

Factors Impacting Registered Nurse Attrition in Acute Care Using Maslow's Hierarchy of Needs as A Conceptual Framework

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Abstract

The global shortage of Registered Nurses (RNs) has deteriorated since COVID-19, with the WHO reporting a 5.9 million shortfall. In the UK 26,755 nurses left in 2023, many under 45 and earlier than planned. Acute care settings are severely affected, as understaffing increases patient morbidity and mortality. Factors contributing to RN attrition are many, varied and inter-related, reflecting the complexity of this issue. A review of three data bases was undertaken to retrieve literature pertaining to post registration RN retention in acute care from 2000- 2024. Findings were narratively synthesised and mapped to Maslow's Hierarchy of Needs, used as a framework to explore issues relating to RN attrition. Unmet needs at all levels contribute to attrition. Breaks, safety, and fair pay are neglected, while a lack of team culture, recognition, and career growth hinders belonging and self-actualisation. A holistic, needs-based approach is vital to improve nurse retention and workforce sustainability in acute care.

Keywords: Registered Nurse, Acute care, Hospital, Retention, Attrition, Maslow

Introduction

Retention of registered nurses is a global issue, leading to a worldwide shortage. Pre-pandemic, the World Health Organization (WHO) reported a shortfall of 5.9 million Registered Nurses (RNs) but the impact of working through the Covid-19 pandemic led to further increases in numbers of nurses leaving the profession, thus exacerbating the shortfall (Holmes, 2022, Falatah, 2021). In the UK in 2023 alone, 26,755 RNs left the workforce (Royal College of Nursing, 2023). More than half of these did so earlier than planned, where two thirds of RNs leaving the National Health Service (NHS) in 2022/23 were under the age of 45 (Holmes, 2022), so unrelated to retirement.

The majority of UK RNs work in NHS acute-care settings, where adequate RN levels are a safety issue, associated with reducing patient morbidity and mortality. These studies reported that risk of death increased when patients were exposed to low RN staffing levels, and importantly, a risk not mitigated by temporary or unqualified staffing (Ball and Griffiths, 2022; Dall'Orta et al, 2022; Griffiths et al, 2024). There is now good evidence linking staffing levels, and skill mix with patient harm, and especially in relation to falls, pressure ulcers, medication errors, clinical incidents and mortality (RCN, 2023).

A number of studies and reviews have been undertaken to investigate factors that contribute towards attrition of nursing staff in acute care settings, for example: Marufu et al, 2021; Pressley and Garside, 2023; Vries et al, 2023. Influencing factors relate to both organisational and personal factors (Table 1).

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Table 1: Factors contributing to RN attrition from acute care settings

	Key Issues	Examples
Organisational Factors	Organisational/work environment	<ul style="list-style-type: none"> • inadequate and inappropriate resources • unsafe working environments • lack of defined areas of responsibility
	Staffing	<ul style="list-style-type: none"> • inadequate and inappropriate staffing levels: high patient/nurse ratios and inappropriate skill mix within staff team • inflexible working hours and shift patterns • inadequate time off (breaks, days off, annual leave), and time off is not adhered to, or respected by the organisation
	Leadership and Management	<ul style="list-style-type: none"> • ineffective leadership styles in promoting positive cultures and team relationships • inaccessible leadership • unsupportive leaders and managers
	Support at work	<ul style="list-style-type: none"> • lack of additional support mechanisms such as mentoring, coaching, strategies to support staff well-being
	Staff development	<ul style="list-style-type: none"> • lack of adequate and appropriate training • lack of opportunities for further education and career advancement
Personal Factors	Demographic factors (e.g. age, gender, personal health, caring responsibilities)	<ul style="list-style-type: none"> • lack of recognition by organisations to provide adequate support and flexible working arrangements to support employees to manage personal needs and ensure 'work-life' balance
	Personal and professional satisfaction	<ul style="list-style-type: none"> • inadequate opportunities to voice concerns • feelings of low autonomy and commitment to the organisation • low job satisfaction related to high workloads, moral distress, injury and 'burnout' • inadequate support to manage work-related stresses • lack of recognition of experience
	Financial factors	<ul style="list-style-type: none"> • inadequate pay and conditions • lack of supporting schemes, such as sick pay, carer's leave, maternity/paternity leave and pensions

At organisational level, key issues are working practices and systems, culture, ongoing education, staffing levels and mix, management and leadership. At the personal level, age, gender, health, experience, resilience, home caring responsibilities and financial situation, all



impact and interact with organisational-level factors to influence an individual's decision about whether to remain in the profession.

Recognising the key factors contributing to RN attrition underpins the strategies developed to enhance RN retention. However, few have demonstrated lasting impact, possibly because interventions have focused on specific issues rather than adopting a multi-faceted approach reflecting the complex interaction of many contributory factors, hence the establishment of the NHS Improvement Retention Collaboration to tackle the challenge (NHS, 2024), attempting to embrace a systematic approach to staff attrition, encompassing multiple influences.

Using models in healthcare provide conceptual frameworks to inform the way we investigate and interpret health and illness (Mullins-Owens, 2016). Maslow's Hierarchy of Needs is an established model (Maslow, 1943; Figure 1), proposing that individuals' needs are hierarchical in structure across five levels, where fundamental needs relating to physical survival have to be met before we can consider the higher levels relating to psychological health. The five levels, from the bottom up, being: physiological needs; safety and security; love and belonging; self-esteem; and self-actualisation, at which point the individual can experience purpose and achieve their potential. Often used in healthcare as a teaching tool, Maslow's model has also been used to support nursing retention strategies.

Groff-Paris & Terhaar (2010), used Maslow's Hierarchy to guide their service improvement and promote a healthier work environment and thus improve retention in a 300-bed US community hospital. Another US service improvement, conducted with 15,000 nurses in 26 hospitals during COVID-19 used Maslow's Hierarchy to guide changes in workplace support and working practices prompted by their observations that nurse's ability to meet their own physiological needs was being impeded, and needed to be prioritised (Hayre-Kwan et al, 2021). In the UK, NHS Employers (2022) supporting the wellbeing needs of staff was seen to compliment Maslow's hierarchy of need, simplifying the model into Basic Needs, Psychological Needs and Self-Fulfilment Needs, presenting a visual pyramid as a poster to promote staff wellbeing needs. Whilst in Taiwan, Chiao et al (2021) recognised the potential of the model to aid understanding about intention to stay by surveying 729 nurses in one hospital. Findings indicated that nurses' intention to stay was moderately correlated with the lower four levels of the pyramid, and highly correlated with self-actualisation (highest level).

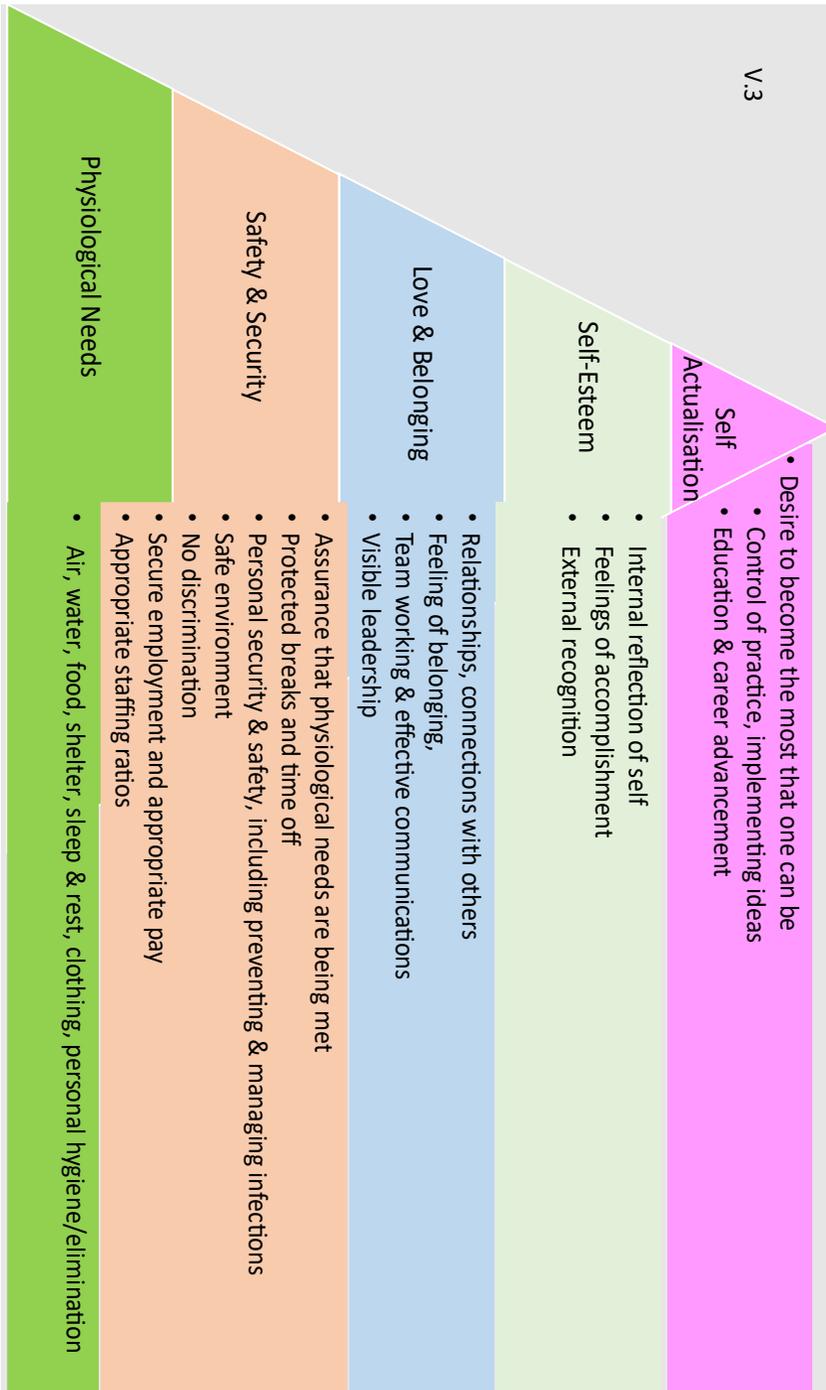
In this review we aimed to map existing knowledge of factors relating to RN attrition to Maslow's Hierarchy of Needs, highlighting the importance of positive organisational and personal factors at the five different levels, and how addressing these could be intrinsically linked with improved RN retention in acute care. As such, this review is the first to comprehensively collate and map issues relating to retention to all five levels of Maslow's Hierarchy of Needs, facilitating a unique and holistic perspective to understand and identify how best to prevent attrition and support retention of a valuable and professional workforce.

Methods

A comprehensive literature search was conducted across three academic databases: CINAHL, Medline, and PsycINFO. The search aimed to identify articles related to registered nurse (RN) attrition and retention in acute hospital settings. The inclusion criteria were:

Language: English

Figure 1: Maslow's Hierarchy of Needs and Factors supporting RN retention mapped to each level (Adapted from Maslow, 1943)



Publication period: January 2000 – March 2024

Population: Registered nurses working in acute hospital settings (adult nursing)

Study type: Reviews (systematic reviews, scoping reviews, literature reviews, integrative reviews)

Focus: RN attrition, retention, turnover, or intent to stay/leave

Search Strategy

Keywords and synonyms were combined using Boolean operators. The primary search strings included:

(retention OR retain OR attrition OR turnover OR "intent to stay" OR "intent to leave")
AND

(Nurs* OR "registered nurse" OR "adult nursing")AND("acute hospital" OR "acute care")

Search Results

Initial results: 208 articles retrieved

Screening: Titles and abstracts were screened for relevance

Included: 89 review articles met the inclusion criteria (systematic reviews, scoping reviews, literature reviews, integrative reviews)

Additional sources: Reference lists of included studies were hand-searched to identify further relevant literature

Exclusion Criteria

Studies not focused on acute hospital settings

Non-English publications

Studies focused on non-RN populations (e.g., nursing assistants, student nurses)

Data Analysis

Using Maslow's Hierarchy of Needs as a theoretical framework, key issues contributing to RN attrition in acute care were identified and mapped to the five tiers of Maslow's model (see Figure 1). The authorship team collaboratively reviewed and categorized these issues to ensure consistency and rigor.

Findings

Physiological Needs

Physiological needs (breathing, food, water, shelter, clothing, personal hygiene/elimination and sleep) are the basic biological requirements needed for survival. Meeting these needs for those in their care, are considered to be the 'fundamentals of nursing' (NMC, 2015). However, nurses and their managers often neglect to apply these essentials to themselves. For nurses to be able to perform their jobs effectively, they need to ensure that their basic physiological needs are met in both the workplace and in their personal lives to maintain their health and wellbeing. In the workplace, the organisation is responsible for the physical environment, and

providing opportunities and work schedules to ensure these needs are met. The organisation also has a responsibility to ensure staff have the appropriate knowledge to support development of their own health literacy, so that staff know how they can best care for themselves, but also that they are being supported by the organisation to do this. Although self-care and stress management are promoted for nurses (RCN, 2024) in practice this does not always happen. In a US survey of 335 RNs, Ross et al (2018) found that more than half were overweight (34.1%) or obese (23.4%), and 80.1% were "sedentary" (≥ 3 hr sitting/day), and only 47.2% consumed 5+ servings of fruits/vegetables daily. Positive job satisfaction was associated with higher levels of physical activity and fruit/vegetable consumption, although as a cross-sectional study, cause and effect could not be ascertained.

In the workplace, regular breaks should be accommodated to ensure that staff are able to **rest, eat and drink**. In the UK, employment law ensures that employers should provide regular breaks both within and between shifts and that employers have a responsibility to provide suitable facilities for rest and food preparation for breaks during a working day (<https://www.gov.uk/rest-breaks-work>, accessed 10/07/2025). Adequate rest breaks, supportive work schedules and sufficient sleep are important for health and wellbeing (Weston et al, 2024), with studies demonstrating that lack of sleep and sleep disorders are associated with burnout (Membrive-Jiménez et al, 2022), stress (Kalmbach et al, 2018) and lower quality of care impacting on patient safety (Stimpfel et al, 2019).

The Royal College of Nursing (RCN) have reported a lack of sufficient breaks being taken in both hospital and community settings by RNs (RCN, 2018) resulting in staff drinking insufficiently whilst on shift. Two studies have clearly demonstrated that high numbers of health professionals, including RNs, were dehydrated on commencing their shifts with numbers rising by the end, indicating that staff seem unaware of the importance of keeping themselves hydrated (El-Sharkawy et al, 2016; Kase et al, 2022). As dehydration can impair cognitive ability and mood (Masento et al, 2014), the potential effect on health professionals ability to perform their jobs safely and effectively is in question.

Staff should feel able to **maintain personal hygiene** including using the toilet and changing menstrual products when needed. Nursing staff report delaying voiding their bladders due to busy work, poor toilet facilities and indolence (Bendtsen et al, 2009). The term 'Nurses Bladder', also known as 'Infrequent Voiders Syndrome', has been coined for staff who delay urinating. The health impacts of this over time can include increased risk of urinary tract infections (Jagtap et al, 2022).

Shelter or accommodation in which staff feel safe, secure and able to rest in comfort is a basic physiological need that must be met for staff to flourish at work. This is particularly relevant to international staff who are recruited from abroad to the NHS where support with settling in and securing suitable accommodation has been identified, leading to the development of a specific strategy and toolkit for international NHS staff retention (NHS, 2024) which suggests addressing four pillars to aid the retention of international nurses: creating strong foundations, making new recruits feel welcome, building a sense of belonging and maximising personal and professional growth.

Whilst appropriate clothing is an important component of Maslow's Hierarchy, which relates to several levels: physiological need (keeping warm), safety (protection against injury and infection), belonging and self-esteem (uniforms denote role), we were unable to find any



evidence that relates clothing (either inappropriate or insufficient) to RN attrition and retention.

Safety and Security

Staff need to feel safe and secure in their personal and professional lives before they can achieve their higher-level needs in Maslow's Hierarchy. This includes feeling safe and secure that their physiological needs are being met appropriately and sufficiently, but goes further to considering their work, personal and wider environments. Whilst the wider societal and political factors are beyond the remit of this review, employers' safety have a key role to play with creating and enforcing policies and a culture that ensure staff feel safe and secure. Threats to safety can arise from unmet physiological needs, unsafe staffing ratios and unsafe environments, leading to exposure to violence, injury and infection. Whilst threats to security arise from concerns such as permanency of job, shift patterns and fair pay.

In mental health, a systematic review by Adams et al (2021) concluded that factors causing mental health nurses to leave, or their intent to leave, included patient or visitor-initiated violence (physical and verbal abuse), fear of assault and perceived risk of assault, whilst in acute-care services triggers included substance abuse, overcrowding and staff shortages. In emergency settings there are further challenges, RNs have a higher exposure to witnessing traumatic events, critical and severe injuries, death and resuscitation, resulting in high levels of occupational stress, burnout, compassion fatigue, and posttraumatic stress disorder and secondary traumatic stress (McDermid et al.,2020). RNs in emergency-care settings can normalised violence as part of the job, with incidents being underreported, despite reports of high turnover rates and clinical signs of PTSD manifested as stress, sleep disturbance, depression, anger and loss of concentration (McDermid et al., 2020) . An additional factor in workplace security are issues relating to horizontal violence (referring to inter-group conflict, workplace bullying and incivility) so RNs are more likely to leave or change careers (Zhang et al, 2022).

Conditions of employment referring to security of tenure and fair pay are reported as key factors in RN retention (Ball & Ejebu, 2021), although reports differ as to whether this becomes a secondary factor if RNs are satisfied with other aspects of their work. In the UK, a 2022 poll conducted by the #WithNHSCampaign (representing 13 NHS unions) reported that four out of five NHS staff said that pay is the main reason they would leave their jobs (Cowin, 2002).

Security of tenure and fair **pay** are key factors in staff being able to maintain a safe and secure lifestyle. The 2022 NHS poll reported that four out of five NHS staff said that pay is the main reason they would leave their jobs (National Health Executive, 2022). Whereas a review of job satisfaction, intent to leave and staff turnover identified four studies from USA, Australia and Singapore that examined nurses' opinions of pay through surveys, including both salary and fringe benefits. Two studies (Fang, 2001; Cowin, 2002) found no statistically significant influence of pay on turnover or intention to leave, although one of these studies (Fang, 2001) combined multiple questions into one score therefore the association with pay alone is impossible to determine (Coomber & Barriball 2007). Cowin (2002) identified that nurses feel that their pay is not reflective of their levels of skill, responsibility, education and experience, increasingly so with more experienced staff, and the unfairness of this in comparison with other professions. Rambur et al., (2003) further found that male nurses (53%) were more

likely to be leaving due to dissatisfaction with salary than female participants (26%), perhaps reflecting cultural expectations of pay between genders. Highlighting that retention is a multifaceted issue, Cowin (2002) also raised the finding that pay was not the primary problem for retention when other aspects of the work were enjoyable.

In a scoping review on nurse retention, Ball & Ejebu (2021) identified five studies from the UK, Sweden, the USA, and Iran that found a positive association between wages and nurses' intent to stay; also citing a Canadian study linking pension benefits to retention. Moseley et al (2008) highlighted a dissatisfaction with pay being a particular risk factor for older nurses wanting to leave. It is important to note that all of the studies identified in these reviews looked at intent to stay and leave, with none measuring the impact on retention of an actual salary increase.

Many nurses move abroad to work, and benefit from support from their employer to feel safe and secure in their new country. This includes the physical aspects of safe and secure **accommodation** and also an absence of **discrimination** from patients and staff. Pressley et al., (2022) highlighted that to support retention, leaders need to understand the reasons behind migration, to identify short term, transitional and long term needs, to manage cultural and language barriers, and ensure a zero tolerance approach to racism and discrimination. Research has highlighted the need to provide tailored support for specific minority groups, due to unique identities and responsibilities, and to ensure an inclusive academic culture and curriculum (Zambas et al, 2020).

Flexible working allows staff to care for their families alongside work commitments, promoting a sense of security in their lives that they are able to support their families. Research has identified that flexible working is a positive factor in workplace retention (NHS, 2021; Moseley et al., 2008). Vries et al (2023) found that flexible working positively impacts retention, and that irregular working hours and on-call duties can have a negative impact on retention. Moseley et al., (2008) discussed how flexible and part time working, self-scheduling, shift preferences, and phased retirement is particularly effective with retaining the retention and turnover of older nurses. The majority of studies reviewed were from USA or Canada.

Staff need to feel safe from bullying and violence at work, especially in settings such as mental health wards and emergency departments where violence from patients is more likely to be reported and is a factor in staff turnover (Jamil, 2024; McDermid et al, 2020; Zhang et al, 2022). This is influenced by **staffing levels** which research has identified as a factor in retention (Chenoweth, 2009; Marufu et al, 2021). It is also influenced by an enforced zero tolerance approach.

Love and Belonging (sense of connection)

Supportive **leadership and management** may be key to workplace retention. A 2020 survey highlighted that out of the nurses considering leaving the profession during the next year, 44% cited lack of support from management as a factor (Royal College of Nursing, 2020). Similarly, this finding was further supported by Bahlman et al., in 2023. in their meta aggregation study of nurses motivations to leave, who found lack of support from managers was a common cause for attrition.

Coomber & Barriball (2007) identified five studies from Singapore, USA and Taiwan that used scale measurements of leadership styles and characteristics against nurses turnover and



intent to leave. Satisfaction with leadership was generally linked positively with intent to stay, however clear conclusions are difficult due to varying definitions and sometimes vagueness of what is defined as leadership, and variations of components used within measurement scales.

Marufu et al (2021) also identified leadership and management as a major factor in a review of nursing retention, breaking this down into sub themes. Included in this review, ten studies looked at leadership style, linking the positive effects of transformational leadership and the negative effects of abusive leadership with retention. Thirteen studies looked at lack of support from managers, and five considered lack of recognition and not feeling valued. Other themes included managers visibility in the clinical environment, and listening to views.

Cardiff et al (2023) completed a review of how nurse leaders can positively influence retention and concluded that leaders can: (1) foster relational connectedness; (2) enable professional practice autonomy; (3) cultivate healthful workplace cultures; (4) support professional growth and development. Leaders therefore have the power to influence many aspects of nurses needs according to Maslow's hierarchy.

A supportive workplace **culture**, free from bullying and discrimination, is key to nurses feeling connected to their colleagues and organisation, resulting in a sense of belonging and teamwork. Organisational culture has been described as a shared way of thinking, feeling and behaving (Mannion & Davies, 2018) and can be influenced by leadership, peers and by team dynamics.

Cardiff et al (2023) identified a large number of studies that positively linked nurse leadership with workplace culture, job satisfaction, organisational commitment and intent to stay. Details of how leaders can influence culture include the promotion of civility, autonomy and psychological safety; ethical care; valuing nurses as people and professionals; the need for acknowledgement and feeling needed by others; welcoming and supporting the integration of newly qualified nurses into the team; fostering positive relationships with teams.

Joseph et al (2022) found that workplace culture is an important factor with retaining newly qualified mental health nurses, including the environment, role modelling, and supportive colleagues. Leadership and peer colleagues were found to have a role in creating a positive culture, with cohesion and supporting one another being key.

Vries et al (2023) has also associated positive workplace culture with retention, highlighting the need for respect, reciprocity and humanity. This review linked culture with leadership, and how types and quality of leadership influence culture. The difficulty with this area of study is that it is difficult to define and measure what a healthy workplace is, and how to achieve it. Although factors have been identified such as organisational support, supportive leadership and colleagues, the mix of any group of individuals will always be unique and difficult to quantify or explain, and the needs and personalities of each individual within a team will vary.

Preceptorship, mentoring, externship and internship programmes have demonstrated success with workforce retention, supporting new staff to feel welcomed to an organisation and able to do their jobs. Nursing retention is a particular problem with newly qualified staff, also attributed to interrelated demographic factors such as age, fewer years of experience and childcare responsibilities (Feixia Wu et al, 2022). Such findings suggest a need for higher levels of support when newly qualified (Brook et al, 2019, 2024).

Brook et al (2019) found that preceptorship programmes with and without mentors mostly had a positive effect on retention, although some internship and externship programmes had a negative effect. Halter et al (2017) found positive evidence linking preceptorship with retention, although with moderate quality evidence from poorly controlled primary studies.

The international literature uses different terms including residency programmes, mentorship programmes, internships and externships, without clear definitions of each, making it difficult to evaluate and compare findings. For example, Vazquez- Calatayud et al (2023) summarised that either nurse residency or individualised mentoring programmes, lasting 1 year, and multi-component, addressing core competencies (interpersonal and intrinsic skills and attitudes) and specific competencies (according to specialism) and including preceptor or mentor components seem to be the most comprehensive and effective in promoting the retention of new nurses in the hospital setting. Further, the quality of the content and teaching of these programmes is challenging to evaluate in order to compare interventions.

Recognition has also been cited as a factor in the retention literature that makes staff feel valued by their employer. Moseley et al (2008) found that factors enhancing retention of older nurses included respect, recognition, empowerment and autonomy.

Research has explored the reasons why older nurses leave the profession before they intended to. Factors include: respect and recognition; managerial characteristics; autonomy; career development and education; shift working; financial issues; personal health; computerisation (Moseley et al, 2008; Uthaman et al, 2015; Storey et al, 2009).

Self Esteem (confidence, achievement, respect of others, the need to be a unique individual)

Self-esteem is built through a combination of many of the factors already discussed, which allow employees to feel that they are in a safe environment, that they are part of something, and therefore can feel good about themselves. Feeling safe, supported and with opportunities to continue learning and progressing with skills and career options can allow staff to feel empowered, challenged and that they are reaching their potential.

In recent years a development of legacy roles has recognised and celebrated the knowledge and skills of those nearing the ends of their careers, providing roles in which they support newly qualified members of staff, yet there is a lack of literature which has evaluated the effectiveness of these roles and how this may link to retention.

Work related stress, burnout, and high workloads have been related with poor retention. Coomber & Barriball (2007) have reported an association with stress and intention to leave, looking at studies that used a variety of measurements including rating scales and written comments, however noting that some literature fails to report on what particular stressors are. Shader et al (2001) however identified a particular stressors as lack of stability in the work schedule. The emotional, mental and physical effects on staff from short staffing and overwork affects self-esteem and confidence as they are unable to provide the level of care they would like to (RCN, 2023) . As this factor is tied up with many other factors mentioned in this review, such as leadership, culture, work relationship, staffing levels and personal factors such as resilience, it is difficult to unpick it in a measurable way.

Being able to provide the level of care that nurses feel is sufficient enables them to feel morally satisfied. **Moral distress** has been described as “when you know the ethically correct action to take but you are constrained from taking it” (Jones, 2021). This conflict is increased in



certain situations, for example during a pandemic, but is influenced in all nursing settings by factors such as insufficient staffing and resources, team dynamics, and inappropriate environments.

Self Actualisation

Opportunities for **education and career advancement** help employees to thrive and to reach their potential, allowing for personal and professional growth. This is a theme that arises frequently in the literature as a reason to leave or stay in a job. Conversely, low job satisfaction, being unable to find job that meets interests or skills, lack of challenge, and too much administration work can negatively affect retention rates (Vries et al, 2023).

Moseley et al (2008) found that there can be an unfair perception of older nurses not wanting to develop their careers further, and that challenges are welcomed to avoid stagnation. They argue that different learning styles and needs need to be considered for nurses of different ages. In a review of hospital nurse retention, Marufu et al (2021) identified 20 studies that linked education and career advancement opportunities with retention. Surveys completed by nurses found that these opportunities would increase their likelihood to stay. Links were also made with staffing levels, as short staffing was perceived as a barrier to being able to undertake these opportunities.

Moseley et al (2008) discussed empowerment and autonomy as a feature particularly important to older nurses, including the need for responsibility, control, and ability to take ownership of work outcomes. Brook et al (2019) reviewed studies of retention interventions and found that the implementation of clinical ladder and advancement programmes decreased turnover, however as a range of interventions were used between individual studies it was not possible to compare findings and strengthen the evidence base.

Discussion

In order to meet the global shortfall of nurses, it is essential we continue to tackle the complex issue of retention of registered nurses in acute care. This review has made an important contribution to the understanding of retention initiatives and the extent to which they impact the nursing workforce attrition and how this maps to Maslow's Hierarchy of need.

Maslow's hierarchy of need has proven to be a useful conceptual framework upon which to consider the retention of Registered Nurses working in Acute care. Using the five levels of need as a framework, has provided a clear map of retention strategies employed to address the global nursing shortfall through attempts to improve attrition of registrants. The review highlights the need to consider retention through a holistic lens to prevent nurses leaving the profession and serves as a reminder to satisfy basic needs before attempting to address advancing requirements of a registrant.

From the basic level of meeting physiological need, the evidence suggests there are gaps in provision of nutrition, hydration, sufficient breaks, hygiene and sleep within the nursing workforce. These basic physiological needs are fundamental to both survival and professional functioning. While these needs are core to the delivery of nursing care, they are frequently overlooked in nurses' own working conditions. Nurses often experience inadequate hydration, nutrition, and rest during shifts, leading to fatigue and reduced cognitive performance. Despite legal entitlements to breaks (RCN, 2018), organisational culture and staffing pressures often make these difficult to access. Neglect of basic needs has been linked to burnout and job

dissatisfaction, both key drivers of poor retention. Sleep deprivation, exacerbated by shift work, further affect wellbeing and patient care quality, whilst international staff may face challenges securing safe accommodation, affecting rest and security. Although limited, evidence does suggest that supporting physiological needs can indirectly support retention through improved wellbeing and job satisfaction. To foster a sustainable workforce, healthcare organisations must prioritise meeting nurses' basic needs by ensuring adequate facilities, fair scheduling, access to nutritious food, and support for sleep and recovery. This represents a foundational step in any retention strategy.

The need to provide a safe and secure culture, free from abuse and discrimination are found to be wanting, with both physical and verbal assault present within working environments, where poor pay and short staffing detracts from perceptions of optimal welfare. Safety and security are critical for nurses to function effectively and remain in the profession. These needs encompass physical safety, emotional wellbeing, financial security, and freedom from discrimination or abuse. Evidence shows that violence, particularly in emergency and mental health settings, remains a major issue, contributing to stress, burnout, and intentions to leave. Both patient-initiated aggression and horizontal violence (e.g. bullying and incivility) undermine staff morale and retention, where a zero-tolerance approach and strong leadership are essential to address these issues.

Financial insecurity also impacts nurse retention. Although some studies dispute the direct link between pay and turnover, dissatisfaction with pay—especially when seen as unfair—has been widely reported as a cause for leaving (RCN, 2020). Additionally, flexible working conditions, safe accommodation for internationally recruited staff, and culturally inclusive practices contribute to a sense of security and belonging. Finally, supportive leadership and adequate staffing are crucial to ensuring nurses feel protected and valued. Addressing these factors holistically is vital for retention strategies in the healthcare workforce.

Effective leadership and management are found to be essential to the need for love and belonging, where the provision of a positive workplace culture and recognition of individual contribution are central. Effective leadership fosters a positive work culture, connection, value, and psychological safety—core elements of Maslow's third tier. Leaders can enhance belonging through fostering relationships, autonomy, and professional growth.

Positive workplace culture, shaped by leadership and team dynamics, further supports connection. Structured support programmes like preceptorships and mentoring also build early career connections. Whilst recognition and respect are key for older nurses too. While difficult to quantify, fostering a relational, inclusive, and respectful environment is essential to retaining a connected and committed nursing workforce.

Self-esteem is shown to be supported where registered nurses are supported and developed, yet where the literature reveals moral distress detracting from this component. Self-esteem in nursing is closely linked to feeling competent, respected, and able to make meaningful contributions. When staff feel safe, valued, and supported, they are more likely to experience confidence and job satisfaction. Opportunities for professional growth, career progression, and recognition of achievements help build this self-worth.

Workplace stress, high workloads, and burnout negatively affect self-esteem and are strongly associated with intentions to leave, when nurses are unable to provide adequate care due to staffing issues, it can lead to moral distress. Yet these issues are often interconnected with leadership, as is organisational culture, making them difficult to isolate but essential to address for workforce retention.



Education and career development contribute to the registrant's self-actualisation, yet the extent to which this need is met is variable. Self-actualisation, provided when there are opportunities for education, career advancement, and personal growth empower staff to feel challenged, capable, and engaged, yet the barriers to engagement and accessing such opportunities are multiple.

This narrative review framed around Maslow's Hierarchy has provided a useful overview of the evidence existing around effective strategies to aid registered nurse retention in acute care settings. The scaffold provided by Maslow's Hierarchy of Need has afforded a valuable perspective of the importance of providing fulfilment of basic requirements, from which more advanced needs progress.

Limitations

This review adopts a narrative approach, which has inherent limitations compared to systematic reviews. Specifically:

- Potential for selection bias: Although a structured search strategy was used, the process did not include formal quality appraisal or risk-of-bias assessment for included studies.
- Lack of reproducibility: Narrative reviews rely on author interpretation and synthesis rather than standardized protocols, which may limit transparency and replicability.
- Subjectivity in analysis: Mapping findings to Maslow's Hierarchy of Needs involved interpretive judgment by the authorship team, which may introduce bias.
- Scope constraints: While comprehensive, the review may not capture all relevant studies, particularly unpublished or non-English literature.

Despite these limitations, the narrative approach was chosen to allow flexibility in integrating diverse review types and to provide a conceptual synthesis aligned with the theoretical framework.

Conclusion

A Maslow-Informed Retention Operating Model for Acute Care

To close the global shortfall in nursing, retention must be treated as a system design problem—not a set of isolated initiatives. This review shows that when lower-order needs are unmet, higher-order strategies underperform. We therefore propose a Maslow-Informed Retention Operating Model (MIROM) that translates evidence into clear principles, near-term actions, and measurable outcomes.

Overarching Principles

1. Basics before brilliance: Make physiological needs non-negotiable; advanced development cannot compensate for fatigue, hunger, or lack of rest.
2. Safety as the social contract: Zero tolerance for violence and discrimination; fair pay, predictable scheduling, and psychological safety are foundational.

3. Belonging through relational leadership: Retention rises when leaders enable connection, respect, and autonomy; mentoring and preceptorship cement early bonds.
4. Esteem via ethical workload: Protect clinical standards and moral agency—match staffing to acuity and provide supervision to prevent moral distress.
5. Self-actualisation through structured growth: Build visible, equitable pathways with protected learning time and recognition that links development to career progression.
6. Equity by design: Ensure internationally recruited nurses have safe accommodation, inclusive onboarding, and culturally responsive support.
7. Data-driven improvement: Track leading indicators (break compliance, violence incidence, intent-to-leave) alongside lagging ones (turnover, vacancy).
8. Shared accountability: Executive sponsorship, line-manager ownership, and empowered staff that co-own goals and solutions.
9. Flexibility first: Offer genuine flexibility (self-rostering, predictable rotas, non-punitive adjustments) to match life demands and reduce attrition.
10. Visible recognition: Regular, specific acknowledgement of contribution reinforces esteem and belonging.

The MIROM Action Set

Physiological (survival & functioning)

- Actions: Guaranteed, tracked breaks; 24/7 access to hydration and nutritious food; rota redesign to reduce consecutive nights and support sleep.
- Metrics: Break compliance (% shifts with ≥ 1 protected break), fatigue/sleep risk index, staff survey on basic needs.

Safety & Security (physical, psychological, financial)

- Actions: Implement a violence prevention bundle (reporting, de-escalation, security presence in hotspots); fair-pay communication and hardship pathways; safe accommodation standards for international staff.
- Metrics: Violence/abuse incident rate, psychological safety index, roster predictability score.

Belonging (connection & inclusion)

- Actions: Universal preceptorship/mentoring with named supervisor; team huddles focused on inclusion and civility; onboarding that builds social ties by week 1.
- Metrics: Preceptorship completion, civility/belonging scores, early-career retention (12-month).

Esteem (competence & recognition)

- Actions: Weekly recognition rituals; protected clinical supervision time; workload calibration to acuity with escalation protocols.
- Metrics: Moral distress index, burnout (e.g., brief validated scale), near-misses related to overload.



Self-Actualisation (growth & purpose)

- Actions: Transparent career ladders; protected learning time targets; funded education pathways (AP/NP tracks, specialist roles).
- Metrics: Progression rate, learning time delivered vs. planned, internal fill rate for senior posts.

Governance & Time-Bound Outcomes

- Cadence: Monthly dashboards, quarterly review; ward-level action plans with executive oversight.
- 12-Month Targets (illustrative):
 - $\geq 90\%$ break compliance on acute wards
 - $\geq 30\%$ reduction in violence/abuse incidents in high-risk areas
 - $\geq 15\%$ increase in early-career (≤ 2 years) retention
 - $\geq 25\%$ uplift in protected learning time delivered
 - $\geq 10\%$ reduction in reported moral distress

Manager's takeaway: Start with the bottom of the pyramid and move upward; enforce basics, hard-wire safety and belonging, then scale esteem and growth. Make it measurable, co-owned, and relentlessly iterative. Retention improves when nurses can recover, feel safe, feel connected, feel effective, and keep growing—in that order.

Conflicts of interest

There are no conflicts of interest

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