient care: The review findings offer insights for healthcare managers, policymakers and researchers, emphasising the need for anti-ageism policies in healthcare organisations. According to WHO (2021), educational activities such as role-playing and simulation during in-service training may also be effective interventions. Additionally, incorporating anti-ageism initiatives into staff meetings and mandating anti-ageism training could support the continuation of practice for older nurses while fostering a more age-diverse nursing workforce.

Impact: We found evidence on the presence of ageism in older nurses' workplace and the detrimental effects of ageism on older nurses' well-being and continuation of practice. Importantly, we identified a lack of organisational initiatives to address ageism and support older nurses. These findings should encourage healthcare organisations to address ageism in older nurses' practice settings and prompt policymakers to develop age-inclusive policies that support older nurses' continuation of practice.

Reporting method: The Preferred Reporting Items for Systematic Reviews and Meta-Analyses and Synthesis Without Meta-analysis checklists were used to report the screening process.

Trial and Protocol Registration: The PROSPERO registration number for the review was CRD42022320214 (https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42022320214).

No Patient or Public Contribution.

KEYWORDS

age-diverse, ageism, nursing, nursing workforce, nursing workforceage discrimination, older nurses, systematic review, workplaces

1 | INTRODUCTION

Global population ageing has led to significant demographic shifts in various workforces, including nursing. In many countries, there has been a steady increase in the average age of nurses (World Health Organisation [WHO], 2016). For instance, in New Zealand, the median age of nurses rose from 42.6 in 1998 to 46 years in 2019 (Nursing Council of New Zealand [NCNZ], 2019). Similar trends can be observed in the nursing workforces of Australia, the United States of America, Canada and the United Kingdom, where the percentage of nurses aged 50 years and older has gradually risen (Uthaman et al., 2016; Walker et al., 2018; Wargo-Sugleris et al., 2018; WHO, 2016).

There have been an increasing number of studies addressing older nurses' practice (Montayre et al., 2023; Ryan et al., 2017; Uthaman et al., 2016). Nonetheless, the age threshold that defines an older nurse is not clearly established in the literature. Some studies define older nurses as those over the age of 50 years (Vickerstaff, 2010; Wargo-Sugleris et al., 2018), whereas others may use thresholds of 55 (Centers for Disease Control and Prevention, 2012) or 60 years (Denton et al., 2023; Walker et al., 2018). The definition of older nurses may vary across different cultural or national contexts, and the reasons for this variation are not always clear.

What does this paper contribute to the wider global community?

- This review could serve as a foundation for further research on ageism in nurses' practice settings.
- Researchers and policymakers could build upon the findings to develop more targeted interventions and policies for supporting nurses of all ages.

1.1 | Background

The ageing nursing workforce brings about both challenges and opportunities for the healthcare system. One of the key challenges is the potential for a nursing shortage, as many nurses may choose to retire or reduce their work hours as they age (Montayre et al., 2023). Such trends could lead to increased workload and stress for the remaining nurses, potentially compromising patient care. However, the ageing nursing workforce also presents opportunities, as older nurses bring valuable experience and knowledge that can positively

impact patient outcomes and provide mentorship for younger nurses (Ryan et al., 2017).

Nevertheless, older nurses encounter various obstacles that hinder their continuation of practice. For instance, a study by Uthaman et al. (2016) found that nurses in their 40s experienced physical limitations such as musculoskeletal disorders and chronic pain that made moving and handling and shift work challenging. Although early retirement is common in the nursing profession, many older nurses choose to work beyond retirement or pensionable age due to financial instability (Nurmeksela et al., 2022). Therefore, addressing challenges related to older nurses' continuation of practice is crucial for retaining their valuable expertise and supporting those who cannot afford to retire due to financial constraints.

Flexible work arrangements, meaningful relationships with colleagues and recognition within the organisation have been identified as factors for older nurses wishing to extend their work lives (Nurmeksela et al., 2022). However, evidence suggests that ageism could hinder older workers from accessing the support needed to remain in the workforce (van Solinge & Henkens, 2014). Ageism was originally described by Butler (1969) as 'prejudice by one age group toward other age groups' (p. 243). Butler later refined the definition to encompass 'a process of systematic stereotyping or discrimination against people because they are old, just as racism and sexism accomplish with skin and gender' (Butler, 1975, p. 12). While Butler's definition faced criticism for oversimplification, an alternative definition proposed by Iversen et al. (2009) has gained prominence in the literature. This definition characterises ageism as the negative or positive stereotypes, prejudice and/or discrimination directed at older individuals based on their chronological age or perception as 'old'. Further, ageism can manifest implicitly or explicitly on micro, meso or macro levels (Iversen et al., 2009). By acknowledging the cognitive, affective and behavioural components of ageism, this definition allows for a nuanced understanding, recognising that ageism can involve positive or negative aspects and operate consciously or unconsciously at various societal levels (Iversen et al., 2009; WHO, 2021). Extensive research has identified that ageism negatively impacts older workers' mental well-being, job satisfaction and overall performance (Nilsson et al., 2016; Thorsen et al., 2016; Weber et al., 2019). In this paper, our focus is on ageism directed at older nurses, and the review will include studies that refer to research participants as older nurses, regardless of whether they use an age threshold to define this group. This study is the first review to investigate ageism in older nurses' practice settings. The study aimed to provide synthesised evidence on the impact of ageism and interventions to ameliorate ageism in older nurses' employment context.

2 | THE REVIEW

2.1 | Aims

The overarching aim of this review was to identify and synthesise evidence related to ageism in older regulated nurses' practice settings and sought to address the following questions:

- How is ageism portrayed in older nurses' practice settings? (places where nurses carry out their professional duties).
- How does ageism impact older nurses' continuation of practice? and
- How can older nurses be supported to continue to practice?

3 | METHODS/METHODOLOGY

3.1 | Design

This systematic review followed the Joanna Briggs Institute (JBI) protocol for systematic review. The PROSPERO registration number for the review was CRD42022320214 (https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42022320214).

3.2 | Search methods

An initial search was conducted on CINAHL, using terms related to ageism and older nurses. In consultation with the university librarian, relevant results, keywords and subject headings were analysed to formulate the final search terms. The final searches were conducted on MEDLINE, Scopus, PsycINFO, CINAHL, Google Scholar and a range of academic institutional websites such as Proquest to identify relevant doctoral and master's theses. The database search process ran from January 2022 to May 2022. The search terms used included (old* or experienced* or 'late career' or 'late-career' or seasoned or senior) proximity search (nurse or nurses or nursing), and (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) proximity search (conflict* OR tension* OR diversit* OR relation*) OR (age) proximity search (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict). The searches ran across databases and their corresponding results can be found in Appendix. All studies identified were transferred to Endnote to remove duplicates, which were then uploaded onto Covidence Systematic Review Software for screening.

3.3 | Inclusion and exclusion criteria

The inclusion criteria for the review were empirical or primary peer-reviewed studies that have been published in English after the year 2000; including older nurses as the primary study population, focused on ageism towards older nurses at their workplace, and provided a description of strategies or interventions that could be used to combat ageism in older nurses' work. Dissertations and theses were also included in the review.

We excluded review studies, book chapters, reports, white papers, internal evaluations, commissioned evaluations, policy documents, grey literature, and other non-academic or non-peer-reviewed sources. Moreover, studies that described older nurses' ageism towards older patients, studies that focused on unregulated

nursing staff, and studies with an inadequate description of ageism, age discrimination or age stereotypes were excluded.

3.4 | Search outcome

All relevant citations were uploaded into Covidence for screening. Duplicates were deleted using Covidence's automatic deduplication feature. However, during the manual screening process, additional duplicates were identified and these were also removed. For each entry, the initial screening of the title and abstract was conducted by the primary author and one other author. Titles and abstracts were screened against inclusion and exclusion criteria to determine their eligibility. Conflicts were discussed and resolved with all authors involved. Full-text screening was completed by two independent reviewers to ensure consistency in the application of inclusion and exclusion criteria. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses checklist (PRISMA) and The Synthesis without meta-analysis reporting (SWiM) guideline were used to report the screening process, see Figure 1 (Moher et al., 2009) and Table 1 (Campbell et al., 2020).

3.5 | Quality appraisal

All studies were critically appraised by two authors using the Joanna Briggs Institute (JBI) Critical Appraisal Tools (Porritt et al., 2014).

The JBI checklists for qualitative studies and cross-sectional surveys were used. All studies were assessed as moderate to high quality and were therefore included in the review. The quality appraisal results of the included studies can be found in File S1.

3.6 | Data abstraction

Data were extracted into an Excel spreadsheet. The data extracted included population, sample size, aim(s), methodology, study outcomes, recommendations and detailed information about the portrayal of ageism in older nurses' practice settings, the impact of ageism in older nurses and the interventions for ageism in older nurses' practice settings.

3.7 | Synthesis

The quantitative data and numeric values pertaining to ageism in older nurses' practice settings were converted into textual descriptions to facilitate data synthesis and integration. Data synthesis of qualitative and quantitative data relevant to the review questions occurred convergently using thematic synthesis to identify meaningful patterns and themes across the included studies (Hong et al., 2017). The finalisation of themes was achieved through a consensus process among reviewers. Subsequently, the findings of the review were reported using the synthesis without meta-analysis guideline.

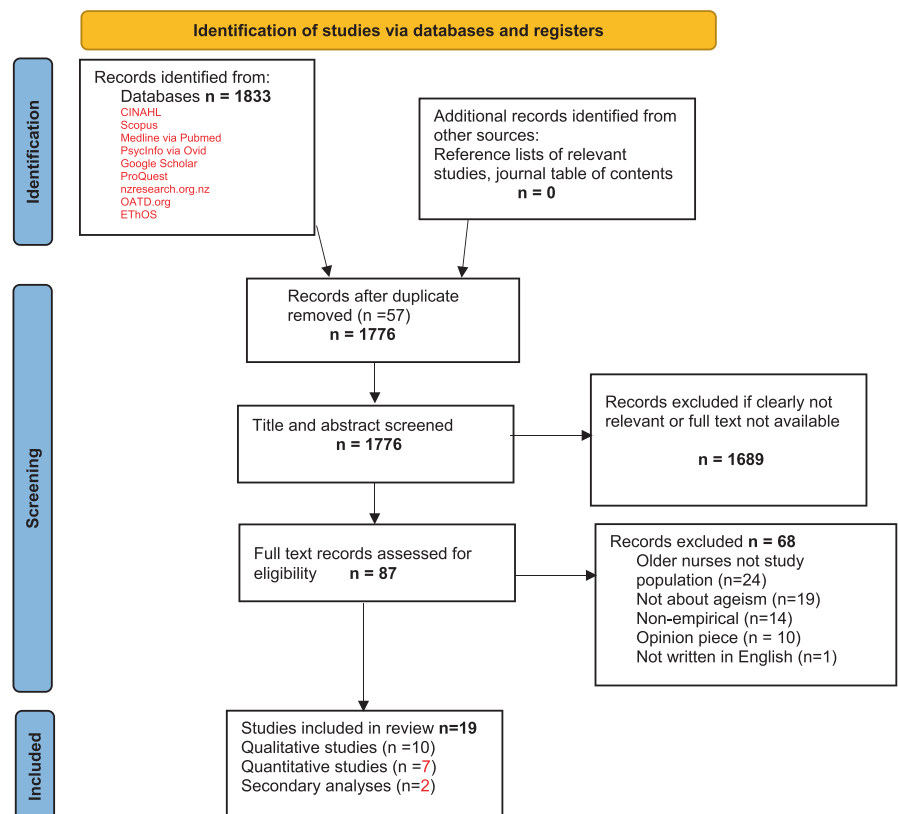


FIGURE 1 PRISMA flow diagram for the process of study identification and selection. [Colour figure can be viewed at wileyonlinelibrary.com]

TABLE 1 Synthesis without meta-analysis reporting (SWiM) guideline.

SWiM reporting items	Item description	Pages in the manuscript where the item is reported
<i>Methods</i>		
1. Grouping studies for synthesis	(1a) Provide a description of, and rationale for, the groups used in the synthesis (e.g. groupings of populations, interventions, outcomes, study design). (1b) Detail and provide rationale for any changes made subsequent to the protocol in the groups used in the synthesis	Pages 3–4 'Defining an older nurse'
2. Describe the standardised metric and transformation methods used	Describe the standardised metric for each outcome. Explain why the metric(s) was chosen and describe any methods used to transform the intervention effects, as reported in the study, to the standardised metric, citing any methodological guidance consulted	Pages 5–6 'Synthesis'
3. Describe the synthesis methods	Describe and justify the methods used to synthesise the effects for each outcome when it was not possible to undertake a meta-analysis of effect estimates	Pages 5–6 'Synthesis'
4. Criteria used to prioritise results for summary and synthesis	Where applicable, provide the criteria used, with supporting justification, to select the particular studies, or a particular study, for the main synthesis or to draw conclusions from the synthesis (e.g. based on study design, risk of bias assessments, directness in relation to the review question)	Page 5 'Quality appraisal'
5. Investigation of heterogeneity in reported effects	State the method(s) used to examine heterogeneity in reported effects when it was not possible to undertake a meta-analysis of effect estimates and its extensions to investigate heterogeneity	Table 3 Quality appraisal results using JBI checklists
6. Certainty of evidence	Describe the methods used to assess the certainty of the synthesis findings	Table 3 Quality appraisal results using JBI checklists
7. Data presentation methods	Describe the graphical and tabular methods used to present the effects (e.g. tables, forest plots, harvest plots). Specify key study characteristics (e.g. study design, risk of bias) used to order the studies, in the text and any tables or graphs, clearly referencing the studies included	Table 4 Data extraction summary
<i>Results</i>		
8 Reporting results	For each comparison and outcome, provide a description of the synthesised findings and the certainty of the findings. Describe the result in language that is consistent with the question the synthesis addresses and indicate which studies contribute to the synthesis	Pages 6–8 'Findings of the review'
<i>Discussion</i>		
9. Limitations of the synthesis	Report the limitations of the synthesis methods used and/or the groupings used in the synthesis and how these affect the conclusions that can be drawn in relation to the original review question	Page 10 'Strengths and limitations'

4 | RESULTS/FINDINGS

A total of 1833 studies were screened; 87 full texts were retrieved for further evaluation. A total of 19 studies were included in this systematic review. The review included 10 qualitative studies (Denton et al., 2021; Fragar & Depczynski, 2011; Gabrielle et al., 2008a, 2008b; Helaß et al., 2022; Letvak, 2003; Li et al., 2020; Mion et al., 2006; Price & Reichert, 2017; Sinoski et al., 2020), seven quantitative studies (Balko, 2013; Bilinska et al., 2016; Cadiz, 2010; Kovner et al., 2007; Powell, 2010; Walker & Clendon, 2013; Wray et al., 2009) and two secondary analyses (Clendon & Walker, 2016; White et al., 2021). The summary of the studies is presented in Table 2.

4.1 | Characteristics of the included studies

The review included 15 journal articles (Bilinska et al., 2016; Clendon & Walker, 2016; Denton et al., 2021; Fragar & Depczynski, 2011; Gabrielle et al., 2008a, 2008b; Helaß et al., 2022; Kovner et al., 2007; Letvak, 2003; Li et al., 2020; Mion et al., 2006; Price & Reichert, 2017; Walker & Clendon, 2013; White et al., 2021; Wray et al., 2009), three doctoral theses (Balko, 2013; Cadiz, 2010; Sinoski et al., 2020) and one master's thesis (Powell, 2010). Three of the included papers explicitly addressed ageism (Balko, 2013; Cadiz, 2010; Helaß et al., 2022), whereas others focused on continuation of practice (Bilinska et al., 2016; Clendon & Walker, 2016;

TABLE 2 Data extraction summary.

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Balko (2013)/USA/44 out of 76 RNs worked in hospitals (58%), 13 in nursing homes (17%), one doctor's office (1%), four in home care (5%), one in school setting (1%), and 13 in other settings (17%)/RNs who are enrolled in the online RN to BS programme, 43% were nurse managers, and 57% were not. Inclusion criteria: have an RN license, between the ages of 18– 65, enrolled in the online RN to BS in nursing program (part-time or full-time), currently employed/ $n = 76$ /Mean age 43	To examine workplace incivility and ageism experienced by RNs who were enrolled in an online RN to BS nursing programme and compare the results by generational cohorts	Quantitative correlational survey design, the study used the Workplace Incivility Scale, the Ageism Survey and the Turnover Intention Scale and demographic questionnaire to collect data	RNs who are completing their RN to BS training experience incivility, ageism and turnover in their workplaces, regardless of their gender, age or generational cohort	Nursing curricula need to incorporate content related to incivility, ageism and the multigenerational workforce so nurse educators could better prepare the students. Organisations and managers also have the responsibility to teach their employees about incivility, and ageism in the workplace and provide generational education and defuse the issues when it arises	Perceived level of ageism is related to participants' intent to quit	Perceived level of ageism is related to participants' intent to quit	How can older nurses be supported to continue to practice?
Bilinska et al. (2016)/ Germany/Participants were selected across 45 small and medium-sized nursing homes and mobile nursing home service companies/ Nurses, 70% trained, 30% untrained, no apprentices/ $n = 397$ / Participants were divided into two groups younger than 40 years old and older. Their average age was 40.86	To introduce the concept of organisational age climate (OAC) and investigate whether strong OAC enhances geriatric nurses' retention	Quantitative, part of a larger longitudinal study within the geriatric nursing sector in Germany. Questionnaires were used to measure PAC, organisational identification, age stereotypes, turnover intentions and job satisfaction	Younger employees held more negative age stereotypes in companies with lower Organisational Age Climate (OAC), whereas nurses in companies with more positive OAC reported the lowest ratings of negative age stereotypes. The findings suggest that OAC and individual-level age stereotypes are related and that strong OAC may reduce younger employees' negative beliefs about older colleagues	Employers in geriatric nursing should value their older nurses. Future research to test if the results apply to other professions. A longitudinal design would allow the drawing of causal inferences on OAC and variables of interest	In companies with lower OAC, older nurses were found to have increased turnover intentions and lower job satisfactions	A strong organisational age climate may reduce negative beliefs held by young nurses against older nurses	(Continues)

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Cadiz (2010)/USA/Most participants worked in hospital or acute care setting/RNs ($n = 773$)/ Average age 45.86, SD = 11.3. Samples were divided into three groups, under 40, 40 and older and combined sample. The age range was 22–70. 11% of the participants are under 30, 20% are between 30 and 39, 24% are between 40 and 49, 37% are between 50 and 59, and 9% are 60 and older	To examine how nurse retention is affected by workplace climate, using a new ageism climate measurement tool	Quantitative. A new ageism climate measure was developed and validated in this study. Participants' job withdrawal intentions, organisational commitment and work engagement were also measured using quantitative tools. Additionally, the study investigated whether Core Self-Evaluation (CSE) was related to ageism climate	The study showed evidence of younger worker ageism climate and older worker ageism climate and identified the variables that affect ageism climate work differently in the three age groups. In the under-40 sample, CSE buffered the negative effects of negative younger and older workers ageism climates and enhanced the positive effects of positive general age climate on turnover intentions and organisational commitment. In 40 and older sample and the combined sample, a less ageist younger and older workers climates were found to be associated with decreased turnover intentions and increased affective commitment	It is important for HR to assess whether the organisation has a positive or negative ageism climate. Further, age diversity training is important for building a positive ageism climate, and can be incorporated as part of the orientation process. Future studies should examine the variable of ageism climate in different nursing settings, since the age cohort of the patients may interfere with nurses' perceptions of ageing. Regarding the ageism climate measuring tool, it can be strengthened by adding more items specific to the younger worker climate. Further, additional items can be added in the future regarding older workers and the general age climate. A parallel positively worded scale could be created to measure positive age climate which will also enhance the validity of the existing age climate measurement tool. Future research should develop an understanding of age- supportive climate and understand whether it is a different construct from age climate or the opposite poles of the same construct	Older nurses being viewed as less valuable, poor investments, not being given much access to career development resources, and older nurses not being given much support. Ageism climates affect turnover intentions, affective organisational commitment and work engagement		

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Clendon and Walker (2016)/ New Zealand/A range of settings/Study 1: RN (85%), EN (8%), NP (0.6%) Study 2: RN (96%), EN(2%), NP(2%)/Study 1: n=3273 Study 2: n=46/Study 1: 50–60 (67%), 61–70 (28%), 71+ (1.7%) Study 2: 50–60 (61%), 61–70 (39%), 71+ (0)	To identify the factors that contribute to some nurses successfully practicing into older age as well as the challenges faced by others	Secondary analysis of data from two existing studies. Study 1 is quantitative, online survey with free text answers, Study 2 is qualitative focus group, however, only qualitative data were analysed in this paper	Older nurses are less physically strong which negatively impacts their practice. Maintaining their own health and fitness enables continuation of practice however self-care strategies were only used by a small group of older nurses. The study also identified guilt among older nurses, it stems from not being able to perform as much, and having to leave some of the tasks to their younger colleagues which all contribute to moral distress. The positive generational stereotypes also pressure older nurses and contribute to moral distress	Managers and organisations are key to supporting older nurses' practice. Organisations may want to self-assess their approach to older workers in order to address the implicit ageism. To better facilitate older nurses' practice, the organisation should provide flexibility and carved-out roles to them	Managers suggest older nurses had a 'short shelf life'. The workplace did not understand the different learning needs of older nurses. The workplace prioritised younger nurses' needs over older nurses'		Participants worked hard to maintain their own health and fitness. 'Doing my part in keeping fit, eating healthy and doing further study to keep my brain and competency up to date'. Work in a familiar area with a sense of belonging, build a rapport and learn to trust colleagues. Flexible working hours, changing job roles, adjusting environment and reducing hours are potential solutions to challenges older nurses face

Denton et al. (2021)/ Australia/A wide range of clinical settings across many different health workplaces located in metropolitan, regional and remote areas of all Australian states'. Four nurses from aged care/rehab/palliative/ Nurses and midwives, 74% RN/n=50/Age range 45–74, 44% in the 60–64 range	To explore the firsthand experiences of older nurses or midwives working in healthcare settings	Qualitative descriptive/ semi-structured interviews	The study identified three themes, (1) ageing bodies, (2) youth focus and (3) wise-workers. For the vast majority, their experiences at the healthcare workplaces were negatively affected by their ageing bodies, the workplaces had a youth-focused culture, leaving the older nurses and midwives feeling ignored, criticised, limited, disadvantaged, isolated, excluded and treated differently because of their age. For a small group of the participants, being an older healthcare worker meant more value and respect from the colleagues and managers	The study highlighted the need to provide more support to older nurses in relation to age-related challenges and changes. Employers should consider the wise-worker model which values and recognises older nurses. Further research is needed on strategies to enable older workers in health care to continue to contribute to the workplace	Emotional distress, older nurses felt they were invisible to younger management with the youth focus culture at their workplaces. Older nurses were overlooked, and excluded from responsibilities and (educational, promotional) opportunities. Management treated older and younger nurses differently. Experiences as an older nurse are being ignored, criticised, limited, disadvantaged, isolated, excluded, and treated differently limited access to training and promotional opportunities. Implementation of older nurses should start aside for younger workers and older nurses were seen as passed their use-by date		
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(Continues)

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Fragar and Depczynski (2011)/ Australia/A range of settings including aged care/Registered nurses and enrolled nurses from community health, aged care, general hospital wards, operating theatres, sterilising departments, midwifery, emergency departments and health service management. A small number were from other professional groupings (less than 10%), encompassing other professional, para-professional and clinical support staff (Aboriginal health, corporate services, clerical administration) and 'hotel services' (catering)./n = 80/ Aged 50 and over. Demographic data on age was not collected	To pinpoint the work- related challenges that older rural health workers face and understand how age- related changes and other factors worsen these difficulties	Qualitative/Focus group	Due to older age, certain tasks become more difficult in hospital settings. Older nurses constantly need to adjust to changes and new tech, whereas their experiences were not valued and consulted during these processes	Older health workers should be involved in the development of a resource booklet on ageing and other factors that impact upon work with practical suggestions for addressing these at personal and local level—The Health Service should establish a health service 'Task Force', comprising managers, older rural health workers and an occupational therapist, to examine the study findings and implement area-wide policy and practice solutions as well as recommendations for state-wide policy development	How is ageism portrayed in older nurses' work environments?	Training opportunities are being given to younger colleagues	How can older nurses be supported to continue to practice?

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Gabrielle et al. (2008b)/ Australia/Acute hospital and community/Female RNs/n=12/aged 40–60 years	To gain a deeper understanding of the health, ageing-related issues as well as self-care strategies employed by older female RNs who practice in direct caregiving roles in acute public hospitals and community facilities.	Qualitative/Semi- structured, conversational style interviews using a feminist perspective	Participants were experiencing many health issues associated with ageing, which negatively affected their QoL and decision to continue nursing. The impact of back problems was exaggerated by heavy workloads and unsupportive work environment. Although participants were aware of the need for self-care, they often prioritised the needs of patients over their own and cared for others at the expense of self-neglect. For some participants, self-care strategies such as exercising and eating healthy were used to maintain a balance between working and ageing	Tailored exercise programmes during working hours could help maintain endurance and fitness levels. The issues raised by participants point to a need for further research investigating the health concerns of the ageing nursing workforce. Such research could lead to the implementation of protective work practices that improve service delivery and help address the retention problem	Feeling exploited, uncared for, by managers (after injuries, managers never asked, disheartened), ageist beliefs from management (want to retain younger staff, older nurses' injuries, sickness nobody cares, their loyalty to the organisation, the time they served, was not valued)		
Gabrielle et al. (2008a)/ Australia/Acute hospital and community/Female RNs/n=12/aged 40–60 years	To investigate the perspectives and experiences of female RNs aged 40–60 years, working in acute hospital and community healthcare settings	Qualitative/Narrative- based study informed by feminist principles, in-depth semi-structured interviews	Self-neglect and self-care, ignoring the pain and fatigue, older nurses just work around it, are also unable to commit to regular exercise due to family responsibilities, other people perform self-care, exercise, eat healthily and get their nails done, self-care makes them appreciate ageing more	Future research needs to explore the need for protective work practices and promote healthy lifestyles for ageing nurses. Management needs to recognise the changing needs of their older nurses and offer flexibility in their work arrangements and tailored exercise programmes to promote their health Future research to focus on the support needs of older RNs, and a national study investigating the clinical experiences and health needs of the ageing nursing workforce is needed	Feeling unappreciated at their workplaces, administrators allocate heavier workload to older nurses because they wish to retain younger nurses. Employers did not care about their work-related injury, it was up to the participant to keep turning up to work		

(Continues)

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Heilaß et al. (2022)/ Germany/A German university hospital/ Nurses with and without management positions/n = 50/average age 47.39 (SD = 10.89; range 22–63 years; Md = 51)	To identify and compare the age stereotypes of RNs in inpatient settings	Qualitative/19 face-to- face interviews and 5 focus groups	Reflecting on the ageing process and cooperation in mixed-age teams, nursing staff and supervisors defined similar age stereotypes towards older and younger nurses reminiscent of common generational labels 'Baby Boomers' and 'Generations X'. Their evaluation created an inconsistent and contradictory pattern differing to the respective work context and goals. Age stereotypes were described as both potentially beneficial and detrimental for the individual and the cooperation in the team. If a successfully implemented diversity management focuses on age stereotypes, negative assumptions can be reduced and cooperation in mixed-age teams can be considered beneficial	Diversity management should be implemented to reduce stereotypes among intergenerational healthcare teams	Older nurses have intuition, core competencies in patient observations, de-escalation and a good overview of the work area. They were also consulted by supervisors for advice on management decisions. Older nurses were less vulnerable to stress-related phenomena due to professional and personal experiences and wisdom. Older nurses are seen as adaptive and less willing to change	Older workers should be integrated into change and all activities at work	

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Kovner et al. (2007)/USA/ RNs working nursing, outside nursing and not working in US/ RNs/n=1906/older RNs are those aged 50 years and older younger RNs are those under the age of 50	To assess the attributes and professional attitudes of RNs aged 50 and above in comparison to those below 50 during two distinct time periods. Additionally, to make comparisons within the older age group, distinguish the characteristics and attitudes between those actively working in nursing, those employed in non-nursing roles, and those not currently employed	Quantitative/Survey	Older RNs were less likely to have an injury, more older than younger RNs had retired or reported that they could not work, older RNs reported that the primary reason for not working as an RN was retirement, followed by poor health or 'other reasons'. On the other hand, younger RNs were more likely to indicate that they could afford not to work or were caring for a family member as their reasons for not working. Older RNs reported more distributive justice (fairness of rewards), workgroup cohesion and supervisory support and less organisational constraint, and quantitative workload than younger RNs. Overall older RNs were more satisfied, had greater organisational commitment and had less desire to quit than younger RNs. There were no significant differences between older and younger RNs for autonomy, mentor support or variety	Workplaces should develop policies targeting older nurses, carve out roles and provide flexibility and ergonomic work environments that take older nurses' ageing bodies and needs into consideration	Older nurses perceived they had fewer chances of finding other jobs compared with younger nurses, and they had fewer promotional opportunities		

(Continues)

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Letvak (2003)/USA/ participants were recruited from three US hospitals/Staff nurse/ <i>n</i> = 11/age range 55–62, mean age 58.3	To describe the experience of being an older staff nurse	Qualitative/In-depth interviews, analysed using feminist perspective	Older nurses are working because they continue to care, despite the stressors of intergenerational conflict with younger nurses, less respect from patients and families and inequity in pay. Older nurses are confident in their abilities and are capable of meeting the demands of hospital nursing	Older nurses are from a generation with a can-do attitude and usually not stand up for themselves. Research should represent and advocate for older nurses more, they are the present and future of nursing	Older nurses took pride in their own skills, younger nurses looked up to older nurses. Older nurses were pressured by their families, peer and organisations to move into non-clinical positions. Some of the younger nurses did not think older nurses had the ability to carry out basic nursing tasks. Managers frequently asked older nurses why they would retire. Feeling dispirited that their salaries were not much different from new graduates		

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Li et al. (2020)/China/ Two Chinese hospital/ Nurses/n=27/56- 60 years old	To explore older nurses' perceptions of continuing to work in a nursing career after retirement	Qualitative/Semi-structured interviews	Based on the definition of the three essential conditions of the framework for understanding behaviour, 14 subthemes that emerged from the data were categorised under this framework. The three main themes were as follows: the nurses' perceptions of their capability, motivation, and opportunity related to engaging in a nursing career after retirement. A number of older nurses with rich clinical experience have the ability and motivation to engage in nursing a career after retirement. However, discrimination against nurses, burnout, and the effects on young people's employment are barriers to older nurses considering working in a nursing career after retirement. Regarding re-employment after retirement, older nurses also expressed concerns about their physical health, family responsibilities, and salary as well as lack of managerial and policy support	Recommend the use of innovative programs to retain older RNs and make use of their knowledge. Have carved-out roles for them. Future research should interview post-retirement age nurses as well as those working and those not working to explore their perceptions of ongoing work and their reasons for and feelings about not continuing. A quantitative study with a larger sample size is needed to determine whether there are differences in findings based on different hospital levels and demographic characteristics of the participants	Some older nurses felt good about their physical and mental capacities, some thought they declined as they aged with less physical power and less able to take in new knowledge. The healthcare system lacks policies to support older nurses' continuation of practice after retirement. Administrators did not value older nurses, and would rather hire younger nurses to reduce cost. Older nurses were forced out of clinical settings to do cleaning jobs. Hospitals did not have positions that would suit older nurses		

(Continues)

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Mion et al. (2006)/USA/At MetroHealth Medical Center (MHMC), a 730-bed tertiary care, teaching county hospital in northeast Ohio, focus group consisted of members from acute care, rehab, long-term care, and outpatient or satellite clinics/RNs and nurse managers/ <i>n</i> = 33/ three focus groups consist of nurses aged 46–73 years, one consisted of nurses aged 22–29	To describe one medical centre's multifaceted approach and subsequent strategies to create a work environment conducive to retaining mature, experienced nurses	Qualitative exploratory study/Focus groups with semi-structured open-ended questions	Organisational strategies to retain older nurses and to accommodate their ageing needs include carving out roles for them and adjusting the work environments. Discussed some examples of what the carved-out roles might be	The retention strategies are showing some success, some nurses approaching retirement are inquiring about carved-out roles and education opportunities to enable them to return to practice or continue practice within their capabilities. Important to remember that retaining older nurses and addressing the challenges for them require multifaceted approach, not one single strategy	Older nurses know the rules and follow the rules, they are more adaptable to organisational change and have a bank of life and clinical experiences for dealing with new situations. Older nurses are less physically strong and fast as when they were younger, some younger nurses perceived this as older nurses 'not pulling their weight'	Older nurses' continuation of practice?	Expanded or carved out roles to suit older nurses' needs, such as admission nurses and discharge nurses
Powell (2010)/New Zealand/ Two district health boards/Clinical/Charge Nurse Managers/ <i>n</i> = 76/ approximately 46% aged 40–49, 4.3% aged 50 years and over	To explore the understanding of the issues facing the older nurse in a New Zealand context	Descriptive survey/ Questionnaire	Clinical Nurse Managers (CNMs) are very aware of the challenges that older nurses face and they are using their own innovative strategies to retain older nurses in the workplace. The findings are similar to international literature	Organisation needs to support CNMs to do their jobs properly so they can support older nurses. Recruiting the right person for the job of CNM and get them to attend training and education to continuously grow with the role. Organisations should invest in generational diversity education and age discrimination education. Attention to the allocation of heavy patients and ensuring that there is the appropriate equipment for manual handling. The organisation AND CNM must find ways to make older nurses feel valued	Inequitable access to training as training opportunities are allocated to younger nurses by managers. Organisations, in terms of innovative rostering, reducing the number of night shifts and ensuring equitable access to training. CNMs work very hard to retain older nurses, making sure they feel valued, being listened to and supported despite limited support from the organisational levels. CNMs are working on their own to support older nurses	In order to implement strategies that could retain older nurses, nurse managers need support from organisations, in terms of innovative rostering, reducing the number of night shifts and ensuring equitable access to training. CNMs work very hard to retain older nurses, making sure they feel valued, being listened to and supported despite limited support from the organisational levels. CNMs are working on their own to support older nurses	

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Price and Reichert (2017)/ Canada/Various settings across eight provinces in Canada/Students, early-career, mid-to late-career nurses (self-selected), 100/185 were mid-to late career nurses/n = 185/Mid- to late-career nurses ranged in age from 25 to 70+ with more than half of participants (62%) being above 50 years of age.	To explore the experiences of nurses across all career stages as they relate to their professional development and work environment	Qualitative descriptive/ focus group	Despite the importance the late-career nurses attributed to ongoing education and training, this was not considered a priority by management. There was little support for maintaining the training requirements necessary to undertake their work. There was a perception of a lack of respect for late-career nurses	Discussed about older nurses' retention programmes in Canada. Employer's recognition of older nurses' continuous professional development needs is a vital part of a healthy work environment that will support their practice	Inequitable treatment, not receiving as many training opportunities compared with the beginning of the career. Their contributions do not get transferred into promotion. Their experiences are being used in training new nurses, but do not contribute towards their own career advancement		
Sinoski et al. (2020)/USA/ Hospital settings/RNs with at least 20 years of experience/n = 16/45–49 12.5% 50–54 31.25% 55–59 25% 60–64 31.25%	To explore the lived experiences of experienced nurses working in hospitals in Virginia to determine factors influencing the nurse's decision to retirement before the retirement eligibility age	Descriptive, phenomenological qualitative study/ semi-structured interviews	Experienced nurses identified a passion for nursing, self-efficacy, rewards, recognition, generational diversity, physical decline, technology fatigue and intention to leave as factors influencing their decisions to retire early. These themes are supported by current literature. Further, the study identified moral distress contributes to early retirement intentions among experienced nurses, this is a new theme unexplored in other literature	Further investigating into workplace factors creating or increasing moral distress in relation to loss of autonomy for experienced nurses and leading to patient safety concerns. A study with a wider base of eligible participants from multiple states would contribute to additional data for analysis. To increase the data collection period from 4 weeks to 6 months to allow more participants to share their experiences. Sharing results with nursing management and HR should raise awareness of the factors contributing to early retirement among experienced nurses and help develop retention strategies for this cohort of nurses	Not valued by leadership, treated no differently from new nurses. Feeling excluded at the workplace because co- workers are all younger. Feeling isolated by others because of older age. Not being able to get a part-time job despite extensive experience, employers prefer to hire novice nurses with lower pay rates		

(Continues)

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Walker & Clendon (2013)/ New Zealand/Across a range of settings in NZ, mainly in DHBs and primary health/RNs, ENs, midwives an NPs. (RNs $n = 2781$ (84.97%), ENs $n = 263$ (8.04%) midwives $n = 28$. NPs $n = 19/n = 3273/50$ years and older)	To report the retirement intentions of regulated nurses aged over 50 in the New Zealand workforce	Quantitative/online survey with free text response	New Zealand nursing age demographics have been confirmed and reflected in the respondents to the survey. In concordance with the international literature, good health, access to flexible working options, safe staffing levels and choice of shifts were all very important to older nurses. Evidence of ageism and a bullying culture towards older nurses was reported. Better pay levels were particularly important to younger late-career nurses (age 50–55). Specific to New Zealand, lack of retirement funds may delay retirement, and migration to Australia may exacerbate shortages and skill/experience deficits	Better choice of shifts, continued access to flexible hours and roles that are appropriate to older nurses' capabilities and still utilise their knowledge, skills and experiences will support their continued practice, despite on a part-time basis. Further research is urgently needed to explore the issues identified from this survey in more depth	Subtle put downs ageist comments about their abilities from colleagues and managers, nil access to promotions/ career development are discussed. Retirement decisions are influenced by experiences of ageism. workplace bullying identified by older nurses		
White et al. (2021)/Australia/ Victorian public health setting/RNs, ENs and midwives divided into four generational cohorts baby boomers, generation X, Generation Y, Generation Z/ $n = 18,963/3781$ Baby Boomers (BB), 9022 from Generation X (Gen X), 4971 from Generation Y (Gen Y), and 1189 from Generation Z (Gen Z)	To explore the experiences of change management, career intentions, learning and development and well-being across different generations of Victorian public health nurses	Secondary analysis of the 2018 People Matter Survey	In total, 3781 Baby Boomers, 9022 from Generation X, 4971 from Generation Y and 1189 from Generation Z responded to the survey. The experience of workplace change had the most adverse impact and increased with age (Gen Z: 34.3%; Gen Y: 49.3%; Gen X: 53.6% and BB: 56.3%) and most participants felt they had limited control over issues that caused stress	Supporting nurses through organisational change is essential. Further, promoting professional development and career progress, particularly in older nurses, may promote retention in an era of global nursing shortages	Older nurses encounter limited opportunities for career growth and perceive a lack of support from management for engaging in professional development initiatives. Therefore, they often face uncertainty about their prospects for career advancement if they continue working within their current organisation		

TABLE 2 (Continued)

Author(s)/year/country/ setting/population/sample size/age mean (SD) unless otherwise stated	Aims	Methodology/methods	Study outcomes	Recommendations	How is ageism portrayed in older nurses' work environments?	How does ageism impact older nurses' continuation of practice?	How can older nurses be supported to continue to practice?
Wray et al. (2009)/UK/ National health service trusts (NHS Trusts) and primary care trusts in UK/Qualified nurses and midwives/n = 510/62.1% of the participants were aged 50 or over, some participants were aged under 50 years to compare with older nurses/midwives	To report on the employment experiences of nurses and midwives with a particular focus on issues relating to age, ethnicity, ill-health and disability	Quantitative/Postal survey	Nurses over the age of 50 had significant less access to professional development opportunities than their younger colleagues	Although continuation of professional development is a key strategy to retain nurses of all ages, older nurses are not accessing it. Especially, the older nurses with illness/disability can be severely disadvantaged to gain access to professional development opportunities	Older nurses have significantly less access to professional development opportunities than their younger colleagues		

Gabrielle et al., 2008b; Li et al., 2020; Mion et al., 2006), experiences of being an older nurse (Denton et al., 2021; Gabrielle et al., 2008a; Letvak, 2003; Price & Reichert, 2017; Sinoski et al., 2020; White et al., 2021; Wray et al., 2009), age-related challenges (Fragar & Depczynski, 2011; Gabrielle et al., 2008b; Powell, 2010) and retirement of older nurses (Sinoski et al., 2020; Walker & Clendon, 2013). Kovner et al. (2007) examined the characteristics and work attitudes of older nurses and compared these with younger nurses and nurses who exited the nursing workforce.

The studies were conducted in hospitals (Balko, 2013; Cadiz, 2010; Gabrielle et al., 2008a, 2008b; Helaß et al., 2022; Letvak, 2003; Li et al., 2020; Mion et al., 2006; Powell, 2010; Sinoski et al., 2020; White et al., 2021), nursing homes (Bilinska et al., 2016) and other healthcare settings and involved nurses with (Helaß et al., 2022; Mion et al., 2006; Powell, 2010) and without managerial positions, including RNs, enrolled nurses and nurse practitioners (Clendon & Walker, 2016; Denton et al., 2021; White et al., 2021). The age range of older nurses varied across the studies, with some including nurses aged 40 and older (Bilinska et al., 2016; Cadiz, 2010; Gabrielle et al., 2008a, 2008b; Powell, 2010), whereas others recruited nurses aged 50 and above (Clendon & Walker, 2016; Fragar & Depczynski, 2011; Kovner et al., 2007; Sinoski et al., 2020; Walker & Clendon, 2013; Wray et al., 2009). Some studies recruited nurses based on their work experience (Sinoski et al., 2020) or generational cohort (White et al., 2021).

4.2 | Findings of the review

Based on our review of the literature, three themes in relation to ageism in older regulated nurses' practice settings were identified: (i) manifestation of ageism in older nurses' practice settings; (ii) impacts of ageism on older nurses; (iii) support for older nurses' continuation of practice.

4.2.1 | Theme 1. Manifestation of ageism in older nurses' practice settings

A recurring theme among the included studies was the presence of ageist beliefs held by younger nurses about the abilities of their older colleagues. While certain studies highlighted younger nurses' admiration for the exceptional performance of older nurses during emergencies (Letvak, 2003; Helaß et al., 2022), others revealed a perception that older nurses operated at a slower pace and contributed less to the team (Denton et al., 2021; Mion et al., 2006). Although two studies shed light on the older nurses' confidence in their capacities to build rapport with patients, taking pride in their clinical skills over less-seasoned colleagues (Helaß et al., 2022; Letvak, 2003), a less optimistic reality was also unveiled where their capabilities were doubted in practice settings (Sinoski et al., 2020). Across various studies, older nurse participants reported that their younger colleagues presumed their lack of essential skills were due to hospital-based training and that they should be reassigned

to non-clinical roles (Denton et al., 2021; Letvak, 2003; Mion et al., 2006). In contrast to their Western counterparts, older nurses in China often undervalued their skills and believed that they should retire to relieve the employment pressure on the younger generation (Li et al., 2020). Several studies uncovered age stereotypes perpetuated by nurse managers (Fragar & Depczynski, 2011; Letvak, 2003; Li et al., 2020; Price & Reichert, 2017). Some managers deemed it unwise to invest in ongoing education for older nurses, citing their nearing retirement and perceived lack of long-term career prospects (Fragar & Depczynski, 2011; Price & Reichert, 2017). Participants in studies by Li et al. (2020) and Letvak (2003) sensed managerial intentions to replace them with entry-level nurses receiving lower salaries. In Denton et al.'s (2021) study, older nurses recounted instances where managers advised them to adjust their employment expectations and be thankful for retaining their jobs.

4.2.2 | Theme 2. Impacts of ageism on older nurses

Ageism hindered older nurses from accessing training and promotions. Older nurses valued the opportunities for continued learning and believed that ongoing training was beneficial to supporting practice development (Gabrielle et al., 2008b). However, several studies reported that older nurses received negative responses from their managers when requesting training that would enhance the provision of nursing care (Fragar & Depczynski, 2011; Price & Reichert, 2017). Hence, older nurses were found to have significantly less access to training compared to their younger colleagues (Helaß et al., 2022; Powell, 2010). Consequently, older nurses reported being ineligible for promotion because they lacked evidence of professional development (Kovner et al., 2007; White et al., 2021; Wray et al., 2009). The impact of ageism also extended to older nurses' emotional well-being, retention and performance.

Fragar and Depczynski (2011) highlighted that older nurses' perspectives on potential organisational changes or restructuring were frequently disregarded. The older nurse participants, who were supportive of the organisation and willing to be consulted, found that changes, including role modifications and increased performance expectations, were implemented without prior consultation (Fragar & Depczynski, 2011). Excluded from discussions about organisational changes, older nurses expressed a sense of powerlessness, especially considering that their opinions had been valued earlier in their careers (Fragar & Depczynski, 2011). In Walker and Clendon's study (2013), older nurses reported their managers treated them differently from their younger colleagues and attributed the inequitable managerial practices to their age. This left the older nurses feeling emotionally distressed and led to a perception that their substantial contributions to the nursing profession over numerous decades were not recognised (Walker & Clendon, 2013).

Additionally, ageism was identified as associated with older nurses' continuation of practice (Bilinska et al., 2016). Bilinska and others (2016) compared organisational age climate (OAC) across nursing companies, which is a concept that examines employees' shared

perception of the value of older nurses in their organisation. Further, OAC measures the positive attributes associated with older nurses among their colleagues. The authors have identified that in companies with lower OAC, older nurses were found to have increased turnover intentions and lower job satisfaction. Similarly, in organisations with an ageist workplace climate, there were higher turnover intentions, lower organisational commitment and work engagement among older nurses (Balko, 2013; Cadiz, 2010). Overall, ageism negatively impacted older nurses' career development opportunities and well-being, hampering their continuation of the practice.

4.2.3 | Theme 3. Support for older nurses' continuation of practice

The review identified three factors that could support older nurses' continuation of practice. First, maintaining a positive perspective on ageing was identified as a key strategy (Clendon & Walker, 2016; Gabrielle et al., 2008b; Letvak, 2003). This was characterised as self-acceptance of older age and engaging in self-care practices, such as exercise and healthy eating to maintain fitness to continue to practice (Clendon & Walker, 2016; Gabrielle et al., 2008b; Letvak, 2003).

Second, fostering positive relationships with supervisors and peers was evidenced as a driving force for older nurses' continuation of practice (Clendon & Walker, 2016; Denton et al., 2021; Sinoski et al., 2020). The inclusion of older nurses in social activities reinforces their sense of belonging and significance (Clendon & Walker, 2016). Denton et al. (2021) and Sinoski et al. (2020) also found that older nurses desired to find camaraderie in their workplaces and wished to be included in social activities. Helaß et al. (2022) highlighted the role of nurse managers in supporting older nurses' practice by involving them in decision-making processes and ensuring equitable access to training and promotional opportunities.

Finally, a workplace environment that values all age groups has been identified as pivotal for older nurses' continuation of practice (Gabrielle et al., 2008a). A strong organisational age climate may reduce negative beliefs held by young nurses against older nurses (Bilinska et al., 2016). Further, an age-inclusive workplace with adaptable work schedules, innovative rostering, redefined job responsibilities and the optimisation of ergonomic workspaces tailored to the specific needs of older nurses were identified as supportive for older nurses' practice (Gabrielle et al., 2008a; Mion et al., 2006). Nonetheless, the lack of workplace initiatives made it difficult for nurse managers to provide older nurses with flexibility (Helaß et al., 2022; Powell, 2010) and older nurses were primarily relying on their own efforts to continue to practice (Clendon & Walker, 2016; Gabrielle et al., 2008b; Letvak, 2003).

5 | DISCUSSION

This systematic review sheds light on the pervasive presence of ageism within older nurses' practice settings. The findings in the

first theme highlighted that ageism is not only perpetuated by older nurses' colleagues, as reported by Denton et al. (2021), Mion et al. (2006) and Sinoski et al. (2020) but also by a significant incongruity in how older nurses perceive their competencies and how their managers perceive them. Notably, many older nurses took pride in their extensive clinical experience (Helaß et al., 2022; Letvak, 2003). Yet, their managers failed to recognise the value of supporting their continuation of practice (Fragar & Depczynski, 2011; Letvak, 2003; Li et al., 2020; Price & Reichert, 2017). This discrepancy is further exacerbated by instances where older nurses were advised to lower their employment expectations (Denton et al., 2021). These negative age stereotypes about older nurses could result in them working in a setting where their skills and knowledge are not respected or acknowledged by their co-workers, and their contribution is not recognised by management, evoking emotional upset (Walker & Clendon, 2013).

Our review found older nurses were unsupported by their managers in accessing training and promotions and were excluded from the decision-making process regarding organisational restructuring (Fragar & Depczynski, 2011; Price & Reichert, 2017). These ageist practices were found to be associated with low job satisfaction, intentions to leave, poor organisational performance and attrition from the nursing workforce (Bilinska et al., 2016; Cadiz, 2010). Thus, older nurses may practice in environments where relationships with younger colleagues are challenging, with unsupportive management, and inequitable access to resources. Additionally, these factors were important indicators impacting nurses' work motives, the length of their work lives and perceived organisational support as evidenced in the wider literature (Armstrong-Stassen & Ursel, 2009; Baljoon et al., 2018; Nurmeksela et al., 2022). The lack of organisational support has been found to correlate with low career satisfaction and turnover among older workers (Armstrong-Stassen & Ursel, 2009).

The findings of this systematic review indicate that older nurses' continuation of practice can be supported by maintaining a positive personal outlook, building meaningful relationships at work and promoting an age-inclusive work environment (Clendon & Walker, 2016; Denton et al., 2021; Gabrielle et al., 2008a; Letvak, 2003; Mion et al., 2006; Sinoski et al., 2020). These findings indicate supporting older nurses' continuation of practice requires strategies at personal, interpersonal and organisational levels. We also identified that the impacts of ageism in older nurses' practice settings are multifaceted since it has effects on older nurses' emotional well-being, relationships with co-workers and retention (Bilinska et al., 2016; Cadiz, 2010; Walker & Clendon, 2013). Therefore, implementing policies that support older nurses' continuation of practice may have positive effects on addressing ageism. Nonetheless, despite the impact of ageism, we could not identify studies that directly address interventions or strategies that could be used to combat ageism. This could indicate that ageism is often overlooked and unchallenged in older nurses' practice settings.

The global report on ageism (WHO, 2021) recommends combating ageism through policies and laws, educational activities and intergenerational interventions. Although there is limited research on organisational support aimed at addressing ageism in older nurses'

practice settings, studies in other disciplines show the importance of organisational policies and practices that promote age diversity and inclusivity as well as the provision of training and development opportunities for older workers (Franz, 2023; Marcaletti et al., 2023; Nedeljko et al., 2023; von Humboldt et al., 2023 et al., 2023). For example, Marcaletti et al. (2023) found that older workers were more likely to continue working when they received organisational support, such as flexible working arrangements and access to training and development programmes. Nedeljko et al. (2023) also highlighted the effectiveness of ergonomic adjustments and technology assistance in supporting older workers' extended work lives. Furthermore, Franz (2023) emphasised the need for organisational policies that address age-based stereotypes and discrimination, as well as promoting intergenerational collaboration and knowledge-sharing among age-diverse workforces.

Organisational support plays a critical role in promoting older workers' continuation of practice and ensuring a diverse and inclusive workforce. In older nurses' practice settings, organisational-led initiatives may be needed to develop age-inclusive policies and offer training services to foster intergenerational collaboration within the age-diverse nursing team. Further, an age-inclusive work environment could benefit nurses of all ages and potentially extend their work lives until or beyond the official retirement age. However, there is scant research on older nurses' awareness and perceptions of such policies and practices in their practice settings and whether the implementation of such policies and practices is effective in supporting older nurses. The lack of a clear and consistent definition of older nurses may also hinder the development of relevant organisational policies and programmes. Future research should focus on identifying older nurses in their practice settings and exploring organisational-level initiatives, programmes, policies and other forms of support needed to address ageism and enable older nurses' continuation of practice.

5.1 | Strengths and limitations

This systematic review adhered to a rigorous and robust methodology provided by JBI. Further, Covidence facilitated the identification and removal of duplicate studies, enhancing the efficiency and accuracy of the screening process. One of the key strengths of this review is its international focus. It included studies from diverse geographical regions, contributing to a comprehensive understanding of ageism in older nurses' practice settings beyond a single cultural context. Lastly, the systematic search strategy yielded a substantial number of studies that met the inclusion criteria, allowing for a comprehensive analysis and synthesis of data relevant to the review question and aims.

While this review provides valuable insight into ageism in older nurses' practice settings, it is important to acknowledge some limitations. Firstly, our search was limited to English language publications, potentially excluding relevant studies published in other languages. Secondly, the absence of a consistent definition of older nurses in the literature resulted in our review including studies with populations that differed in age. This variability in age could affect the applicability of the findings to specific age groups of older nurses.

Additionally, due to the limited availability of studies that explicitly focused on ageism in this specific population, we had to include studies covering a range of related topics, which may have diluted the data we could extract. Finally, while we conducted a thorough search of peer-reviewed literature, searching the grey literature may have further strengthened our findings.

6 | CONCLUSION

Overall, our review highlights the negative impact of ageism on older nurses' career development, well-being and ability to continue to practice. Future research should focus on identifying older nurses in the organisations and explore organisational initiatives and policies aiming at addressing ageism and enabling their continuation of practice. In addition, healthcare organisations should develop and implement policies and interventions to combat ageism. This may foster age-inclusive workplaces that could help retain nurses of all ages, this could have serious implications for relieving the global nursing shortage.

AUTHOR CONTRIBUTIONS

Conceptualisation: CC, KS, SN¹, SN²; Literature search: CC, KS, SN¹, SN²; Screening of papers and data extraction: CC, KS, SN¹, SN², JM; Formal analysis: CC, KS, SN¹, SN², JM; Writing—original draft preparation: CC; Writing—review and editing: CC, KS, SN¹, SN², JM. All authors have read and agreed to the final version of the manuscript.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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APPENDIX

SEARCH STRATEGIES

Database and date	CINAHL 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) N1 (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) N2 (conflict* OR tension* OR diversit* OR relation*) OR (age) N2 (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	159
Database and date	Scopus 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) W/1 (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) W/2 (conflict* OR tension* OR diversit* OR relation*) OR (age) W/2 (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	1475
Database and date	MEDLINE 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) N1 (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) N2 (conflict* OR tension* OR diversit* OR relation*) OR (age) N2 (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	146
Database and date	PsycINFO 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) ADJ1 (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) ADJ2 (conflict* OR tension* OR diversit* OR relation*) OR (age) ADJ2 (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	313
Database and date	Google Scholar 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) AND (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) AND (conflict* OR tension* OR diversit* OR relation*) OR (age) AND (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)

APPENDIX (Continued)

Database and date	Google Scholar 5 May 2022
Parameters	Year (2000–2022)
Total search results	7
Database and date	ProQuest 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) NEAR/1 (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) NEAR/2 (conflict* OR tension* OR diversit* OR relation*) OR (age) NEAR/2 (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	22
Database and date	nzresearch.org.nz 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) AND (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) AND (conflict* OR tension* OR diversit* OR relation*) OR (age) AND (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	4
Database and date	OATD.org 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) AND (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) AND (conflict* OR tension* OR diversit* OR relation*) OR (age) AND (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	16
Database and date	ETHOS 5 May 2022
Key search terms	(old* or experienced* or 'late career' or 'late-career' or seasoned or senior) AND (nurse or nurses or nursing) AND (ageism OR agism OR ageist OR 'age discrimina*' OR 'age prejudice*' OR 'age identit*' OR 'age stereotyp*' OR 'age attitude*' OR 'age dynamic*' OR 'ageist stereotyp*' OR 'agist stereotyp*') OR (intergenerational OR generational OR workplace) AND (conflict* OR tension* OR diversit* OR relation*) OR (age) AND (discrimina* OR stereoty* OR bias* OR attitude* OR favouritism OR favouritism OR conflict)
Parameters	Year (2000–2022)
Total search results	73