An integrative review of nursing staff experiences in high secure forensic mental health settings: Implications for recruitment and retention strategies

Jennifer Oates1 | Alice Topping1,2 | Ivanka Ezhova1 | Emma Wadey3 | Anne Marie Rafferty1

Abstract
Aims: To identify the experiences of nursing in high secure forensic mental health settings that may affect staff recruitment and retention.

Background: Recruitment and retention of Registered Nurses is a vital international concern in the field of mental health. The high secure forensic setting presents unique challenges for the nurse. Studies of nurse's experiences in this setting have not previously been reviewed in the context of workforce sustainability pressures.

Design: An integrative review (Whittemore and Knapfl, 2005).

Data sources: A systematic search of data sources: MEDLINE (PubMed), PsycINFO, EMBASE, CINAHL, International Bibliography of the Social Sciences, Applied Social Sciences Index and Abstracts (ASSIA), Social Services Abstracts, ProQuest Social Sciences Premium collection (IBSS, PAIS, and Sociological Abstracts), and Web of Science from inception to December 2019.

Review methods: Data extraction, quality appraisal, and convergent qualitative synthesis.

Results: Fifteen papers were selected for inclusion in the review, describing 13 studies. Six studies were quantitative, all cross-sectional surveys. There were seven qualitative studies, using a variety of methodologies. Four themes were identified: engagement with the patient group, the ward social environment, impact on the nurse, and implications for practice.

Conclusion: When policymakers address workforce shortages in high secure forensic nursing they must take account of the unique features of the setting and patient group. Nurses must be adequately prepared and supported to function in an ethically and emotionally challenging environment.

Impact: This study identified factors affecting workforce pressures in the speciality of forensic mental health nursing. Findings are of interest to national nursing policymakers and workforce leads in mental health service provider organizations, seeking to promote forensic nursing as a career option and retain nursing staff.
1 | INTRODUCTION

Nursing workforce sustainability depends on recruitment of nurses to fill vacant posts and retention of skilled and experienced staff. There is a registered nursing workforce shortage in the United Kingdom and internationally (OECD, 2016). Compared with other countries, a mismatch between supply and demand for nurses in the United Kingdom has been associated with frozen pay, reduced employment, and reduced student nurses as a consequence of economic austerity (Buchan, Charlesworth, Gershlick, & Seccombe, 2019). The UK government reported around 40,000 nursing vacancies in England in 2019 (Harding, 2019). Projected healthcare workforce shortages are a major threat to the financial viability of the National Health Service (NHS; House of Commons Committee of Public Accounts, 2019), jeopardizing the realization of the national LongTerm Plan (Harding, 2019). Shortages have been particularly felt in the mental health sector, with attrition rates of 13.6% for mental health nursing staff (Health Education England, 2017) and 12.8% of mental health nursing vacancies unfilled (NHS Improvement, 2018). This should be contextualized within an unprecedented demand for mental health services, both in the United Kingdom (Independent Mental Health Taskforce to the NHS in England, 2016) and globally (Rejm & Shield, 2019). Despite recent analyses of healthcare workforce strategy (Beech et al., 2019; Buchan et al., 2019; Durcan, Stubbs, Appleton, & Bell, 2017) and the levers affecting nursing workforce supply and demand (Gunn, Muntaner, Villeneuve, Chung, & Gea-Sanchez, 2019; Hussain, Rivers, Glover, & Fottler, 2012; Kroetzen et al., 2015), there has been limited scrutiny of factors affecting workforce sustainability within the sub-specialties in mental health nursing.

The Durcan et al. (2017) report, based on policy analysis and stakeholder consultation, identified changes to funding for nurse training, reduced employment benefits, lack of promotion of mental health nursing as an attractive career, and lack of career development for experienced nurses as specific factors affecting mental health nursing recruitment and retention. The present review was commissioned to inform English national workforce strategy in relation to the sub-speciality of forensic mental health (FMH) nursing, also described as ‘nursing in secure environments’. Nursing in high secure (also known as ‘maximum security’) environments is a further sub-specialty within FMH. There are three high secure hospitals (HSH) in England. They house patients with mental disorders detained under the Mental Health Act 1983 who ‘require treatment under conditions of high security on account of their dangerous, violent, or criminal propensities’ (NHS Commissioning Board, 2013). Concern about the impact of short staffing on patient care at two of the HSH was raised by the national healthcare regulator in 2018 (Care Quality Commission, 2018). Where short staffing and low nurse-to-patient ratios are known to affect the quality of patient care in general hospital settings, affecting the numbers of adverse events and patient lengths of stay (Aiken et al., 2014; Griffiths et al., 2016; Rafferty et al., 2007; Sizmur & Raleigh, 2018), short staffing in the HSH was observed by the regulator to affect staff morale, monitoring of seclusion and segregation, and patients’ access to appointments, ground leave, and fresh air (Care Quality Commission, 2018). These observations make a compelling case for considering how aspects of nurses’ experience may affect workforce recruitment and retention in the high secure setting.

2 | BACKGROUND

Many aspects of FMH nursing reflect the skills and competencies that are important for any mental health nursing role, such as risk assessment and developing therapeutic relationships. There are, however, some unique features of the HSH nursing environment. Previous studies where the core competencies and features of FMH nursing have been described (e.g., Dale & Storey, 2004; Mason, King, & Dulson, 2009; Newman, Patterson, Eason, & Short, 2016; Peterenelj-Taylor, 2000; Rask & Aberg, 2002; Timmons, 2010) have characterized the central challenge of FMH nursing as striking the balance between care and control, whereby nurses’ primary goal ‘to care’ is tempered by their custodial and safety-oriented duties in the secure setting. This challenge is an ethical one, given that the nurse must provide ‘an environment in which the human rights, values, customs and spiritual beliefs of the individual, family and community are respected’ (International Council of Nurses, 2012, p2). Custodial duties, for example, the searching of patients and maintaining a locked environment, focus on minimizing the risk of violence and arguably restrict rather than promoting patients’ rights and beliefs. Gildberg, Elverdam, and hounsgaard, L. (2010) have described this as a tension between paternalism and therapeutic engagement. For example, interactions
may have a paternalist focus because the nurse must set limits on behaviour and enforce rules while explaining those roles and supporting patients to adhere to them.

Previous systematic reviews on FMH nursing have focused on the well-being of forensic staff, finding the empirical research to be heterogeneous, site-specific, and of limited generalizability (Brown, Igoumenou, Mortlock, Gupta, & Das, 2017; Dickinson & Wright, 2008; Freestone et al., 2015). While some studies (Elliott & Daley, 2013; Jones, Janman, Payne, & L., & Rick, J. T., 1987; Kriakous, Elliott, & Owen, 2019) found more mental distress or burnout in forensic healthcare professionals versus other professionals, others found lower or comparable prevalence of stress and burnout compared with nurses working in other settings (Berry & Robertson, 2019; Chalder & Nolan, 2002; Dickinson & Wright, 2008; Elliott & Daley, 2013; Happell, Martin, & Pinikahana, 2003; Lee, Ogloff, Daffern, & Martin, 2015). Correlates for higher burnout and symptoms of stress in FMH nurses have been identified as: younger age (Berry & Robertson, 2019); whether the ward atmosphere feels safe and therapeutic (Berry & Robertson, 2019); intensity and frequency of physical aggression towards staff, when mediated by job stress (de Looff, Nijman, Didden, & Embregts, 2018); staff with low emotional intelligence and high personality traits of neuroticism and altruism (de Looff, Didden, Embregts, & Nijman, 2019); staff with low inclination to mindfulness (Kriakous et al., 2019). Most studies have been single site and cross-sectional. Also, most have not focused on the high security setting. There has been no previous study to integrate all previous research on FMH nursing experience in the high secure settings with the aim of informing workforce policy.

3 | THE REVIEW

3.1 | Aim

To conduct an integrative review to address the research question: What are the aspects of nurses' experiences in high secure FMH hospitals that may affect recruitment and retention of registered nursing staff?

3.2 | Design

An integrative review approach was used, as described by Whitttemore and Knaff (2005), after Cooper (1998). This approach enables inclusion of research from a range of methodologies and suits a review question about which there may be multiple perspectives. Integrative reviews have five stages: problem identification; literature search; data evaluation, data analysis; and presentation. A review protocol was registered with the International Prospective Register of Systematic Reviews (PROSPERO 2019 CRD42019137259). Following the decision flowchart developed by Flemming, Booth, Hannes, Cargo, and Noyes (2018), this review is reported according to the Enhancing transparency in reporting the synthesis of qualitative research (ENREQ) statement (Tong, Flemming, McInnes, Oliver, & Craig, 2012).

3.3 | Search methods

In the problem identification stage, the team identified search criteria with reference to the research question. A preliminary search identified no studies that specifically addressed recruitment and retention in the high secure forensic setting, leading the research team to broaden their review focus to nurses' experiences in high secure FMH, from which potential factors affecting workforce sustainability could be drawn. A Population, Exposure, Outcome (PEO) framework was used to define search parameters for the literature search stage. The Population was inpatient FMH nurses, Exposure was working in high secure FMH settings, and Outcome was the effect of working environment on the nurse's experience at work, including their well-being at work and their motivation to stay in the high secure setting. Empirical research studies of any design were included. No date parameters were set. Only English language papers were included.

A database search was conducted of MEDLINE (PubMed), PsycINFO, EMBASE, CINAHL, International Bibliography of the Social Sciences, Applied Social Sciences Index and Abstracts (ASSIA), Social Services Abstracts, ProQuest Social Sciences Premium collection (IBSS, PAIS, and Sociological Abstracts), and Web of Science from inception to December 2019. Three strings of terms were connected by the Boolean operator ‘AND’ to capture the PEO. They were: (nurs or nurses or nursing) AND (forensic OR secure OR criminal justice) AND (mental health or psychiatrist*). To ensure that no papers describing studies that included high or maximum security (as opposed to low or medium security) forensic settings were missed at the search stage, we did not include search terms relating to level of security. Sifting of papers according to level of security took place at the title/abstract review stage and again at the full paper review stage if level of security was not clear from the abstract. Furthermore, references from the reviewed papers were scrutinized for potentially relevant papers. We also reviewed papers that had cited the 13 included studies.

3.4 | Search outcome

The outcomes of the literature search are detailed in the flow chart in Figure 1. Two researchers conducted the searches, comparing results and decisions around inclusion to assure consistency. Two researchers reviewed and extracted the data, with a further reviewer available to arbitrate on any differences of opinion. Data extraction and organization was undertaken by one researcher. Two researchers reviewed these papers and agreed on the final selection for inclusion. Papers were excluded at this stage if they did not present empirical research, did not contain evidence specific to high secure settings, did not focus on nursing staff experience (e.g., solely
FIGURE 1  Search strategy [Colour figure can be viewed at wileyonlinelibrary.com]
focused on patient experience). Where no specific level of security was described, or where the study described medium or low secure rather than high or maximum security, the studies were not included.

3.5 | Quality appraisal

In the data evaluation stage, the quality of studies was reviewed and agreed by two researchers, using the Mixed Methods Appraisal Tool Version 2018 (MMAT; Hong et al., 2018). The MMAT allows researchers to use comparable criteria to identify the methodological limitations of both quantitative and qualitative study designs. Studies were appraised according to the MMAT screening questions and the five specific questions for their research design (all were either qualitative or quantitative descriptive studies; See Supporting Information).

3.6 | Data extraction and synthesis

Descriptive data from the qualitative and quantitative studies were extracted and tabulated. This included the authors and year of publication; study design; number of participants in study and comparison groups; methods of data collection and analysis; and a summary of findings. Data-based convergent qualitative synthesis (Pluye & Hong, 2014) was used to compare and describe the findings from the included studies, in relation to the study research question. A constant comparison method was used to identify and develop themes from the data. Findings from the quantitative studies were described narratively to foster comparison with the qualitative study findings. Details of findings were tabulated in a matrix, then coded according to emergent themes and subthemes (Figure 2; Whitlemore and Knaf, 2005). Constant comparison enabled the identification of patterns and commonalities between studies. Two members of the team undertook the extraction and synthesis. Plausibility of analysis was discussed with the wider team on presentation of themes and subthemes. This ensured rigour in data extraction and synthesis (Whittemore & Knaf, 2005).

4 | RESULTS

4.1 | Study selection

The flow diagram in Figure 1 shows the number of studies retrieved and retained at each stage of the screening process. Fifteen papers were selected for inclusion in the review, describing 13 studies. One study was described in three separate publications. Mercer, 2013, Mercer & Perkins, 2014, Mercer & Perkins, 2018).

4.2 | Study characteristics

Study characteristics are summarized in Table 1. There were no intervention studies, trials, or longitudinal studies. Seven studies were undertaken in the United Kingdom, two in Australia, one in the Netherlands, one in Sweden, one in Norway, and one in the United States. Four studies gathered data from more than one site. Nine studies took place at a single site, although some gathered data from more than one ward per hospital site.

Six studies were quantitative, all cross-sectional surveys. Caplan (1993) and de Vries, Brazil, Tonkin, and Bulten (2016) compared staff and patients’ responses on ward climate, using the Ward Atmosphere Scale (WAS; Moos, 1974) and Essen Climate Evaluation Schema (EssenCES; Schalast, Redies, Collins, Stacey, & Howells, 2008) respectively. In addition, de Vries et al. (2016) measured the relationship between patient characteristics of age, length of stay, risk, psychopathy on EssenCES scores. Cramer et al. (2020) used a battery of measures to quantify and measure the relationships between mental well-being (including burnout and coping) in forensic staff, of whom 88.9% were nurses or nursing assistants. Reininghaus, Craig, Gournay, Hopkinson, and Carson (2007) measured the relationships between perceived stress, coping, self-esteem, and mental health in nursing staff. Lauvrud, Nonstad, and Palmstierna (2009) explored the relationship between post-traumatic stress disorder (PTSD) symptoms and professional quality of life. Newman, Eason, and Kinghorn (2019) explored the relationships between vicarious trauma and impact of events.

FIGURE 2 The unique features of nursing in high secure forensic settings that may contribute to difficulties in recruiting and retaining nursing staff

<table>
<thead>
<tr>
<th>Engagement with the patient group</th>
<th>The ward social environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapeutic engagement (N6)</td>
<td>‘Social climate’ differences of opinion (N6)</td>
</tr>
<tr>
<td>‘Dilemmas and balancing acts’ (N6)</td>
<td>Exposure to violence and aggression (N6)</td>
</tr>
<tr>
<td>Patients as traumatised’ (N2)</td>
<td>Gender and sexuality (N5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact on the nurse</th>
<th>Implications for practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress and distress (N7)</td>
<td>Educational provision (N6)</td>
</tr>
<tr>
<td>‘Emotional hard labour’ (N7)</td>
<td>Supervision (N6)</td>
</tr>
<tr>
<td>Survival strategies (N7)</td>
<td>Support (N8)</td>
</tr>
</tbody>
</table>

(N = number of studies from which the theme emerged)
There were seven qualitative studies. Addo (2006), Aiyegbusi and Kelly (2015), and Beryl, Davies, and Völlm (2018) used interpretive phenomenological approaches to their data analysis. Addo and Beryl used interviews as their data collection method, whereas Aiyegbusi and Kelly used a mixed qualitative approach of a Delphi study, individual interviews, and focus groups. Barr, Wynaden, and Heslop (2019) undertook content analysis of 32 interviews with nurses. Dutta, Majid, and Völlm (2016) undertook thematic analysis of focus group interviews. Kumpula, Gustafsson, and Ekstrand (2019) and Mercer (Mercer, 2013; Mercer & Perkins, 2014, 2018) used discourse analysis of their semi-structured interview data.

### TABLE 1  Summary of characteristics of studies included in the review (13 studies described in 15 papers)

<table>
<thead>
<tr>
<th>Lead author (year)</th>
<th>Study aims</th>
<th>Study design</th>
<th>Participants</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addo (2006)</td>
<td>To describe Registered Nurses’ experiences in working with sex offenders in two high secure settings</td>
<td>Interpretive phenomenological approach</td>
<td>9 nurses working with sex offenders</td>
<td>2 high secure settings in the United Kingdom (1 hospital, 1 clinic within a prison)</td>
</tr>
<tr>
<td>Aiyegbusi (2015)</td>
<td>To establish experiences of the nurse–patient relationship with people who have Personality Disorders in therapeutic community and secure settings.</td>
<td>Mixed methods study</td>
<td>Delphi: 12 nurses from three clinical sites, Interviews: 13 primary nurses, 12 in-patients</td>
<td>3 clinical sites including a dangerous and severe personality disorder service in a high secure hospital, United Kingdom</td>
</tr>
<tr>
<td>Barr (2019)</td>
<td>To document how the experiences and skill set of forensic nurses can inform practice changes to reduce the use of restrictive practices.</td>
<td>Inductive content analysis of semi-structured interviews</td>
<td>32 nurses</td>
<td>State Forensic Mental Health Service (SFMHS) in Western Australia, including a 32-bed high secure inpatient unit.</td>
</tr>
<tr>
<td>Beryl (2018)</td>
<td>To understand the experience of providing nursing care to women patients in a high secure hospital.</td>
<td>Interpretative phenomenological analysis</td>
<td>7 nursing care staff</td>
<td>National High Secure Healthcare Service for Women, United Kingdom</td>
</tr>
<tr>
<td>Caplan (1993)</td>
<td>To describe factors influencing nursing staff and patients’ perceptions of the ward atmosphere</td>
<td>Cross-sectional survey</td>
<td>70 direct nursing care staff and 39 patients</td>
<td>4 units in a maximum security forensic hospital, Northeastern United States.</td>
</tr>
<tr>
<td>Cramer (2020)</td>
<td>To quantify existing levels of mental health and subjective well-being and factors associated with staff mental health and subjective well-being.</td>
<td>Cross-sectional survey</td>
<td>170 staff (nurses and nursing assistants) from 3 forensic facilities</td>
<td>Three hospital sites (low/medium/high security), United Kingdom</td>
</tr>
<tr>
<td>de Vries (2016)</td>
<td>To provide insight into the relationship between patient characteristics and perceived ward climate.</td>
<td>Cross-sectional survey</td>
<td>72 patients and 113 staff members</td>
<td>13 wards in a high secure forensic psychiatric institution, the Netherlands</td>
</tr>
<tr>
<td>Dutta (2016)</td>
<td>To explore the experiences of nursing staff caring for long-stay forensic psychiatric patients</td>
<td>Thematic analysis of focus group interviews</td>
<td>10 nurses with at least 5 years of experience in the hospital,</td>
<td>1 high secure hospital, United Kingdom</td>
</tr>
<tr>
<td>Kumpula (2019)</td>
<td>To explore how nursing staff talk about patient care and the implications for the care given to patients.</td>
<td>Discourse analysis of semi-structured interviews</td>
<td>12 nurses with at least 6 months of experience in forensic max secure ward</td>
<td>2 wards in a maximum-security forensic psychiatric clinic, Southern Sweden</td>
</tr>
<tr>
<td>Lauvrud (2009)</td>
<td>To explore relations between job satisfaction, burnout and post-traumatic stress symptoms among nurses in high-frequency violence environment.</td>
<td>Cross-sectional survey</td>
<td>70 nursing staff from 4 wards</td>
<td>1 high secure hospital in Brøset, Norway.</td>
</tr>
<tr>
<td>Mercer (2013, 2014, 2018)</td>
<td>To explore how forensic nurses and mentally disordered sexual offenders, with a diagnosis of personality disorder, constructed accounts of pornography and offending</td>
<td>Discourse analysis of semi-structured interviews</td>
<td>9 male patients and 18 mental health nurses</td>
<td>1 personality disorder unit in 1 high secure hospital in the United Kingdom</td>
</tr>
<tr>
<td>Reininghaus (2007)</td>
<td>To explore the causal role of generalized and specific stress resistance resources in the stress process following physical assault in nurses</td>
<td>Cross-sectional survey</td>
<td>636 nurses</td>
<td>3 high secure sites England and 1 in Scotland, United Kingdom</td>
</tr>
</tbody>
</table>
4.3 | Quality appraisal

Study quality appraisal using the MMAT is reported in Tables S1 and S2 (Supporting Information). All studies met the screening criteria of having a clear question and presenting data to answer that question. According to MMAT criteria, six studies (all qualitative) met all five criteria for quality, meaning that they used an appropriate approach for the study question, their data collection was adequate for their chosen methodology, the findings presented were clearly derived from the data, interpretation was substantiated and there was coherence between data source, collection, analysis, and interpretation. Dutta et al.’s (2016) study did not meet the quality standard about data collection due to focus groups being less than optimal size (having four, three, and two members respectively).

Of the quantitative descriptive studies, the common methodological limitations were sample representativeness and non-response bias. Caplan (1993) reported a response rate of 69% for his study but did not account for non-response bias in his presentation or discussion of findings. De Vries et al.’s (2016) study used routinely collected data from staff and patients that had been manipulated to create two subsamples for analysis. Ward data were used if there had been at least a 50% response rate to the EssenCES questionnaire. This was within the guidance for the scale but reflected a low response rate and low response bias was not discussed. Lauvrud et al. (2009) had a response rate of 70%, although they discuss the possible effect of non-response bias on their findings. Newman et al. (2019) had a response rate of 79.4% for their study and discuss the impact on non-response bias on their results. Unlike the other surveys, theirs was a convenience sample drawn from voluntary participants in a vicarious trauma management program meaning their responses on trauma may not be reflective of a wider population of forensic nurses. The response rates for the four sites in Reininghaus et al.’s (2007) study were between 22% and 28%. Such a low response rate must raise concerns about study quality in terms of representativeness of the sample.

4.4 | Themes

Four themes were identified during the data analysis phase, comprising 12 subthemes (Figure 2). These themes reflect what is known about the experience of working as a nurse in HSHs, offering insight into what may affect recruitment and retention in the setting.

4.4.1 | Engagement with the patient group

The first major theme had three subthemes. First was the challenge nurses face in developing and maintaining therapeutic relationships with patients in high secure settings, many of whom had committed serious crimes and had diagnoses of severe personality disorder. Studies showed that HSH nurses aim to approach patients with a non-judgmental attitude to provide care. They develop therapeutic relationships in the long term and through those relationships they aim to foster hope and optimism. The second theme was how FMH nursing was characterized by ‘dilemmas and balancing acts’ (Beryl et al., 2018), namely the tension between care and control, therapy and risk management described earlier. Negotiating these tensions could be rewarding, with HSH nurses enjoying work between the two worlds of mental health and criminal justice if they felt adequately prepared, educated, supported, and supervised to do their job. The next subtheme was ‘patients as traumatized’ (Aiyegbusi & Kelly, 2015; Beryl et al., 2018), whereby having potentially committed serious and violent acts prior to admission, high secure patients may have experienced significant traumas themselves. Nurses in HSHs must work with trauma and its effects on behaviour, alongside the imperative to manage risk of violence.

4.4.2 | The ward social environment

The second major theme was the ‘ward social environment’, with the subtheme of ‘differences of opinion about social climate’. Studies showed that as locked environments in locked institutions, social climates differ and fluctuate between wards and HSH nurses must be sensitive to how they may influence and respond to factors affecting social climate. Caplan (1993) used the WAS (Moos, 1974) to measure three dimensions of the ward environment (relationships, treatment programs, and system maintenance), finding a distinct difference of opinion between nurses and patients regarding the amount of ‘control’ or ‘enforcement of rules’ that nurses exerted. De Vries et al. (2016) used the EssenCES (Schalast et al., 2008), which measures therapeutic hold (TH), experienced safety (ES), and patients’ cohesion and mutual support (PC), also finding significant differences between staff and patients on all scales.

The second subtheme was ‘exposure to risk of violence and aggression’. Verbal and physical attacks were a feature of HSH nursing work, as was management of extreme self-harm. This could have an impact on nurses’ mental well-being. Reininghaus et al.’s (2007) survey of nurses across the four high secure sites in the United Kingdom (Ashworth, Broadmoor, Carstairs, and Rampton) established a significant association between experience of physical assault in the past 12 months and nurses’ psychological distress, although there were several moderating factors.

A further subtheme relating to the environment was ‘gender and sexuality’ which featured in five studies. HSH wards are single gender, but with male and female staff. Mercer (Mercer, 2013; Mercer & Perkins, 2014, 2018) directly addressed gender roles and sexuality in one male personality disorder unit in one HSH. He found that talk about pornography and sexual offences was a defining feature of the social setting, leading female staff to feel vulnerable and marginalized. Addo (2006) made a similar observation, that female staff felt vulnerable when working with sex offender patients because they had experienced being the subject of patients’ sexual fantasies which could manifest as direct threats and graphic expression of these threats.
4.4.3 Impact on the nurse

The third major theme: ‘impact on the nurse’, comprised subthemes of ‘stress and distress’ ‘emotional hard labour’, and ‘survival strategies’. Reininghaus et al. (2007) and Cramer et al. (2020) used measures of stress and coping in their surveys, alongside other measures of mental health. Scores on measures of mental ill health, including burnout, were low compared with samples of other nursing populations (Cramer et al., 2020). There was a correlation between recent experience of physical assault and likelihood of psychological distress (Reininghaus et al., 2007). Higher self-esteem, higher self-confidence, and use of a range of coping strategies were ‘stress resistance resources’ that could moderate the effect of physical assault on psychological distress in some nurses (Reininghaus et al., 2007). LAuVRud et al.’s (2009) and Newman et al.’s (2019) studies measured the effects of trauma on staff, finding that participants presented with lower than expected incidence of trauma symptoms despite ongoing exposure to traumatic events, such as instances of violence. Hypothetical explanations for relatively low incidence of trauma or stress symptoms given in these studies include that those who stay working in HSH settings may be resilient individuals, who can cope with trauma and assault well, or that those nurses who experience heightened distress self-select out of the setting or had self-selected out of the research studies.

The next subtheme was ‘emotional hard labour’. Alongside the discussion of ‘stress’ as a feature of being in a nurse in HSH, the concept of ‘emotional labour’ was invoked in seven studies. Emotional labour, as theorized by Hochschild (1983), is when the worker must deploy and manage their emotional resources as part of their professional duties. Beryl et al. (2018) describe nursing in HSH as ‘emotional hard labour’, to reflect the personal cost of HSH work, namely the likelihood of assault and the difficulty of working with a disturbed and distressed patient group. When facing ‘stress and distress’ and undergoing ‘emotional hard labour’, nurses described or exhibited several ‘survival strategies’ (as coined by Addo, 2006). The third subtheme ‘survival strategies’ were not necessarily healthy or positive reactions to challenging and distressing situations, they could include several ‘defence mechanisms’: ‘avoidance’, ‘deflection’, ‘detachment’, ‘distancing’, ‘disengage’, ‘rationalising’, ‘compartmen-talizing’, and ‘not reflecting’ (Addo, 2006, p. 185). Beryl et al.’s (2018) participants used black humour and compartmentalization as ways of coping in their setting, alongside accessing formal support and learning to ‘understand why’ their patients behaved in certain ways. Newman et al. (2019) made the correlation in their study between experience of vicarious trauma and the participants’ use of avoidance, intrusion and hyper arousal, whereby, emotion avoidance was associated with poor mental well-being.

4.4.4 Implications for practice

The fourth theme was ‘implications for practice’, the subthemes of which were: ‘educational provision’, ‘supervision’, and ‘support’. Implications for ‘educational provision’ were that nurses in HSH should have access to specialized training on working with the HSH patient group, for example, on ‘formulation and boundary management’ (Beryl et al., 2018), psychodynamics (Aiyegbusi & Kelly, 2015), and on theoretical understanding of aspects of offending behaviour (Mercer & Perkins, 2014, 2018). The role of ‘support’ for nursing staff was discussed in six studies. Reininghaus et al.’s (2007) study measured ‘perceived support outside work’ finding it an important stress reduction resource. Regarding social support in work, the importance of ‘close knit’ teams (Beryl et al., 2018) and teamworking, with clear team roles and team commitment were emphasized. Team cohesion, familiarity, and team commitment were considered vital to nurses being able to work well in the HSH setting with long-term patients (Dutta et al., 2016).

In the third subtheme, study authors surmised that supervision and reflective practice should include opportunities to ‘process ward dynamics’ (Caplan, 1993), learn emotion-focused coping strategies (Cramer et al., 2020), address the risk of vicarious trauma (Newman et al., 2019) and experience of physical assault (Reininghaus et al., 2007). Managers should be equipped to support staff to develop healthy coping strategies and resilient practitioners (Aiyegbusi & Kelly, 2015).

It is worth noting though that there were other ‘implications for practice’, specific to the individual included studies but not categorizable under broader themes. These were that differences between staff and patient perceptions of ward climate should be addressed through targeted interventions (De Vries et al., 2016), nurses’ career planning should account for the effects of working full time in high-frequency violence environments, for example by negotiating time out of the setting or early retirement (LAuVRud et al., 2009) and finally, for Mercer and Perkins (2018), wider societal discourses on gender and discrimination should be recognized as affecting behaviours in the HSH setting.

5 DISCUSSION

Our thematic findings suggest several factors which may inform nursing workforce strategy. In their analysis of workforce trends in the English NHS, Beech et al. (2019) identified ‘improving the offer to staff’ as one of five key areas for action to address the recruitment and retention crisis. For them, success meant having career progression pathways, improving staff engagement, and staff well-being. The insights provided by this review that FMH nursing is ethically challenging ‘emotional hard labour’ should inform how service providers choose to work with staff to improve their working conditions and increase their intention to stay in the HSH setting. Durcan et al.’s (2017) recommendations for ‘the future of the mental health workforce’ were that there should be clear career pathways, investment in supervision, mentoring and training, investment in staff well-being, and more consistent education and training for ‘mental health practitioners’. The findings from this review should enable education and service providers to tailor aspects of their development and support offer towards FMH nursing as a sub-speciality.
Core features of HSH nursing include: the unique nature of HSH therapeutic relationships; the risk patients pose of harm to others; significant trauma histories and long stays. The nursing role in HSH settings is ethically challenging because nurses are both custodians and carers. These observations may be made about other low or medium secure settings and to an extent other inpatient mental health setting where patients are detained under mental health legislation, but the custodian/carer tension is most heightened in the high secure environment. The review found that the social environment in HSH wards was characterized by a constant risk of violence. Furthermore, nurses on HSH wards, as single sex environments, some with patients who have committed crimes of a sexual nature, may feel vulnerable or distressed by the sexual politics and patients' expressions of their sexuality on those wards. Social climates differ between hospital wards and over time (Doyle, Quayle, & Newman, 2017), meaning that assumptions should not be made about atmosphere and tensions on such wards based on single-site studies capturing a moment in time. While ward climate studies have identified differences in perception of climate between staff and patients, the value of these scales lies in repeated use and comparison between outcomes and locally determined normative scores.

The third theme described the consequences of being a HSH nurse, namely stress, exposure to trauma and the consequences of ‘emotional hard labour’. Assumptions about whether HSH nursing or forensic nursing per se is more ‘stressful’ and has more impact on nurses’ own mental health than nursing in other mental health settings have seldom been tested in comparator studies (Chalder & Nolan, 2002). The review findings suggest that nurses with high self-esteem and high self-confidence are more suited to working in the HSH. These findings have implications for workforce strategies because they may guide recruitment methods, for example psychometric testing to identify nurses with certain traits and retention strategies, for example ensuring that support and supervision programs address the emotional toll of the work. Employers may also wish to ensure that HSH nurses have an adequate support network outside work and that teams are well supported because these factors appear to counter the effect of the work on the well-being of the nurse. Such recommendations accord with those of the recent reviews of forensic nurses’ well-being; however, like those reviews (Brown et al., 2017; Dickinson & Wright, 2008; Freestone et al., 2015), we found that there remains a lack of empirical research testing the effectiveness of specific modes of staff support or supervision.

The final theme of ‘implications’ was drawn from the discussion sections of the included papers. Some suggestions are applicable to a broader range of mental health nursing settings and have identified from other analyses of workforce factors in mental health (Durcan et al., 2017). There are some unique features of HSH nursing that should be taken into account when devising strategy, such as the requirement for education and clinical supervision that specifically address the exposure to violence, risk of harm, and vicarious trauma that HSH nurses face. Some settings, such as wards housing personality disordered offenders with histories of committing sexual offences, also may affect nurses’ sense of sexual and psychological safety in relation to their gender. Where calls for support to develop resilience and healthy coping are applicable to the range of mental health nursing settings, this review makes a case for targeted interventions to the specific HSH workforce.

5.1 | Limitations

The limitations of this review are its narrow focus, solely on empirical research on nurses experiences in HSH settings. There may be insights of relevance to recruitment and retention from the wider literature on forensic nursing, for example from studies where the level of security is not specified. The lack of studies specifically analysing recruitment and retention factors in high secure settings have led us to a review that identifies likely rather than proven factors affecting nursing workforce sustainability.

Although Europe, Australia, and North America were represented, there were no studies meeting the inclusion criteria from Africa or Asia. This may be due to differences in classification of security in psychiatric hospitals between countries. The limitations of the included studies reduce the transferability of the findings. First, these were all studies of a single point in time, in specific settings. There was no longitudinal or intervention research to review. There were some cross-site research and the mapping of themes showed commonality between studies, study sites, and types of study. Further research is required, for example studies of changes in ward atmosphere over time and studies comparing how environments or nurses’ attitudes to their work and intentions to remain in the setting change over time.

6 | CONCLUSION

This review has drawn together and evaluated a body of literature not previously examined. The findings suggest that high secure settings have unique characteristics, albeit these may be heightened versions of nurses’ experience in other forensic and mental health nursing settings. The study is of interest to an international audience because the challenges identified speak to the wider nursing workforce crisis. The review findings elaborate and offer specificity on broader analyses of factors affecting nursing workforce recruitment and retention. Findings suggest that future workforce retention strategies must incorporate tailored education, support and supervision to address the specific features of nursing in high secure settings. Furthermore, recruitment and retention strategies must take account of the characteristics of nurses who thrive in the high secure setting.

IMPACT STATEMENT

The review findings should inform workforce strategy in high secure forensic mental health hospitals. Recruitment and retention policy must be tailored to account for the provision of education,
supervision, and support required by the ethical challenge and emotional labour of nursing in this setting.

CONFLICT OF INTEREST
No conflict of interest has been declared by the author(s).

AUTHOR CONTRIBUTIONS
JO,AT,IE,EW,AMR made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; involved in drafting the manuscript or revising it critically for important intellectual content; gave final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content; and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

ORCID
Jennifer Oates https://orcid.org/0000-0001-7745-9539

TWITTER
Emma Wadey @NursingEmma
Anne Marie Rafferty @annemarierrafter

REFERENCES


SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

**How to cite this article:** Oates J, Topping A, Ezhova I, Wadey E, Marie Rafferty A. An integrative review of nursing staff experiences in high secure forensic mental health settings: Implications for recruitment and retention strategies. *J Adv Nurs*. 2020;00:1–12. https://doi.org/10.1111/jan.14521

The *Journal of Advanced Nursing (JAN)* is an international, peer-reviewed, scientific journal. *JAN* contributes to the advancement of evidence-based nursing, midwifery and health care by disseminating high quality research and scholarship of contemporary relevance and with potential to advance knowledge for practice, education, management or policy. *JAN* publishes research reviews, original research reports and methodological and theoretical papers.

For further information, please visit JAN on the Wiley Online Library website: www.wileyonlinelibrary.com/journal/jan

**Reasons to publish your work in JAN:**

- **High-impact forum:** the world’s most cited nursing journal, with an Impact Factor of 1.998 – ranked 12/114 in the 2016 ISI Journal Citation Reports © (Nursing (Social Science)).
- **Most read nursing journal in the world:** over 3 million articles downloaded online per year and accessible in over 10,000 libraries worldwide (including over 3,500 in developing countries with free or low cost access).
- **Fast and easy online submission:** online submission at http://mc.manuscriptcentral.com/jan.
- **Positive publishing experience:** rapid double-blind peer review with constructive feedback.
- **Rapid online publication in five weeks:** average time from final manuscript arriving in production to online publication.
- **Online Open:** the option to pay to make your article freely and openly accessible to non-subscribers upon publication on Wiley Online Library, as well as the option to deposit the article in your own or your funding agency’s preferred archive (e.g. PubMed).