Frontline staff perspectives of providing secure in-patient care

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CHAPTER 1: SYSTEMATIC REVIEW

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For J.Mc.

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Chapter 1:

Title:

A systematic review of secure inpatient multi-disciplinary staff role-based perspectives of occupational stressors and wellbeing, including job and/or compassion satisfaction.

Mhairi McDonald

Prepared in accordance with the author guidelines for the Forensic and Legal Psychology Journal

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Also see Appendix 1.1 for further information regarding author guidelines

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ABSTRACT

Background: Recent broad scope review in the area of high secure nursing staff retention offered insight into the importance of considering context when delivering interventions to support staff in these complex occupational settings. However, less research has explored frontline secure staff wider perspectives of their role, associated occupational stress and especially occupational wellbeing, including key indicators such as job and/or compassion satisfaction. These concepts are considered relevant to healthcare staffing sustainability and retention. The present review therefore aimed to update the literature in this area in the context of a difficult period for healthcare services worldwide, associated with reduced staffing levels.

Data sources: A search of four electronic databases (MEDLINE, Embase, CINAHL and PsychInfo) was conducted.

Aims: To update the literature since the last relevant review in the area of retention. To examine the literature on frontline secure inpatient staff role based perspectives of occupational stressors, wellbeing, and/or job or compassion satisfaction. To offer understanding on protective coping strategies.

Review Methods: A narrative synthesis approach was adopted.

Main findings: Seven studies met inclusion criteria for the present review. The Mixed Methods Appraisal Tool was employed for the purposes of assessing the quality of included papers. In concordance with previous review in the area, the available quantitative, qualitative and mixed methods research provided insight into the role-based perspectives of occupational stress and wellbeing of a secure inpatient predominantly front-line nursing staff group, comprised of registered and unregistered nursing staff. Staff perceptions of threat were noted to be a key multi-faceted occupational stressor. In concordance with previous review findings, this highlighted the value of specificity of support and interventions designed for staff in this area. There was also variation in how occupational stress and wellbeing were experienced noted by role and context. Potential impacts on staff wellbeing were also highlighted. Less clear concordance with previous review findings was noted in other domains. The quality and quantity of the literature in the area was also noted to be mixed. Particularly around the conceptualisation and measurement of job satisfaction, which to an extent limited insight in this area. Role and professional identity-based protective coping strategies, amongst other supportive strategies, were found to be helpful to staff in these settings. These findings are

also considered relevant for the purposes of retention in the context of the current health staffing crisis. Future research recommendations are also made.

INTRODUCTION

For those who are judged to pose a serious risk to themselves or others, Forensic Mental Health services offer both inpatient and community based care and treatment (Crichton, 2009; Markham, 2021). In general terms, increased severity in mental health presentation and risk is typically associated with forensic inpatient status, and service users in these settings can present with complex mental health issues (Tomlin et al., 2021). A variety of comorbidities, such as learning/intellectual impairment, (Chester et al., 2018) substance misuse and/or head injury (Brown et al., 2019) and personality dysfunction (Freestone et al., 2015), are frequently present in secure inpatient populations. Research has also indicated a proportion of secure adult inpatients will have significant trauma histories, which are not always well understood by services involved in their care (McKenna et al., 2019).

Secure inpatient service users can therefore at times appear both vulnerable and interpersonally challenging (McKenna et al., 2019; Newman et al., 2021). They can be physically assaultive towards other patients and staff and can engage in significant deliberate self-harm (Kelly et al., 2015; Newman et al., 2021). These conflicting therapeutic engagement experiences have also been described in the wider literature as care and control dilemmas (Oates et al., 2020; Clarke, 1996). In these scenarios, secure inpatient staff can perceive tension between offering forensic service users the typical caring qualities associated with healthcare roles, while also having to attend to their criminogenic needs (Oates et al., 2020; Markham 2021).

It can therefore be anxiety provoking and stressful providing care for patients in secure settings (Markam, 2021). It is generally accepted that professionals who routinely interface with trauma and violence, in mental health services and in the wider legal system, can experience considerable occupational stress (Pirelli et al., 2020; O'Connor et al., 2018; Frost & Scott, 2022). Psychoanalytic theory developed using observational studies in secure inpatient settings also postulates there is variation associated with how occupational stress is experienced by staff, based on their role and position in the at times hierarchical forensic inpatient mental health system (Menzies-Lyth, 1988; Barnes et al., 2022). Secure inpatient staff perspectives of their work role are therefore further considered within the framework of this review and given the context; stress is a key factor to be cognisant of. Stress can be defined using Lazurus and Folkman's (1984) parameters of an individual experiencing

psychological distress and potential emotional overwhelm in response to the perception that the environmental demands outweigh the resources necessary to cope with the situation.

In the wider literature, a qualitative paper concerning the views of forensic nursing staff working in community and secure inpatient settings, found staff subjective perceptions of occupational stress could be related to frustrations with the regulatory issues that can slow service user progress in the forensic mental health system (Harris et al., 2015). Staff also found practical challenges of working in secure settings to be stressful, such as the volume of legal and regulatory issues they are presented with and feeling unprepared for these aspects of the role (Harris et al., 2015).

While there has also been a focus on the challenges of working in secure inpatient settings (Kelly et al., 2015; Pirelli et al., 2020; Frost & Scott, 2022), less research has explored other subjective occupational wellbeing indicators such as job satisfaction for healthcare staff in forensic services and settings (Reid, 2014). Occupational wellbeing broadly describes the way individuals feel at work and about their occupational roles, and is comprised of staff perceptions of occupational satisfaction, meaning and purpose (De Neve & Ward, 2023). Though somewhat varied in its conceptualisation, emerging occupational wellbeing research indicates it can be highly relevant to career longevity, staff retention and associated organisational sustainability (De Neve & Ward, 2023; Ozbonov et al., 2020).

In the wider literature, a sense of job satisfaction has been found to be protective in community forensic mental health nursing staff and is associated with a sense of self-efficacy in the workplace (Reid, 2014). It has also been shown to be related to general life satisfaction (Judge & Watanabe, 1993). Job satisfaction can be defined as the degree of pleasure or happiness staff associate with their occupational roles (Henne & Lock, 1985). However, caution is required when interpreting findings in relation to job satisfaction, because there is some variation in the wider literature in how job satisfaction is conceptualised and measured (Judge & Watanabe, 1993; DeNeve & Ward, 2023). For example, there is some overlap noted with Compassion satisfaction, defined more specifically as the amount of pleasure an individual associates with helping others, and is measured by the ProQual, which tends to be used with health care staff (Stamm, 2013; Turgoose & Maddox, 2017).

Previous reviews and literature

Previous reviews in the area have highlighted the predominance of registered nursing staff perspectives in the available literature (Oates et al., 2020; Brown et al., 2017). Oates (2020)

reviewed factors relating to the recruitment and retention of nursing staff in high secure settings. In regard to individual differences, it was noted in Oates' (2020) findings that nursing staff with high levels of self-esteem, confidence and extroversion may be more likely to sustain in their roles when dealing with patients who are at higher risk of causing harm to others. The review also noted nursing staff should be appropriately prepared and supported to operate in these emotionally challenging settings via training, ideally prior to beginning to deliver secure forensic care. Additionally, the salience of threat to staff in secure environments was emphasised, as was the importance of strategies and interventions to support staff in these settings being developed with these unique elements of the secure environment and inpatient presentation in mind. Similar recommendations were made in a recent research direction paper in the area of forensic mental health staff wellbeing. Newman (2020) called for more specificity of understanding of stressors, protective factors and relevant coping strategies that support sustainability and retention for staff in these at times challenging occupational contexts.

Purpose of review

The present review aimed to build on and update Oates' (2020) review of secure frontline forensic inpatient staff occupational sustainability, and in particular retention, in the context of a challenging period for healthcare services worldwide, including noticeably reduced staffing levels (WHO, 2023; Bailey, 2021). The present review aimed to develop understanding of secure inpatient frontline staff perspectives of occupational stressors, which may impact organisational sustainability and retention negatively. In addition to developing understanding of staff perspectives of factors that are supportive of sustainability and retention, including occupational wellbeing, Job and/or Compassion satisfaction. Additionally, where Oates (2020) focused on high secure forensic nursing staff, the present review aimed to explore wider secure inpatient frontline Multi-Disciplinary staff Team roles (MDT: DOH, 1984) and context based perspectives, across levels of secure inpatient forensic mental health care (low/medium/high).

METHODS

After feasibility was established, the review question, search strategy structure and key search terms, outlined below, were developed in liaison with College Librarians. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009; Tricco et al., 2018) served as a guide for the authoring of this systematic review. In line with current methodological understanding (Smith & Ho, 2023) aspects of the previous review

methodology have been retained for the purposes of replication. Although, variation where appropriate to address current research aims, is noted throughout where relevant.

Search Strategy

A systematic search of the literature was developed using the Population (context) Exposure Outcome (PcEO) search strategy, recommended for quantitative and qualitative reviews (Bettany-Saltikov, 2016; Oates et al., 2020). The population/context string was; 'MDT Frontline inpatient staff (P)/operating at any level of forensic inpatient security (c)'. The exposure condition included 'Role based exposure (E) & associated experiences of Occupational stress/Occupational wellbeing and/or Job or compassion satisfaction'. The outcome was 'Secure Staff role based subjective perspectives and/or perceptions'. (O). Search strategy sensitivity was evaluated by its ability to detect key papers. Also see **Table 1:** Search Strategy below for an overview.

TABLE 1: Search strategy

Pc	Population/context	Secure MDT staff (P) context: secure inpatient settings of any level (c)
E	Exposure to condition	Secure inpatient role and associated occupational stress and/or job/compassion satisfaction/occupational wellbeing (E)
O	Outcome or themes	Staff role based subjective perspectives and/or perceptions (O)

Review Question

What are secure inpatient frontline multi-disciplinary staff (Pc) role-based perspectives (O) of occupational stressors and occupational wellbeing, and/or job/compassion satisfaction (E)?

Study Eligibility Criteria

Inclusion criteria were developed to guarantee study relevance and specificity to the review question and are outlined below in **Table 2**. Due to the emerging nature of the literature in the area (Ward & DeNeve, 2023; Oboznov et al., 2020; Cramer et al., 2020) and conceptual overlap between occupational wellbeing, job and compassion satisfaction, in healthcare staff, (Ward & DeNeve, 2023; Stamm, 2013; Turgoose & Maddox, 2017), papers were included if they investigated secure inpatient MDT staff, operating at any level of security perspectives of any of these concepts, in addition to occupational stressors.

TABLE 2: Eligibility criteria

Inclusion criteria	Exclusion criteria
Peer reviewed primary research published in English	Paper is not peer reviewed primary research e.g., conference abstract
Studies were conducted in the UK or developed Western countries	Research was based in community forensic mental health settings
Research was based in forensic inpatient setting	Study participants were in patient forensic mental health service users
Research investigated secure (of any level) inpatient frontline MDT staff perspectives of occupational stressors and wellbeing, or job and/or compassion satisfaction	The paper did not focus on secure MDT inpatient staff perspectives of occupational stressors and wellbeing, or job and/or compassion satisfaction

Databases

The following electronic databases were searched with time limiters of 2019 – 2024/Present applied: PsycINFO using the EBSCO platform, the Cumulative Index to Nursing and Allied Health Literature (CINAHL) (EBSCO), EMBASE (1947-Present; OVID) and Medline (1946-Feb 02, 2024-OVID). In line with research aims to update the literature since the last publication in the area (Oates et al., 2020) the present review employed database search time limiters from the period 2019-2024 (**five years).** Time limiters were set to include one year prior to previous review publication, as is understood to be the convention to account for publication lag.

Search Terms

The previous review (Oates et al., 2020) used broad search terms including (nurs OR nurses OR nursing) AND (forensic OR secure OR criminal justice) AND (mental health or psychiatr*) across search components. The present review sought to broaden and focus understanding developed by including staff perspectives across levels of security. For example present review keywords included *"*secure forensic*" or "secure psychiatric setting*" or "medium secur*" or "low secur*" or "high secur*". Key words and Indexed Terms related to components were combined using the Boolean operators AND/OR to retrieve relevant papers and truncation was employed (indicated by Asterix *) where appropriate to ensure word endings could be identified. Databases were searched using a combination of key words and Subject Headings specific to each database, across the four key components of the review. Indexed headings and search terms were applied to titles and abstracts. The following represents a

selection of terms employed across database search lines using the PcEO search strategy headings:

Also see **Appendix 1.2:** Database Search Terms pp. 87 for an overview of Psychinfo database terms.

Pc

“Forensic Psychiatry” or “Forensic Nursing” or “Forensic Psychology” or “Institutional Attendants” or “frontline care” or caregiver or "Nursing assistant" or "HCSW" or "HCA" or "Forensic Health Care Professional*" or “FHCP” or “Secure inpatient staff*” or Multi-Disciplinary or “MDT”.

AND “Psychiatric Hospital” or “Mentally Ill offender” or Forensic* or "forensic mental health" or offender* or “forensic client* or “Forensic Inpatient*” or “Forensic Hospital*” or “Secure Psychiatric” or Secure or “Secure Hospital* or "forensic psychiatric care" or “secure forensic*” or "secure psychiatric setting*" or medium secur* or low secur* or high secur* or "LSU*" or "MSU*" or "HSU*"

E

AND “Occupational Stress” or “Job Satisfaction” or “occupational subjective wellbeing” or “occupational wellbeing” or "job satisfaction" or “workplace stress” or “compassion satisfaction” or “stress*”.

O

AND staff* or clinician* or perspective* or perception* or attitude* or experience* or “lived experience” or phenomenology* or interview or "semi-structured" or "in-depth" or “questionnaire” or “worker perception*"

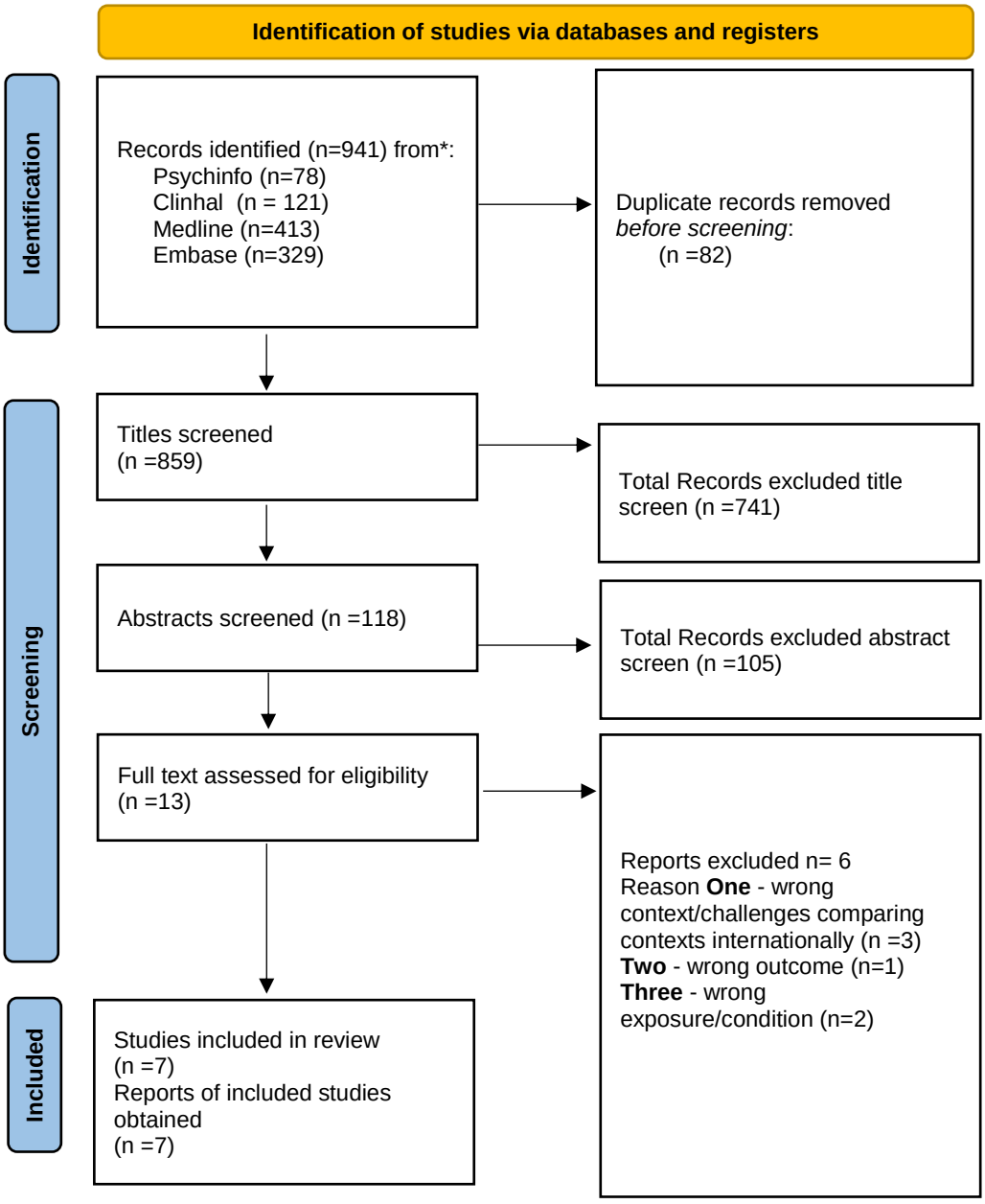
Selection of sources of evidence

Systematic review searches were carried out by the author and took place in February 2024. The search generated a total of 941 results (see Figure 1). Results were exported to reference manager software (Endnote) where duplicates were deleted (n=82). Records were uploaded to Rayyan (n=859) to apply inclusion and exclusion criteria systematically. Initially, 859 titles were screened by the principal researcher and 741 records were excluded. At this stage, an independent reviewer (non forensic clinical psychologist) also screened titles, citations,

topics/keywords for the purposes of evaluating inclusion and exclusion criteria. The second reviewer screened 10% of titles (85 records) and no disparities were noted.

After excluding 741 papers as part of initial title screening processes from a total of 859 titles, 118 papers including **abstracts** were then subject to further evaluation. Similar co-rating processes were employed for stage two: title, citation, key word and abstract screening and 20% (23 records) were reviewed and no disparities were noted. A further 105 papers were then excluded. Thirteen full texts were then obtained and further examined for eligibility. Co - rating processes were also employed as part of Stage 3 finalisation of inclusion and exclusion criteria, and no disparities were noted. **Seven** studies were included in the review. Reasons for the exclusion of full texts are documented and noted in **Figure 1** below.

Figure 1: PRISMA Flowchart



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71.
doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

Data Extraction

Data on the characteristics of the included studies was extracted. Studies of differing designs were extracted and described separately. An overview of each article is provided in **Tables 5-7**. In accordance with guidelines, The JBI QARI Data Extraction Tool was also employed to standardise the data extraction processes (see **Appendix 1.3**: Data extraction pp. 89 for an example). Additional fields and categories were added to ensure all information relevant to the review question was extracted.

Study quality appraisal:

Due to the variety of study types included, it was important to ascertain an overview of included study quality, and to offer information on each individual paper for the purposes of analysis and comparability. The Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018) was employed as it is used to determine the methodological limitations of studies that are quantitative, qualitative and of mixed methods designs. Also see **Table 8** for an overview of the MMAT qualitative (Q: 1-5), quantitative descriptive (QD: 1-5) and mixed methods (MM:1-5), items employed where appropriate based on study design. Papers were given ratings on a Likert scale of 1-3 for responses to items based on quality indices suggested outcomes e.g. No (0), Can't tell (1) or Yes (2) out of a total score of **14** including the two MMAT screening items total score out of 4. See **Appendix 1.4** Quality appraisal pp.91 for screening items. Papers were then ranked based on an overall quality rating scale and employed quality indices including screening items for the purposes of the present review. A score of 1-6 represented an overall *poor* study quality rating, 7-8 was rated as *acceptable*, and 9-12 *moderate.* Studies rated 13-14 were considered to be of *good* methodological quality.

Particular attention was paid to MMAT QD Item 3, focused on the suitability of measures employed, in relation to noted challenges in the measurement and conceptualisation of Job Satisfaction (Henne & Lock, 1985; De Neve & Ward, 2023). Due to issues in the wider literature with survey based cross-sectional designs (Molenberg et al., 2021), attention was also paid to MMAT QD Item 4 focused on non-response bias. For survey-based studies, a

standardised nonresponse bias cut-off metric of 70% was employed where appropriate. Studies with a response rate of below 70% were viewed as at increased risk of response bias. Due to issues with the wider applicability of the 70% standard metric (Johnson et al., 2012), survey format and compensatory mechanisms were also relevant to ascertaining study quality and risk of bias (Molenberg et al., 2021). *Additionally, quality rating was not used to exclude studies; the potential impact of study quality on review findings was considered as part of overall results and where relevant in data synthesis.*

Data Synthesis

Due to the noted heterogeneity of the literature in the area and outcome measures used (Brown et al., 2017), it was not feasible to conduct a meta-analysis of studies. A narrative synthesis approach was adopted instead. According to Popay (2006), narrative synthesis is the process of methodically and transparently collating and arranging research data to give an overview of existing knowledge, synthesize pertinent study findings, and create explanations**.** In accordance with Popay's (2006) guidelines data relevant to addressing study aims and secure inpatient staff perspectives of their job role and associated occupational stressors, wellbeing and job or compassion satisfaction, were extracted from eligible studies after full text screening. Data was collated into a table format where an overview of each study was provided (also see **Tables 5-7**). Patterns in the data were explored to identify consistent themes, findings and outcomes in relation to the study aims and review question. Findings from the quantitative studies were described narratively to allow for comparison with the qualitative study findings. Interrogation of the data also explored relationships between study characteristics including methods employed, research quality and study findings. Theoretical understanding, previous review and wider healthcare research were also integrated and described in the context of the present review findings, predominantly in the discussion section.

RESULTS

Tables 5-7 summarise the **seven** qualitative, quantitative and mixed methods papers included in this review.

Study overview- *Methods employed and conceptual focus*

Three studies were qualitative interview papers (Husted & Dalton, 2021; Mistry et al., 2022; Hammarstrom et al., 2019), and three were quantitative descriptive including two cross sectional and one longitudinal (correlational) study (Cramer et al., 2020; Morris et al., 2022; Degl'Innocenti et al., 2021). A final paper by Henshall (2020) employed an interview and survey based mixed method design. Please see **Table 3** below for an overview of study focus in relation to key review concepts.

TABLE 3: Overview of study focus

	Staff perspectives of occupational stressors	Staff perspectives of occupational wellbeing	Job satisfaction	Compassion satisfaction
Husted & Dalton, (2021)	x	x	x	
Mistry (2022)	x	x	x	x
Hammarstrom (2019)	x	x	x	
Cramer (2020)	x	x	x	
Morris (2022)	x	x		x
Degl'Innocenti (2021)*	x	x		
Henshall (2020)	x	x	x	

**Upon further examination during quality rating processes, Degl'Innocenti's (2021) conceptualisation of job satisfaction wasn't considered comparable to wider research or other included paper definitions (Judge & Watanabe, 1993; Cramer et al., 2020; De Neve & Ward, 2023). This paper was therefore included on the basis of offering insight into secure inpatient frontline staff perspectives of occupational stressors and wellbeing.*

Study setting and corresponding level of security

Five of the studies were conducted in low to high secure inpatient forensic mental health settings in the UK (Husted & Dalton, 2021; Mistry et al., 2022; Henshall et al., 2020; Cramer et al., 2020; Morris et al., 2022), and two of the studies took place in secure inpatient forensic settings in Sweden (Hammerstrom et al., 2019; Degl'Innocenti et al., 2021). For the purposes of the review, the UK and wider European forensic mental health systems were considered broadly comparable on the basis of secure inpatient provision (Tomlin et al., 2021; Critchon, 2009). Further literature (Hammarstrom et al., 2022) provides relevant information in this respect where it is noted Swedish forensic inpatient care is offered at very high, high and acceptable levels. However, specific level of security was not clearly noted in included Swedish based papers in the present review. UK based papers, Cramer (2020) specified participants provided high secure care. Participants in Husted & Dalton (2021) were described as operating in both low and medium secure settings. In Mistry (2022) study participants operated in medium secure environments. Other papers described participants as operating in secure forensic inpatient settings (Henshall et al., 2020; Morris et al., 2022).

TABLE 4: Overview of study setting

Level of security Paper	Low (secure setting)	Medium (secure setting)	High (secure setting)	Inpatient forensic secure provision (level of security unspecified).
Husted & Dalton, (2021)	x	x		
Mistry (2022)		x		
Hammarstrom (2019)				x(*)
Cramer (2020)			x	
Morris (2022)				x
Degl'Innocenti et al (2021)				x(*)
Henshall (2020)				x

*For the purposes of direct comparison, challenges were noted with developing more definitive understanding of the specific level of security associated with the included Swedish papers. In general terms, these were therefore considered based on provision of secure service.

Study participants role

The studies (Hammarstrom et al., 2019; Husted & Dalton, 2021; Mistry et al., 2022; Degl'Innocenti et al., 2021; Cramer et al., 2020; Morris et al., 2022; Henshall et al., 2020)

primarily examined secure inpatient Nursing or ward staff perspectives. Three papers (Cramer et al., 2020; Degl'Innocenti et al., 2021; Morris et al., 2022) also included wider secure inpatient MDT staff perspectives (forensic psychiatry, psychology, social work, dieticians and occupational therapy). However, in all of the studies the majority of participants were registered and unregistered frontline female nursing staff. Two of the included papers, Husted & Dalton (2021) and Hammarstrorm (2019) had more unregistered than registered Nursing staff participants.

TABLE 5: Qualitative study characteristics

Author (Year) & *study location, setting, level of security,* ***design****, and main focus/aims.*	**Sample** **n=** *Demographic information provided including:* **role, gender** *breakdown and* ***length of occupational experience*** *(years)* Recruitment	**Methodology** -Data Collection -Method of Analysis -Additional study specific relevant information	***Key Findings*** *Findings of note, key themes.* *-Additional study specific relevant information e.g. epistemology.*	***Study quality*** *Index score:* *Risk of Bias rating:* *Key study strengths/weaknesses and limitations noted:* *Additional relevant methodological issues:*	***Additional relevant information:***
Husted & Dalton (2021) Low-to-medium secure hospitals **(UK)** **Design:** qualitative interview **Focus/aim** Study explored frontline care workers' experience and perceptions of providing care within a secure hospital.	Total N= **8** secure inpatient Nursing staff Comprised of Healthcare assistants (HCAs) (**6**) Registered Mental health nurses (**2**) (RMNs) **Demographics:** majority **female** sample noted (**75%** - 6F: 2M) **Experience:** not noted **Recruitment**: Purposive	*Data Collection:* Semi-structured interviews *Method of Analysis:* Thematic *Additional relevant information:* case study approach employed.	*Relevant Themes:* **'Unique environment'** highlights the dual aspect of providing care and attending to service user criminogenic needs whilst coping with common challenges e.g., staff shortages in secure **contexts.** -Tensions highlighted in Nursing staff **role** where experiences of conflict and ambiguity were noted as frequent.	**Study Quality instrument and rating:** MMAT- Qualitative items 1-5. *Good* study quality indicated. Overall quality rating score **13/14** **Strengths:** A significant volume of relevant data was provided in this study to substantiate findings and conclusions. **Weakness** Reduced clarity in regard to study philosophical or epistemological position.	This paper provided insight into the experiences of a cohort which was mostly comprised of clinical support or nursing assistant staff.

Author (Year) *study location, setting, level of security, design, and focus/aim.*	**Sample n=** demographic information provided. Recruitment	**Methodology** -Data Collection -Method of Analysis -Additional study specific relevant information	***Key Findings*** *Findings of note.*	***Study quality*** *Index score:* *Risk of Bias rating:* *Limitations noted:* *Additional relevant methodological issues:*	***Additional relevant information:***
Mistry (2022): **Medium** secure inpatient setting **(UK).** **Design***:* qualitative interview **Focus/Aim:** To assess overall health and wellbeing of secure forensic patient facing staff.	Total N=**14** 'Frontline *Nursing* staff'' **Demographics** No further information other than gender available: **male** majority (**57% -** M:8 F:6) *Forensic/secure Exp average (y)* No information available. **Recruitment**: Opportunity	*Data Collection:* Semi-structured interviews. *Method of Analysis:* Thematic *Additional relevant information:*	*Relevant Themes* information relevant to study aims and objectives was obtained over superordinate themes including categories of trauma; how well-being is impacted; ways of coping and managing.	**Study Quality instrument and rating:** MMAT- Qualitative items 1-5. *Good* study quality indicated. Overall quality rating score **13/14** **Strengths:** A significant volume of relevant data was obtained in this study to substantiate findings and conclusions. **Limitations noted:** A lack of clear structure was noted in this paper, impacting coherency at times.	Job Satisfaction was equated with Compassion Satisfaction.
Author (Year)	**Sample n=**	**Methodology**	***Key Findings***	***Study quality***	
Hammarstrom (2019) secure forensic inpatient care	Total N=**13** Secure inpatient *Nursing* staff Comprised of	*Data Collection:* Semi structured Interview *Method of Analysis:*	*Relevant Themes* 'Being frustrated' (relevant subthemes included "Fighting	**Study Quality instrument and rating:** MMAT- Qualitative items 1-5. *Good* study quality indicated.	This paper also provided insight into the experiences of a cohort which was mostly

Sweden. Level: unspecified **Design:** qualitative interview **Focus/Aim** Explored Nursing staff lived experiences and perspectives of the interpersonal dynamics of providing secure care.	N=8 Assistant Nurses N=3 RMNs N=2 Registered Nursing staff **Demographics:** majority **male** sample (**77%** - M:10 F: 3) *Forensic/secure* *Exp average* **11** years **Recruitment**: Purposive	Qualitative thematic phenomenological-hermeneutic approach	resignation" and "Being disappointed") "Being open-minded" (subthemes included "Developing compassion") Additional findings -The stress of the control aspects of working in secure inpatient settings was noted to challenge nurses' caring professional identities.	Overall quality rating score **14/14** **Strengths:** Study epistemology clearly specified. **Limitations noted:** Less Information available in regard to study setting e.g., level of security.	comprised of clinical support or nursing assistant staff.

TABLE 6: Quantitative study characteristics

Author (Year) & *study location, setting, level of security,* ***design****, and aim.*	**Sample** **n=** *Demographic information provided including:* **role, gender** *breakdown and* ***length of occupational experience*** *(years)*	**Methodology** -Data Collection -Measures employed e.g., **study specific** or **validated** or **both** -Method of Analysis -Additional study specific relevant information	***Key Findings*** *Findings of note.* *-Additional study specific relevant information e.g. Effect sizes reported.*	***Study quality*** *Instrument and items* *Overall quality rating* *Key study strengths/weaknesses and limitations noted:* *Additional relevant methodological issues:*	***Additional relevant information:***

Morris (2022): secure inpatient setting **UK:** *level* unspecified. **Design** Nonexperimental cross-sectional survey. **Aim:** To investigate experiences of potentially morally injurious events and their relationship to wellbeing in health professionals in secure services.	n=**237 MDT** secure inpatient staff: *Demographics:* Majority ***Nursing-Unregistered/Nursing* Assistant majority** noted (**46.6%) female** (65.8%) staff population noted *Experience:* not noted	*Data Collection:* Paper and online survey *Outcome measure* Job satisfaction/ **compassion satisfaction** was conceptualised and measured across **one instrument.** ProQoL: **validated** health care staff quality of life measure (compassion satisfaction subscale present review main focus). *Method of Analysis:* Data **nonparametric:** Spearman rank-order correlations and a Mann-Whitney U-test were conducted.	Potentially Morally injuries events were significantly negatively associated with Compassion satisfaction **(*r*.36; p=< 0.001).** Effect size: **small**	**Study Quality instrument and rating:** MMAT- Quantitative descriptive items 1-5. *Moderate* study quality indicated. Overall study quality rating score **12/14** **Limitations noted:** -Lack of information provided on risk of nonresponse bias **Strengths:** Large sample size	**Additional outcome measure** The Moral Injury Events Scale (MIES) is a nine-item self-report questionnaire assessing exposure to and impact of PMIEs involving committing, witnessing or failing to prevent a transgression, or betrayal by others (Maguen et al., 2024).
Author (Year) *study location, setting, level of security, design, and aims.*	**Sample** **n=** demographic information provided.	**Methodology**	***Key Findings*** *Findings of note.*	***Study quality***	

Cramer (2020): UK. ***High*** secure inpatient setting. **Design:** Cross-sectional **Aim:** To assess overall health and wellbeing of secure forensic patient facing staff.	n=**170** secure inpatient **MDT** staff: *Demographics* Sample was comprised of a majority nurses or nursing assistants (n = 134, 88.9%) population. *gender:* **male majority (54%)** *Forensic/secure Exp average* **5.2** years	*Data Collection:* Voluntary Survey using paper (n=43) and online (n=147) options *Measures employed:* Job satisfaction was conceptualised and measured across **two instruments.** The Spanish burnout inventory (SBI) translated to English (**validated in Spanish**). subscales (1): enthusiasm toward job and a 10-item **Study specific** measures of job satisfaction also employed. *Method of Analysis:* Descriptive statistics Multivariate Regression Model Statistics, Univariate effects also reported/relevant to review findings.	A positive association was noted between NFA Approach and SBI subscale Job enthusiasm (**0.36 *p* =.007).** Effect size: **small** *Comparison* Staff mean job satisfaction and enthusiasm were higher than predicted	**Study Quality instrument and rating:** MMAT- Quantitative descriptive items 1-5. *Moderate* study quality indicated. Overall study quality rating score **12/14** **Limitations noted:** -Lack of information provided on risk of nonresponse bias - No specific comparator population noted.	*Additional relevant measures*: **Need for Affect (NFA)** Questionnaire- a validated 10-item instrument measuring an individual's approach towards affect (i.e., preference to experience and express emotions or vice versa). - Internal consistencies have been shown to be satisfactory at multiple time-points: NFA approach (α = .83/.85) and NFA avoidance (α = .85/.87)
Author (Year)	**Sample n=**	**Methodology**	***Key Findings***	***Study quality***	
Degl'Innocenti (2021) In-patient secure care **Sweden**. Level: unspecified	Secure inpatient staff n= **239** *Demographics* Sample was described as comprised of a	*Data Collection:* Survey (not specified*) **Outcome Measures**	-Variation in positive perceptions of environment, specifically PCSQ staff domain	**Study Quality instrument and rating:** MMAT- Quantitative descriptive items 1-5. *Moderate* study quality	-Aspects of measurement of Job satisfaction not considered compatible with other papers

Design*:* Prospective longitudinal correlational quantitative study. **Aim** This study investigated secure inpatient staff perceptions of Job Satisfaction in the context of service relocation.	majority **female** registered (63), and unregistered nurses or nursing assistant population. *Forensic/secure Exp average* with a mean range of experience of 60% more than 5 years*	Job Satisfaction and Perceptions of the psychosocial environment and staff beliefs in their abilities to provide person centred care were conceptualised and measures across the **validated** Person-Centred Climate Questionnaire–Staff Version (PCQ-S) and the Person Centred Assessment tool (PCAT) *Method of Analysis:* Pearson's Correlational Coefficient.	**'everydayness'** were noted to vary with length of experience in forensic psychiatry & role, though correlations noted to be weak/effect size: **small** number of years in the profession (***r.12 p=0.18).*** Number of years in forensic psychiatry (***r.14 p=0.16*)***	indicated. Overall study quality rating score **12/14** **Strengths:** -Strong points noted re sample size. -Some quantitative demographic data quality checking procedures re internal reliability employed **Limitations noted:** - Challenges noted in conceptualisation of job satisfaction. -Some issues with reduced clarity associated with participant demographic data. .	(PQS/PCAT) though information obtained in regard to occupational wellbeing.

TABLE 7: Mixed methods study characteristics

Author (Year) & *study location, setting, level of security,* ***design****, and aims.*	**Sample** **n=** *Demographic information provided including:* **role, gender** *breakdown and* ***length of occupational***	**Methodology** -Data Collection -Measures employed e.g., **study specific or validated or both** -Method of Analysis	***Key Findings*** *Findings of note.* *-Additional study specific relevant information e.g. Effect sizes reported.*	***Study quality*** *Instrument and items* *Overall quality rating* *Key study strengths/weaknesses and limitations noted:* *Additional relevant methodological issues:*	***Additional relevant information:***

	experience *(years)*	-Additional study specific relevant information			
Henshall (2020) secure inpatient setting **UK:** level *unspecified.* *Design:* **Mixed methods** **Aim:** This study aimed to implement and evaluate a work-based personal resilience development intervention for forensic nurses.	Secure inpatient Registered Nursing staff **N=29** Nurse mentees. *Forensic/secure Exp* **Mentees:** predominantly female newly registered or approx. **2-3** years qualification exp.	*Data Collection:* Interview and Survey (format un specified) *Outcome measure* Study specific measure employed across 4 domains of resilience including work relationships: occupational satisfaction and confidence providing care. *Method of Analysis:* Descriptive T tests Qualitative Interview and free text survey data thematic **Additional relevant:** Qualitative case study approach employed.	***Quantitative Survey findings:*** Mentees self-confidence post-programme **(t = 4.12, SD = 0.60)** was significantly higher than pre-programme, **t= 3.07. *p*= 0.003** There were ***no significant*** pre- and post-programme differences between mentees' belief in their ability to provide good patient care. **Qualitative** ***Free text survey findings*** Noted Improved mentee perceptions of confidence and development of coping skills. **Key theme:** ***Impact of the programme***	**Study Quality instrument and rating:** MMAT- Mixed methods items 1-5. *Moderate* study quality indicated. Overall study quality rating score **13/14** **Strengths:** Adherence to qualitative study quality indices e.g., **Squire** Qualitative checklist employed. **Limitations:** Study specific survey Questionnaire lacked formal or otherwise considerations of measures of validity or reliability.	Study also explored and compared nurse mentor experiences in some aspects.

		Data were analysed thematically using inductive and deductive approaches, and was managed using the Framework Method.	Participants also valued the specificity of support relevant to forensic inpatient settings, in regard to improved problem solving and improved confidence and occupational stress management.		

Figure2: Tables 5-7 Response Key

Abbreviation	Full term
SD	Standard deviation
p	Statistical significance threshold or ***p*** value
t	The **t**-value, or **t**-score
MMAT	Mixed Methods Appraisal Tool
Forensic/Secure exp	Forensic/secure occupational experience measured in years (y)
MDT	Multi-Disciplinary Team

Results of the quality rating of studies

The quality of each paper was assessed using the Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018; also see **Table 8** below for an overview of items employed and **Appendix 1.4** Study quality pp.91 for an overview of the MMAT screening items). Further see **Tables 5-7** for information relating to the quality of included studies. Qualitative interview papers (Hammarstrom et al., 2019; Husted & Dalton, 2021; Mistry et al., 2022) were found to be of a *good* methodological quality. Overall, qualitative interview papers, and the qualitative component of the mixed methods paper (Henshall et al., 2020) were broadly comparable and primarily focused on participant perspectives and perceptions in respect to epistemology. The quantitative papers (Cramer et al., 2020; Degl'Innocenti et al., 2021; Morris et al., 2022), were overall found to be of *moderate*

methodological quality. These issues are discussed further below under the heading **Quantitative papers strengths and weakness**. The mixed method paper (Henshall et al., 2020) was found to be of *good* methodological quality, and the quantitative component broadly comparable with other included quantitative descriptive papers

TABLE 8: Overview of MMAT items employed and study quality ratings

Quality appraisal tool employed: Mixed method appraisal tool (MMAT Qualitative items 1-5)		**Qualitative papers**		
		Husted & Dalton (2021)	**Mistry et al., (2022)**	**Hammarstrom et al., (2019)**
Quality Indices items	Item descriptor			
Q1	Is the qualitative approach appropriate to answer the research question?	Y	Y	Y
Q2	Are the qualitative data collection methods adequate to address the research question?	Y	Y	Y
Q3	Are the findings adequately derived from the data?	Y	Y	Y
Q4	Is the interpretation of results sufficiently substantiated by data?	Y	Y	Y
Q5	Is there coherence between qualitative data sources, collection, analysis and interpretation?	CT	CT	Y
Total quality indices scores (+screening items x2 =4)		9/10	9/10	10/10
Overall Rating		13/14 Good	13/14 Good	14/14 Good

Quality appraisal tool employed: Mixed method appraisal tool (MMAT Quantitative Descriptive items 1-5)		**Quantitative papers**		
		Degl' Innocenti et al., (2021)	**Cramer et al., (2020)**	**Morris et al., (2022)**
Quality Indices items				
QD1	Is the sampling strategy relevant to address the research question?	Y	Y	Y
QD2	Is the sample representative of the target population?	Y	Y	Y
QD3	Are the measurements appropriate?	No	Y	Y

QD4	Is the risk of nonresponse bias low?	Y	No	No
QD5	Is the statistical analysis appropriate to answer the research question?	Y	Y	Y
Total quality indices scores (+screening items x2=4)		8/10	8/10	8/10
Overall Rating		12/14 Moderate	12/14 Moderate	12/14 Moderate

Quality Indice tool employed: MMAT mixed method items 1-5		**Mixed methods paper**
		Henshall et al., (2020)
Quality Indices items		
MM1	Is there an adequate rationale for using a mixed methods design to address the research question?	Y
MM2	Are the different components of the study effectively integrated to answer the research question?	Y
MM3	Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	Y
MM4	Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?	Y
MM5	Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	CT
Total quality indices scores (+ screening items x2 =4)		9

Overall Rating		Good 13/14

Figure3: Table 8 Quality rating Response Key

Yes	Y (2)
No	N (0)
Can't tell	CT (1)

Quantitative papers: strengths and weakness

In the longitudinal and cross-sectional quantitative descriptive papers, two key issues highlighted by the MMAT quantitative descriptive items impacted study quality. These were QD3 and QD5, outlined in **Table 9** below. Also see **Table 6** for information in respect to strengths and limitations of included quantitative papers.

TABLE 9: MMAT Quantitative descriptive items

QD3	Are the measurements appropriate?
QD4	Is the risk of non-response bias low?

In respect to MMAT QD item three, the longitudinal quantitative (Degl'Innocenti et al., 2021) and cross-sectional studies (Morris et al., 2022; Cramer et al., 2020) varied in their conceptualisation and measurement of job satisfaction. This resulted in reduced conceptual comparability in the study findings. Degl'Innocenti (2021) employed a prospective longitudinal design to investigate the influence of the psychosocial and physical environment on secure staff perceptions of their beliefs in their abilities to provide person centred care, in the context of service relocation. Job satisfaction was conceptualised and measured across two validated structured questionnaires. The first was the Person-Centred Climate Questionnaire (Staff Version -PCQ-S). The PCQ-S is an instrument comprised of three related domains and offers an overview of staff perceptions of the 'person centredness' of ward climate or atmosphere. Domains of the PCQ-S include safety, everydayness (considered to map on to a 'homely' or personalised ward atmosphere) and community (Edvardssen et al., 2009). The Person-Centred Assessment tool (PCAT- Edvardssen et al., 2010), was also employed. The P-CAT is a questionnaire measuring healthcare staff perceptions of their belief in their ability to provide Person centred care, and the extent to which psychosocial environmental factors support them to do so.

However upon further examination during quality rating processes, potentially under pinned by language issues, Degl'Innocenti's (2021) conceptualisation and measurement of job

satisfaction wasn't considered comparable to wider research or other included paper definitions (Judge & Watanabe, 1993; Cramer et al., 2020; De Neve & Ward, 2023). The findings of Degl'Innocenti (2021) were therefore included on the basis of data relevant to occupational stressors and wellbeing. Only prospective demographic and occupational correlational data from the PCQ-S was therefore included, because this offered understanding of secure inpatient staff occupational stressors and wellbeing in the form of role-based perceptions of ward climate. Internal reliability was also noted as measured through wider demographic variables collated in Degl'Innocenti (2021) e.g., length of time in profession and length of time in forensic psychiatry. Other strengths of Degl'Innocenti (2021) were the reduced risk of non-response bias in relation to QD item 4, where the response rate to initial survey-based data collection was 94%, with a large sample size (n=239), and the structured, validated nature of the PCQ-S (Edvardssen et al., 2009). The PCQ-S instrument's reliability and internal consistency have also been found to be acceptable (α _≥ _.9 - Edvardssen et al., 2009).

Cramer's (2020) cross-sectional design study used a survey method to examine the relationship between job satisfaction and wider secure inpatient MDT staff subjective wellbeing indicators. Job satisfaction was measured on the validated (in Spanish) Spanish Burnout Inventory (SBI) job enthusiasm sub scale (Gil-Monte & Faundez, 2011). The internal consistency of SBI job enthusiasm subscales have been found to be acceptable in the wider literature (α = .87; Gil-Monte & Manzano-Garcia, 2015). In Cramer (2020) a 10-item measure of job satisfaction was designed specifically for the study, which included a perception of threat domain. Internal consistency values were found to be acceptable (α = .83) for Cramer's (2020) 10 item measure of job satisfaction. However, challenges were also noted in Cramer (2020) when comparing secure in-patient job satisfaction out with study results. No comparator populations were noted for either the study specific 10 item measure employed or the SBI job enthusiasm subscale. Additionally, the SBI was noted to have only been validated in Spanish, potentially reducing scope for wider comparability using the English version.

In respect to MMAT QD Item 5, risk of non-response bias could not be assessed fully in Cramer (2020) as this information was not collected for online survey participants, who made up the majority of the sample (n=147). Moreover, of the 250 paper surveys that were distributed, only 43 were completed, indicating a high non-response rate (80%) and a significant risk of associated non response bias and overall reduced study quality. Morris (2022) used a similar survey design to examine the relationship between compassion satisfaction and the impact of work-related trauma (Moral injury-PMIES scale, Maguan et al., 2024). For these purposes, Morris (2022) also employed a validated measure of overall quality

of life in healthcare staff who work with individuals who have experienced trauma, the ProQual (Stamm, 2013), compassion satisfaction subscale. However, despite being of a survey design, no information was provided about non-response bias, which impacted study quality ratings.

Narrative Synthesis

Additional relevant information obtained from included qualitative, quantitative, and mixed method papers can be found in **Tables 5** - **7**.

Qualitative findings

Six themes emerged from the findings of the qualitative papers. The first four were - *Managing threat in the moment and the secure in-patient nursing role; Impact of the everyday occurrence of threat*; *Perceptions of reduced control and predictability*; *Facing typical healthcare challenges in secure contexts.* A fifth theme, *Building and maintaining therapeutic relationships in secure settings and the nursing professional identity* identified a sub theme: i) Experiencing compassion satisfaction in secure settings. A final theme was: *Resilience to threat and making a difference.*

Managing threat in the moment and the secure in-patient nursing role

A noted subtheme in Husted & Dalston's paper was *Acceptability of threat.* This theme highlighted the variation in the ways participants described managing the threat of violence. Relatedly some participants in this paper emphasised the importance of hiding emotions, in what were perceived as high-risk moments, or when witnessing serious and deliberate self-harm. Normalising threat was also noted to be a common way of coping with violence in secure inpatient settings, with staff regarding this as part of their job role (Husted & Dalston, 2021). Depersonalising acts of aggression such as verbal abuse, was thought to be protective against the development of burnout (Mistry, 2022).

In terms of secure staff's perceptions of their job role as managing threats of violence, this was not always perceived negatively (Hammarstrom et al., 2019; Mistry et al., 2022). Participants in Hammarstrom's (2019) study described the importance of emotion regulation when exposed to the threat of violence (theme: *Regulating oneself),* and how this was related to nursing staff role responsibilities and values. These staff members obtained job satisfaction from their ability to manage incidents of violence and aggression and considered this a demonstration of their professional skills and competence and confidence in managing highly challenging inter-personal situations.

Impact of everyday occurrence of threat

Participants from inpatient forensic occupational contexts in three of the papers described daily experiences of verbal abuse, harassment, and the associated threat of violence and aggression as key to their perceptions of occupational stress (Hammarstrom et al., 2019; Husted & Dalston, 2021; Mistry, 2022). Mistry (2022) noted that the level of vicarious trauma exposure was 'shocking" to some participants. Relatedly, some participants in Mistry (2022) described experiencing a constant fear of violence or exposure to vicarious trauma. Secure inpatient staff also described a build-up of negative interactions between service users as requiring significant management on shift (Mistry et al., 2022; Hammarstrom et al., 2019). Hammarstrom (2019) also noted that violence and provocative behaviour represented occupational stressors that could fundamentally threaten nurses' professional caring identities. Some aspects of the secure inpatient nursing role including managing incidents of violence and aggression, and associated systemic consequences e.g., additional regulatory paperwork, could predominate and overwhelm the caring features of the role.

Perceptions of reduced control and predictability

In common with the views presented by the participants in all three qualitative papers, Hammarstrom (2019) found that issues associated with the forensic mental health system, and a lack of control and predictability, were thought to have an impact on job satisfaction in secure settings. Participants in Hammerstrom's (2019) study described the frustration and disappointment associated with unpredictable changes or delays to patient care or plans, from changes to the way the forensic units were run or legal issues that frequently arose. For these reasons, managing their own and patient expectations was also seen as a key part of their job role.

Facing typical healthcare challenges in secure contexts

Two UK based papers noted that staff shortages were perceived to be the cause of frequent perceptions of unpredictability and associated occupational stress in secure inpatient settings (Husted & Dalton, 2021; Mistry, 2022). In Husted & Dalton, (2021) participant narratives focused on the stress caused by the experience of role conflict caused by reductions in staffing levels. The predominance of Nursing Assistant participants noted in Husted & Dalton (2021) is also relevant for staff perceptions in this instance. Nursing Assistants in mental health contexts, are usually a patient facing staff group, and they may be more exposed and subject to the demands of service users in secure settings (Bailey et al., 2015). Husted & Dalton (2021) also noted that participants felt that secure forensic mental health settings appeared to make everyday nursing tasks additionally stressful. In the context of some of the typical challenges that can be experienced in secure settings, such as exposure to violence and aggression, consecutive 12-hour shift patterns were described by one nursing assistant participant as

"engulfing" both physically and mentally. Participants were concerned that these issues could lead to burnout and fatigue. In turn, they thought that this could have a negative impact on patient care. This was captured in the theme *Unique environment* in Husted & Dalton (2021).

Building and maintaining therapeutic relationships in secure settings and the nursing professional identity

The challenge of developing therapeutic relationships in secure settings was felt to be a source of occupational stress by participants in all three qualitative papers (Hammarstrom et al., 2019; Husted & Dalston, 2021; Mistry, 2022). Managing the impact of physical violence could lead to a sense of detachment from service users and a struggle to engage with them therapeutically after incidents (Mistry, 2022). Cancelling shifts was an avoidance based coping strategy reported by participants in response to the perceived difficulties of engaging with service users therapeutically after an incident had occurred. The participants were aware that this strategy could lead to longer periods of absenteeism and negative emotional consequences such as guilt (Husted & Dalton, 2021). Relatedly, it was acknowledged that prolonged periods of absence could, in turn, contribute to increased fear and avoidance of challenging interactions. Nevertheless, distancing themselves from patients, in the period after an incident, was characterised by staff as being protective. In participant narratives in Hammerstrom's (2019) paper other institutional procedural practices, such as placing service users in isolation after an incident were perceived to reduce the authenticity of therapeutic relationships in secure settings. Hammarstrom (2019) also emphasised the importance of remaining open and offering qualities of typical therapeutic relationships, in order to experience job satisfaction in secure inpatient contexts. The processes of engaging service users and developing therapeutic relationships also had wider clinical implications because relationships became increasingly fulfilling for both parties, they become increasingly predictable and safer (Hammerstrom et al., 2019).

ii) Experiencing compassion satisfaction in secure settings

In Mistry (2022), there was a consideration of participant perceptions of compassion satisfaction in secure settings. Compassion satisfaction refers to the amount of joy or satisfaction staff perceive associated with helping service users in health care contexts (Stamm, 2013). In Mistry (2022) under the theme *It doesn't affect me* it was noted participants who perceived issues typically associated with secure service users (such as violence and aggression) as part of their nursing role, appeared less impacted by exposure to them. In this paper, participants who were noted to be less impacted by the sometimes challenging working conditions in secure settings, expressed narratives that emphasised the importance of values and professional identity based coping as protective. They also considered these processes

helped them to experience compassion satisfaction in secure settings. It was also noted that some participants who appeared less impacted by trauma exposure experienced as part of their occupational role in secure settings, often developed skills to manage this including, re-framing.

Resilience to threat and making a difference

These were key themes to emerge from all the qualitative papers, and the qualitative component of the mixed methods paper (Henshall et al., 2020). Given the challenges found in the secure environment and the frequent difficulties engaging patients in therapeutic work, some staff felt that they had to learn to proactively problem solve service user engagement challenges in these settings, and to value small signs of service user progress. The latter was also characterised as motivational in secure settings and captured in the theme *Making a difference* in Husted & Dalton (2021). Aspects of occupational stress management were also noted as responding positively to intervention in Henshall (2020). In this study, newly qualified Nursing mentee participants described improvement in the key areas of confidence and problem solving after taking part in a resilience based mentoring program. Also see **Table 7** for an overview of the included mixed method paper (Henshall et al., 2020).

Quantitative findings

Measurement and conceptualisation of occupational wellbeing and job satisfaction

As can be observed in **Table 6,** longitudinal correlational and cross-sectional studies varied in their conceptualisation and measurement of staff perceptions of a key occupational wellbeing indicator, job satisfaction (Degl'Innocenti, 2021; Morris et al., 2022; Cramer et al., 2020). This limited direct comparison between studies and was unsurprising given some of the wider challenges noted in the literature with the conceptualisation and measurement of job satisfaction in frontline staff in secure settings (Judge & Watanabe, 1993; De Neve & Ward, 2023). Nonetheless, some insight could be gleaned from included papers. Morris (2022) found exposure to Potentially Morally Injurious Events (PMIEs subscale– Maguen et al., 2024) was associated inversely with compassion satisfaction as measured on the ProQual (Stamm, 2013). Although, there was a significant sample size employed in Morris (2022), the effect size of findings was noted to be small, and no information provided about selection bias, reducing the strength of conclusions that could be drawn on the basis of study quality.

Cramer (2020) employed a 10 item measure developed specifically for the purposes of the study, and a Spanish Burnout Inventory subscale (SBI- job enthusiasm) to conceptualise and measure job satisfaction in a workplace health assessment of secure inpatient MDT staff. It

was noted that the predominantly nursing staff sample had higher midpoint scores on job enthusiasm than had been hypothesised as measured on the SBI and job satisfaction using the study specific index. This was also considered to represent relatively neutral secure inpatient staff perceptions of job satisfaction. However, no clear comparator population was noted in either the study specific measures or SBI job enthusiasm subscale. Challenges developing understanding of secure inpatient staff perceptions of job satisfaction in the context of wider healthcare staff groups were also therefore highlighted in these findings, and in respect to the use of non-validated measures of job satisfaction. Cramer's (2020) study specific measure also included a perception of threat domain, which described as acceptable and subject to measurement of internal validity.

Need for Affect (NFA) is a construct that represents an individual's tendencies to approach or avoid emotional or affective internal experiences (Appel et al., 2012). As measured on the NFA (short form- Appel et al., 2012), approach tendencies were found to be positively associated with job enthusiasm as measured on the Spanish Burnout Inventory (SBI) in Cramer (2020). In terms of ecological validity, it would follow that engaging in an approach-based manner with service users may be more likely to be exposed to opportunities to learn and attain occupational rewards and feel more enthusiastic about their roles in secure settings. However, the significant nonresponse rate noted in Cramer (2020) could also be indicative of response bias and a self-selecting population who took part in the study. This is considered salient to these findings in respect to internal validity.

Role and experience-based variations in staff perceptions of occupational wellbeing

In the quantitative longitudinal correlational (Degl'Innocenti et al., 2021) and mixed methods literature (Henshall et al, 2020), it was noted secure inpatient staff perceptions could vary based on role and length of experience. In Degl'Innocenti (2021) secure in-patient staff with increased occupational experience in forensic psychiatry, and time spent in role and associated educational qualification, were noted to be more likely to perceive environments as 'everyday'. This is considered to represent staff perceptions of personalised qualities in ward-based environments as measured on the Person-Centred Questionnaire Staff version. In Degl'Innocenti (2021) PCQS 'everydayness' correlated with number of years in the profession (Edvardssen et al., 2009). Although the sample size was the largest of included papers, in Degl'Innocenti (2021), correlations were also noted to be small in effect size, reducing the strength of conclusions that could be drawn. However, the findings of the aforementioned paper are viewed as likely indicative of hierarchical role-based variations in perceptions of positive factors in the environment that contribute to occupational wellbeing in

secure settings. In addition to the potential links between clinical experience, competency, and occupational wellbeing in these contexts.

Also related to variation in secure staff perceptions of occupational wellbeing by role, in the mixed method paper by Henshall (2020), it was found that after taking part in a mentoring facilitated resilience intervention that mentees self-confidence post-programme was higher than pre-programme. However, as can be observed in **Table 7**, offering an overview of the included mixed method paper, there were *no significant differences* observed in mentee belief in their ability to provide good patient care pre and post intervention as measured on study specific indices. Henshall's (2020) findings could therefore also be indicative of experience-based variation in frontline staff occupational wellbeing, and the time and input that can be required for registered nursing staff to feel confident in their professional identities, in secure in-patient settings.

DISSCUSSION

Main findings

Overall, in respect to addressing current review aims, some comparability was noted between previous and present review findings, especially on the salience of threat as an occupational stressor for secure inpatient staff. This is discussed further below and throughout the **Wider Context** section**.** Despite less literature directly exploring non ward based frontline MDT secure staff role based perspectives of occupational stress and especially occupational wellbeing and relevant indicators (Job/Compassion satisfaction) in line with previous review literature (Oates et al., 2020) some understanding could be developed across a predominantly secure inpatient nursing staff (registered and unregistered) groups perspectives, as outlined below. The ongoing predominance of nursing staff in secure settings and the available literature is also reflective of practice guidelines for staff complement in the area (Critchon, 2009; RCN, 2012) and additional prior review (Brown et al., 2017). Also, in line with expectations, some variation in staff perspectives of occupational stress, and wellbeing associated with role and context were noted. Strategies that helped secure frontline staff to experience reduced occupational stress are also described under the subheading of **Clinical implications.**

Wider context

In line with the wider evidence base (Kelly et al., 2015; Newman et al., 2021) and in concordance with previous review findings (Oates et al., 2020) across included papers, secure forensic frontline staff perspectives of threat and its associated management were highlighted as a key multi-faceted occupational stressor. Descriptions included staff perspectives of threat

and stress or emotional overwhelm associated with exposure to violence and aggression in the included qualitative literature (Husted & Dalton, 2021). Some of which also appeared specific to the forensic mental health system, in line with wider qualitative research in the area (Harris et al., 2015). Other similar perceptions of threat, such as fear of vicarious trauma exposure, also predominantly related to the forensic mental health system, were noted (Mistry et al., 2022).

In line with expectations, typical nursing health care staff challenges including 12-hour shifts and inadequate staffing levels were also found to impact secure patient facing staff perceptions of occupational stress. These issues were noted in the available qualitative literature (Husted & Dalton, 2021; Hammarstrom et al., 2019) and were also described as interacting with and being amplified by typical occupational difficulties faced in the secure setting. Such as the physically tiring nature of being exposed to service user verbal aggression across a shift, and working numerous similar long shifts consecutively. Oates (2020) review findings also emphasised the need for supportive occupational interventions in inpatient secure forensic healthcare practice to be designed with considerations given to the environment and patient group. This is related to the risk of threat and potential harm associated with secure inpatient contexts for frontline forensic staff (Oates et al., 2020). Present review findings are also considered to be in concordance with the previous review in this domain.

Furthermore, based on some included qualitative, quantitative and mixed methods papers findings, there were also indications of role-based variations in staff perspectives, associated with perceptions of occupational wellbeing (Degl'Innocenti et al., 2021; Henshall et al., 2020; Husted & Dalton, 2021).These were noted to be positively related to seniority and length of experience in post, and indicative of the complexity of secure inpatient nursing role, time and input required for staff to develop confidence and associated competencies in these areas (Coats & Jones, 2020). Significant potential impacts including burnout and absenteeism were also highlighted and were noted as more prominent in staff groups with reduced power and status in the forensic mental health inpatient system hierarchy, such as unregistered nursing staff. Present review understanding developed on role based variation in staff perspectives on occupational wellbeing, and by implication, capacity to manage occupational stressors, were also considered to be broadly in accordance with the wider evidence base and psychoanalytic theory, which indicates staff in more senior positions can project responsibility onto junior staff in these settings (Menzies-Lyth, 1988). This is hypothesised to result in increased perceptions of occupational demands and associated stress, which may lead to reduced opportunities to access occupational wellbeing for staff with less power and status in the at times hierarchical,

NHS secure inpatient setting (Johnson & Boyle, 2018; Barnes et al., 2022). Relatedly, the importance of training, for new frontline staff occupational wellbeing and retention in secure settings, was also therefore emphasised in the present review findings. This also concurs with previous review (Oates et al., 2020) and wider research and practice literature in the area (Harris et al., 2015; Georgious et al, 2019; Critchon, 2009).

Although less available literature was noted to focus on key occupational wellbeing indicators, job and/or compassion satisfaction, in secure forensic frontline staff, it could be observed that in the majority of included qualitative (Hammarstrom et al., 2019; Husted & Dalston, 2021; Mistry et al., 2022) and quantitative papers, (Cramer et al., 2020; Morris et al., 2022) links between job satisfaction and self-efficacy were noted as relevant to staff perspectives. The wider literature notes the related nature of self-efficacy and job satisfaction (Reid et al., 2014; De Neve & Ward, 2023). In present review findings, this also appeared specific to the secure inpatient nursing role identity, such as a sense of professionalism associated with appropriately responding to violence and aggression, noted as relevant in some of the included qualitative papers (Hammarstrom et al., 2019; Mistry et al., 2022). Secure staff perceptions of stress and threat specific to potentially morally injurious events (PMIES; Maguen et al., 2024) were also noted as associated with compassion satisfaction (Morris et al., 2022; Stamm, 2013). The development of a questionnaire instrument on forensic staff job satisfaction with a domain focused on perceptions of threat, and early indications of its acceptability for use in this population, underscores the likelihood of potential links between threat, occupational wellbeing and associated job and/or compassion satisfaction indicators, in secure inpatient staff (Cramer et al., 2020).

Review findings were less clearly comparable with the findings of Oates (2020) on individual differences and how these may be relevant to sustainability and retention in secure forensic inpatient staff in lower security settings. Some variation in population examined and their context was noted, and is considered explanatory in this domain. While most review participants were comparable to Oates (2020) as secure female frontline nursing staff were predominant, only a small proportion of included papers were described as being based in comparable UK high secure settings. Wider UK based research and practice understanding indicates an increasing focus on the criminogenic aspects of forensic inpatient care is associated with higher levels of inpatient security, and a more clinically assertive approach is employed in these contexts (Tighe & Gudjohnson, 2012; Georgious et al., 2019). In general terms, self-esteem, confidence and extroversion may have also therefore been less relevant to present review participant roles, as the majority operated in medium and low secure settings.

As noted by Lazarus and Folkman (1984), for more individualised evaluative aspects of coping processes, a fit between resource type and stressor characteristics may enhance coping or offer better resistance to stress. In line with previous review and wider relevant research findings and recommendations (Oates et al., 2020; Newman et al., 2020) understanding was also offered on approaches or coping strategies that may reduce subjective perceptions of occupational stress, and/or increase perceptions of occupational wellbeing and role satisfaction in frontline secure inpatient staff, outlined below.

Clinical implications

In accordance with Bronfenbrenner's (1979) ecological systems approach, on an individual level, managing expectations, re framing, depersonalising, and values-based role and professional identity coping strategies, were highlighted as protective for some secure frontline staff participants in the current review findings.

Review Limitations

Some variation in the quantity and quality of the available literature was noted**.** In general, less papers directly explored wider secure forensic inpatient Multi-Disciplinary staff perspectives. This resulted in limitations to understanding that could be offered in the present review on wider secure inpatient frontline Multi-Disciplinary staff group perspectives. Variation was also noted in the quantity and quality of the available quantitative literature and the conceptualisation and measurement of a key occupational wellbeing indicator; job satisfaction. This was related to wider challenges associated with the conceptualisation of occupational wellbeing and job or compassion satisfaction (De Neve & Ward, 2023), and was also potentially underpinned by cross cultural and/or linguistic barriers, noted as relevant in some of the present review included papers. Due to less specificity offered in some UK and European based (Sweden) papers on study setting and associated level of security, (low vs medium vs high), additional understanding of potential variation between papers based on setting and level of security, including cross-cultural variation was somewhat limited. This was also to an extent associated with the potential scope of the present review. For example, it was not possible to develop further understanding of differences in security levels between Sweden and the UK within the timeframe allocated (Hammerstrom et al., 2019: 2022; Degl'Innocenti et al., 2021; Tomlin et al., 2021; Critchon, 2009).

Review Strengths

In line with expectations, concordance could most clearly be observed between previous and present review findings in the domain of the salience of threat for staff in secure forensic

settings. The present review also offered additional in-depth understanding focused on aspects of the secure role and context that may contribute to occupational stress and wellbeing for frontline forensic inpatient staff. Staff perspectives of typical healthcare occupational stressors as having potential impacts on wellbeing in these setting were noted, in addition to stressors specific to the secure forensic mental health system occupational context. Potential links between threat and job satisfaction were observed. Protective strategies that also appeared supportive in these contexts were also identified. Current review findings were also supportive of understanding offered by Oates (2020), which noted the importance of interventions designed to support sustainability and retention in this area to account for the more unique aspects of the secure inpatient context. Finally, present review findings may also be relevant for the purposes of developing guidelines or interventions aimed at improving staff wellbeing, retention and sustainability in the area (Newman et al., 2020). These could also be important for the purposes of staff retention in the context of the ongoing health care staffing crisis (WHO, 2023; Bailey, 2021).

Future Research directions

Due to noted reduced quality and quantity of research focusing on occupational wellbeing and associated more specific indicators, such as job/and or compassion satisfaction, in secure inpatient frontline staff, future research recommendations are made on the importance of developing understanding in this area. Related to an emerging evidence base indicating occupational wellbeing is a predictor of employee role sustainability and longevity (Ozbonov et al., 2020; De Neve & Ward, 2023). There was also indications of variation based on role in secure staff perspectives observed in the current review findings, and potential wider health and wellbeing implications noted. Further exploration of the relationship between key occupational wellbeing indicators e.g., job or compassion satisfaction and threat may also offer additional information that could be important for staff wellbeing and retention in this area. The value of developing a specific measure of job satisfaction for ward based staff in secure settings that includes a perception of threat dimension was also noted (Cramer et al., 2020), which may be helpful for future research in this area. Professional values based coping was also found to be protective for some participants in the present review, and may represent a helpful further avenue of research for improving staff wellbeing in secure settings (Hauan, et al., 2023).

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Chapter 2: Major Research Project

Title:

Working with people with Intellectual Disabilities who present with aggression in Secure Forensic settings: clinical support staff everyday perspectives.

Mhairi McDonald

Prepared in accordance with the author guidelines for the Forensic and Legal Psychology Journal

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Also see Appendix 1.1 for further information regarding author guidelines

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Plain Language Summary

Title: Working with people with Intellectual Disabilities who present with aggression in secure forensic settings: nursing assistant everyday experiences.

Background: Clinical support staff in secure forensic Intellectual Disability wards experience aggression frequently. However, there is less research that focuses directly on understanding support staff perspectives of aggression. Particularly given recent staffing challenges in the NHS, and the key role clinical support staff play in providing patient care, it is important to develop understanding of their perspectives in this area to support wellbeing.

Aims: The study aimed to develop better understanding of support staff perspectives of experiencing aggression in Secure Forensic Intellectual Disability wards. This included a consideration of the impact experiences of aggression have on secure inpatient clinical support staff, what helps them day to day in these scenarios and their wider support needs at work and at home.

Methods: Eight support workers from wards providing secure Forensic care for adults with Intellectual Disabilities were recruited to participate in the study. A qualitative interview-based study design was chosen to allow for a deeper understanding of staff perspectives of experiencing aggression in Forensic Intellectual Disability settings.

Main findings:

In addition to exposure to incidents of violence and aggression, secure inpatient staff also experienced frequent threats of violence. The emotional and procedural consequences of these incidents were sometimes significant for staff operating in these environments and resulted in perceptions of a reduction in control when performing their day to day roles. Managing relationships with service users after incidents of aggression could also pose significant challenges. Despite this, participants reported having positive engagement with other staff and service users and found this and the community aspect of their roles protective. A number of strategies for managing more challenging aspects of the role including impacts associated with exposure to violence and aggression at work and at home, were also found to be helpful. Overall, a sense of being proactive day to day in regard to developing their own practice and service users' difficulties was found to be protective for staff in these settings. In addition to work based external supports when available in a notably resourced strained NHS context. At home there were fewer avenues for staff to access support. This was concerning given the impact of exposure to aggression on the lives of staff when they were off duty. Study findings are also considered in the context of wider research, where it is noted aspects of

forensic settings and the nursing assistant role may result in increased risk of burnout in the context of exposure to violence and aggression. Recommendations for further research are also made.

ABSTRACT

Background: A growing evidence base indicates high frequency and intensity of ward staff exposure to violence and aggression in secure forensic settings. Despite this, the perspectives of frontline forensic nursing assistant staff, particularly in regard to exposure to violence and aggression, are less clearly elucidated in the literature.

Objectives: To explore secure forensic Intellectual Disability nursing assistant perspectives on exposure to occupational aggression, the impact of these experiences, what they find helpful day to day, and their support needs in this unique occupational context.

Methods: This paper employed a qualitative interview method. Eight nursing assistants working across two levels of security (low and medium) in secure Intellectual Disability inpatient settings were recruited to participate in in-depth semi-structured interviews. A thematic analysis of respondent data was employed.

Main findings: Four main themes emerged in addition to conceptually linked subthemes. Key insights obtained into forensic Intellectual Disability support worker perspectives of violence and aggression included the following. Participants described frequently experiencing the threat of aggression, in addition to less frequent exposure to incidents. Associated impacts included significant emotional and procedural consequences day to day for clinical support staff in secure settings such as reduced perceptions of autonomy, in addition to experiences of disempowerment. Aspects of the nursing assistant role and practice in secure settings which may also increase risk of burnout in the context of exposure to violence and aggression, were also highlighted in the present research findings. Despite this, on the whole, participants reported having positive engagement with other staff and service users and found these elements and the community aspect of their roles protective**.** Individual level protective strategies were also employed extensively by study participants. In particular, a proactive approach was noted as helpful day to day in a number of areas of secure inpatient nursing assistant practice, though with caveats applied. Opportunities to access support at work and at home were valued but noted as limited and were characterised by significant barriers including the current resource strained NHS occupational context. This was concerning given the impact of exposure to violence and aggression which continued when staff were off duty.

Clinical implications are summarised including individual and systemic level protective strategies and interventions. Future research recommendations are also made.

INTRODUCTION

Forensic mental health and Intellectual Disability (ID) settings in Western contexts have a similar function to general adult forensic services (Tomlin et al., 2021). They provide care and treatment for those with mental health needs who are involved in the criminal justice system and are judged to pose a risk to others (Markam, 2021), although they are designed to meet the needs of offenders with an ID (Critchon, 2009). In general terms, in part due to the increased severity of secure forensic inpatient presentation and risk (Critchon, 2009; Manyloso et al., 2009), all patient facing staff members working in secure settings are exposed to emotionally demanding interpersonal interactions that are frequently underpinned by conflict and the implied or real threat of violence (Newman et al., 2021). One study reported that 70% of forensic mental health staff surveyed had been physically assaulted in the workplace during the previous 12 months, and 99% had experienced conflict with a service user (Kelly et al., 2015).

Forensic mental health inpatient services can therefore be risk focused and relationally tense areas to work in (Markham, 2021). There is some research indicating aspects of the secure ward based nursing staff role can be protective (Hammarstrom et al., 2019) and some indications of mixed findings on increased risk of burnout for forensic staff in comparison to other healthcare staff groups in larger scale review research (O'Connor et al., 2018). However, in general terms, exposure to violence and aggression is related to increased risk of burnout in healthcare staff (O'Connor et al., 2018). Burnout can be described as a state of physical, mental, and emotional exhaustion that can occur due to significant occupational stress. This condition is prevalent in occupational roles and settings that interface with people, including service industry roles and especially healthcare staff (Maslach & Leiter, 2016).

Recent qualitative interview research indicated that forensic healthcare staff, regardless of qualification, can perceive the presentation and treatment needs of a Forensic Mental Health and ID population to be complex especially when addressing risk related issues (Manyloso et al., 2009; Coats & Jones, 2020). This is partly due to the inherent complexity of presentations in the area and communication challenges which are also prevalent in ID populations (Coats & Jones, 2020). Additionally, understanding from psychoanalytic theory and research indicates evaluations of responsibility in forensic inpatient settings are frequently inverse. It has been noted that staff in positions of higher power and responsibility project responsibility and negative evaluations downwards onto more junior staff (Menzies-Lyth, 1988). Wider

qualitative ethnographic research focused on clinical support staff working in older adult residential care indicates the role can be associated with reduced perceptions of control and autonomy (Bailey et al., 2015). This can also increase risk of burnout in healthcare staff (O'Connor et al., 2018). Taking into account role and status within the forensic mental health system, frontline clinical support or unregistered nursing staff could be described as a disempowered staff group in NHS secure inpatient settings which are often hierarchical and they may therefore be subject to negative evaluations (Menzies-Lyth, 1988; Barnes et al., 2022; Markam, 2021). A qualitative paper which interviewed 26 people from a Forensic ID population, found high quality staff support, and clinical support staff or nursing assistants, to be central to positive perceptions of recovery (Aga et al., 2020). This underlines the prominence of the role in patient care and treatment and the value of developing further understanding in this area.

An additional qualitative interview study by Husted & Dalton (2021) explored forensic inpatient registered and unregistered nursing staff's occupational experiences of providing secure care. This paper emphasised the constant perception of threat associated with fears of exposure to violence and aggression that staff experienced, in addition to challenges with accessing support, and impacts on their health and wellbeing (Husted & Dalton, 2021). An experientially focused study of a similar design, (Beryl et al., 2018) indicated a sample of predominantly high secure registered nursing staff could find it stressful and emotionally draining to manage typical forensic service user needs of both a caring and criminogenic nature. These are also referred to as care and control dilemmas in the wider literature (Markam, 2021; Harris et al., 2015; Greenwood & Braham, 2018). This stems from observational research (Clarke, 1996) where it was found nursing staff teams often experienced conflict based on which approach they prioritised in their practice (care vs control). A further qualitative interview paper, based on interviews with medium secure staff in the UK indicated that these more challenging aspects of inpatient care can also be protective, when considered by staff to be a key part of their role and practice within the secure inpatient setting (Mistry et al., 2022).

In respect to support needs associated with the secure inpatient role, recent qualitative review evidence (Billings et al., 2021) highlighted there is limited research on the occupational experiences and support needs of frontline healthcare staff. Available evidence found that UK based NHS frontline workers, including clinical support staff, were frequently challenged by high workloads, limited resources and experienced communication and accessibility issues at work. Billings (2021) also indicated staff expressed varying views about the adequacy of support received. Issues around accessing support were exacerbated during the COVID-19 pandemic. Recent review in the area of the forensic mental health literature also noted the

value of further understanding being developed in this area, and interventions developed to address the needs of staff in these unique occupational environments (Oates et al., 2020; Newman et al., 2020).

The findings outlined indicate the importance of developing understanding of nursing assistant perspectives in this area. They are a significant though often disempowered (Menzies-Lythe, 1988; Johnson & Boyle, 2018) and less well represented (RCN, 2012; Bailey et al., 2015) group of secure forensic mental health staff, who are key to high quality patient care, treatment and safety in this area (Aga et al., 2020). In a challenging post COVID-19 occupational context in the NHS, which is subject to significant frontline healthcare staff shortages, exploration of this topic is also of wider importance (WHO, 2023). The present paper employed a qualitative interview method and thematic analysis approach to address the research question and aims outlined below:

What are inpatient forensic Intellectual Disability clinical support staff perspectives on exposure to violence and aggression?

The present research aimed to develop understanding of the perspectives of secure forensic ID clinical support staff in three main areas. i) Their views on exposure to violence and aggression ii) How clinical support staff perceived these more challenging occupational experiences impacted them & protective strategies employed iii) Their views on how they can be appropriately supported.

METHODS

Ethical Approval

The study conformed to the European Union Data Protection Regulation (GDPR) and approval was received from NHS Greater Glasgow and Clyde (GGC) research and innovation department (Reference number: GN22PH063: **Appendix 2.1.1** p. 93). Local NHS service level ethical and audit committee approval was also obtained (**Appendix 2.1.2** p. 95). Approval was also obtained from the University of Glasgow college of Medicine, Veterinary & Life sciences (MVLS) ethics committee (Reference Number 200210123; **Appendix 2.1.3** p. 96).

Design

This study utilised a qualitative design to explore secure inpatient ID clinical support staff perspectives of exposure to violence and aggression, using a semi structured interview method.

Study procedure

Recruitment

Recruitment was undertaken on a purposive basis, in line with research aims. Nursing assistant staff who regularly worked in secure **male** mental illness forensic ID wards in the Greater Glasgow and Clyde (GGC) area were approached, (approximately 15 individuals in total). This included individuals with a range of experience and length of service working across two levels (low and medium) of inpatient security.

Participants were recruited by the researcher, NHS GGC psychology staff (including the researcher's field supervisor), a psychology assistant, and nursing staff from secure Forensic ID services in NHS GGC. The author explained the details of the proposed study to the Service via a presentation and offered the same information verbally to potential participants in the main ward area, if they showed interest in taking part. Being mindful of the researcher's role within the hierarchical forensic mental health system, this information was only imparted when it was requested of the author to do so (Barnes et al., 2022; Johnson & Boyle, 2018). This helped to reduce the risk of participants feeling pressurised to take part and/or perceiving the research was a mandatory part of their work role. Nursing assistant staff were also provided with written study and participant information sheets (**Appendix 2.3** p. 98). They were advised to consider the information further for a minimum period of 24 hours and to contact the researcher if they had any questions, and/or were interested in taking part. Recruitment was in part facilitated by the researcher having a clinical placement at another GGC forensic mental health service. A member of the research team was also a permanent member of staff and regularly raised the issue of recruitment to the research at multi-disciplinary team (MDT) meetings. Field and reflective notes were kept electronically throughout the process and informed the analysis. Also see **Appendix 2.4** p. 100 for a sample reflective field note excerpt.

Topic guide and Interview style

At proposal stage an initial interview schedule was developed (**Appendix 2.2** p. 97). However, this was updated to reflect a change in qualitative approach (**Appendix 2.5** p. 101). The final interview schedule was developed based on thematic analysis principles. The first part of the interview was conducted using a Cognitive Behavioural Interview (CBI) format. The CBI, adapted for the purposes of this study, asks participants to describe an activating incident of violence and aggression and consider the emotions and beliefs associated with the event (Wanless & Jahoda, 2002). Aspects of the CBI framework were primarily employed to contextualise data. The latter part of the interview schedule was focused on addressing research aims. Interview questions and prompts from this section were flexible, depending on

what the participant chose to discuss. Where appropriate, interesting or unexpected responses were followed up. General features of the participants' role were also discussed throughout, including positive aspects, to reduce the likelihood of participants becoming distressed.

The researcher recognised that staff may be reluctant to reveal their experiences to an 'outsider', especially the potentially emotive topic such as staff experiences of violence and aggression (Garton & Copeland, 2010). An empathetic stance was employed to ensure participants felt able to express their perspectives on a potentially challenging topic matter (Rubin & Rubin, 2016). Reflecting and summarising participants' responses, to check shared understanding, was also used throughout interviews. Open questions were used to prompt discussion where appropriate. The researcher was also mindful of offering participants breaks where appropriate to reduce the risk of participants becoming distressed or overwhelmed.

Interviews

Study participants were interviewed by the **author/principal researcher**. Interviews ranged from 50-90 minutes and were conducted on a face-to-face basis. Paper consent forms were distributed with participant information sheets. These documents were discussed at interview to ensure understanding and informed verbal consent before written consent was also obtained. All interviews took place in low (two) and medium (five) secure NHS GGC settings. Seven interviews were conducted on the ward in staff meeting rooms. One was conducted in an off-ward environment. To ensure participant anonymity and confidentiality, all nursing assistant staff taking part in the study were assigned pseudonyms and research interviews were recorded using an encrypted audio recorder. Basic demographic and work related information were also collected at interview. This included the person's name, sex, training completed, and whether they wanted to take part in a debrief and/or be contacted about results. Interviews were audio recorded and transcribed verbatim. Line by line coding was carried out by hand.

Debrief

To have the opportunity to reflect on their engagement in the research and receive support and signposting and to discuss potentially difficult experiences, respondents were also offered the option of engaging in a post interview debrief. 75% of participants took part in research debrief interview. No participants disclosed experiencing significant distress or raised issues pre or post interview.

Data saturation, sample size justification and homogeneity

As a qualitative approach was employed, the concept of data saturation was used as a framework for discussions between the principal researcher and supervisor during recruitment and the early stages of data analysis (Braun & Clarke, 2013). Recent qualitative methodological review research (Henick & Kaiser, 2022) noted that interview based studies with between 5 and 24 participants can reach saturation in the context of homogenous study populations and narrowly defined objectives. Initial data analysis processes and discussions indicated **8** NHS GGC secure ID nursing assistants were adequate to explore participant perspectives of a sensitive topic, in this small and less accessible population (Braun & Clarke, 2013). Homogeneity of sample was also viewed as important to maintain in line with research aims to explore participant perspectives and associated experiences (Robinson, 2014).

Participant characteristics and inclusion/exclusion criteria

All those who took part in the study were over 18 years of age and had experienced at least one incident of violence and aggression in the last three months that they were willing to discuss at research interview. They had also worked in GGC secure forensic ID services in their present role for at least six months, and they had taken part in all mandatory secure forensic GGC NHS frontline staff training. Three participants were woman; five were men. Also for the purposes of homogeneity of sample it was important that clinical support staff taking part in the study had been in post for a specified minimum period (six months) and had completed mandatory training to ensure they had comparable basic understanding of NHS and localised processes relevant to appropriate responses to violence and aggression (Bowers et al., 2006; Georgiou et al., 2019). Please also see **TABLE 1:** Participant characteristics for an overview.

TABLE 1: Participant characteristics

Characteristics	**No of total participants *n*=8**
Sex – female (*n*) (%) overall *n* (%) female participants operating at low security	3 (37.5%) 2 (100%)
Low secure Nursing Assistant total (*n*) (%)	2 (25)
Medium secure Nursing Assistant total *(n) (%)*	6(75)

Reflexivity

Reflexivity was employed throughout the current research framework in an introspective manner. This can be described as a process of using self-awareness and understanding for general insight and interpretations, in addition to linking wider knowledge with participant and researcher experience (Finlay, 2002). I am a Doctorate in Clinical Psychology PhD candidate (forensic psychology alignment) with approximately seven years of occupational experience in secure forensic mental health services, therefore care was taken to reduce the risk the analysis could be subject to influence by the researcher's own perspectives and personal history (Polkinghorne, 1995). This includes past ward based occupational experiences. In recognition of this, a reflective diary and field notes were used to allow the researcher to further consider relevant past personal experiences and associated potential biases, and to minimise the impact of these on the research and analysis process. An excerpt of the author's reflective field notes can be found in **Appendix 2.4** p. 100. The COREQ checklist was also used to enhance transparency and methodological rigour (**Appendix 2.8.** p. 106).

Data approach and analysis

The epistemological position of this study was critical realist and sought to explore participant perspectives, while recognising that these were influenced by the researcher and wider societal, cultural and political issues (Danermark et al., 2002). Researcher influence is further addressed under the heading of **Reflexivity** and where appropriate throughout**.** Thematic analysis, (TA) was employed iteratively as described in the six-step process outlined in Braun & Clarke (2006): (1) developing familiarity with the data; (2) generating codes, (3) generating themes, (4) reviewing themes, (5) defining and naming themes, (6) write up and locating exemplars for the purposes of contextualisation in the wider literature and discussion sections. With a view to supporting reflexivity, when initially becoming familiar with the data, (stage 1 of analysis), the researcher did so in the style of a 'naïve reading' to avoid ascribing past comparable occupational experiences to participants and to build primarily on participant understanding (Lindseth & Norberg, 2004). The present study also prioritised induction to approach the emerging nature of the literature in this area. Also, in accordance with the aims of the present study, an empathetic orientation to data interpretation was adopted to prioritise and develop understanding of meaning as ascribed by participants. Examples of coding can be found in **Appendix 2.6** p. 103 and in a coded transcript in **Appendix 2.7** p. 104. The researcher's supervisor provided feedback on a coded transcript and the development of the themes with a view to enhancing the rigour and trustworthiness of the data. The analysis

process also drew on the researcher's reflective field notes. An example of which can be found in **Appendix 2.4** p.100.

RESULTS

Analysis

A Thematic analysis was performed on participant transcripts (Braun & Clarke, 2006). Study participant perspectives were best captured in the following main themes: *Being human together in a secure setting*; *Balancing the boundary scales*; *Making sense of violence and aggression on the ward* and *The impact of incidents and barriers to accessing support can be isolating*. Each main theme had subthemes, which were conceptually interlinked. Conceptual links between themes were also highlighted. See **Table 2**: Main themes and related subthemes for an overview.

TABLE 2: Main themes and related subthemes

Main theme	**Sub themes**
Being human together in a secure setting	*Being vulnerable*
	The ward is a community of people we are part of
	Working together as a team is hard but rewarding
Balancing the Boundary scales	*Staff and service user boundaries can change after an incident*
	Using boundaries to promote fairness for staff and service users on the ward
Making sense of violence and aggression on the ward	*Knowing & understanding the service users and context helps*
The impact of incidents and the barriers to accessing support can be isolating	*Talking about my feelings can be a double-edged sword*

	Some parts of the role don't stop
	After an incident - how I and others respond makes a difference

Theme One - Being human together in a secure setting

All participants reflected in an open manner on themselves and their relationships with other staff and service users on the ward, and the immediate impact of experiences of violence and aggression. They also often emphasised the highly individualised nature of the therapeutic work they engaged in day to day, which was characterised by certain qualities such as trust and openness to understanding the service users as people. Being proactive towards service users' internal experiences was also noted as helpful day to day by the majority of participants. Being proactive and authentic in more challenging scenarios, including exposure to verbal or physical aggression, was also emphasised as being helpful and protective by three male medium secure participants. Central to all participant views was the importance of a positive ward community to the quality of their day-to-day occupational experiences. The majority of support staff interviewed also displayed an awareness of the importance of their influence on the wider ward community. Emphasis was also placed on the value of working in an ID setting for their sense of community by the majority of participants

Being vulnerable

When reflecting on exposure to violence and aggression, the majority of participants described both themselves and service users as *"only human"* (Iain, p.18 ln 632) and therefore vulnerable in secure contexts. One participant Iain expressed this in a humorous way:

> *"I don't care who you are, if you're Goliath even…everyone's scared if there's a situation"* (p.13 ln449).

All participants said they were exposed to the threat or actuality of either verbal or physical violence and aggression on a weekly and sometimes daily basis during more challenging or "*unsettled*" (Simon p.10 ln 348) periods as they were also referred to by the majority of participants. Maddie also talked about their tension and stress levels being *"through the roof"* (p.6 ln 219) due to perceptions of threat and associated anticipatory anxiety about potential

incidents of violence and aggression. Another participant, Cath, described feeling *"out of control and fearful"* (p.3 ln 95) in their responses in the moment. Unsurprisingly, these descriptions were broadly reflective of the majority of participant perspectives of occupational experiences of violence and aggression. In terms of their reactions to incidents and associated processes and procedures, the majority of participants discussed the use of restrictive practices such as restraints Although, more frequently, the majority of participants referred to the build-up, described as challenging by Maddie due to the uncertainty associated: "*Because you're left wondering when it's going to happen"* (p.3 ln78), aversion, or consequences of a near or actual incident of violence and aggression that did not require restraint. These types of incidents, even when averted, were a major preoccupation for the majority of participants, often with significant implications for their relationships with clients. The majority of participant reflections, especially those on relational repair processes, were also characterised by reduced perceptions of control and autonomy. Perceptions of a lack of control, associated with relational repair processes, were also noted as relevant to participant perspectives in the **Balancing the Boundary scales** subtheme: *Staff and service user boundaries can change after an incident.*

The ward is a community of people we are part of

All participants prioritised staff and service users in the issues they reflected on. These included descriptions of aspects of the role they valued, especially the process of working with their colleagues and service users in a person-centred manner to effect positive change and seeing progress in care and treatment goals. Considered to be reflective of this, Ben stated:

> *"And the more I don't know, challenging the patient the bigger reward you get when you see them actually start to integrate with the staff with their peers and actually getting up and out into the grounds and getting their free time and actually moving on to another unit."* (p.6 ln 184-187).

Relatedly the majority of participants also thought that they and their colleagues set the tone and culture on the ward. Of these, three individuals further emphasised the importance of being consistently proactive about instilling humanity and respect into their interactions with service users, perceiving this promoted an overall safe and positive ward culture and community. Ben described:

> "*It sounds (sic) cliché but if you are open to getting to know them as people and you treat service users with respect, they generally give you and others the same back over time."* (p.15 ln 524-527).

A strong person-centred approach was advocated by all the participants. This was reflected in the importance attached to getting to know the individual concerned. As Ben explained:

> "*Usually, I make my relationship with the guys and then read the clinical files"* (p4. ln142-143).

One participant, Iain, further emphasised the importance of providing individualised person-centred care in this setting, related to an awareness of both staff and particularly service users being generally unable to leave the ward, and that the ward was thought of as their home by some service users. Iain stated:

> "*We are here a long time… And some of the guys are here 3 or 4 years so it becomes their home and you can't force a relationship on them you have got to build a relationship with them.*" (p.8 ln 272-273).

Which, was also noted as relevant to participant perspectives in the subtheme *Staff and service user boundaries can change after an incident* of the main theme*:* **Balancing the Boundary scales.**

Working together as a team is hard but rewarding

All participants reflected on the importance of teamwork and the dynamic between staff to their day-to-day occupational experiences. One participant, Maddie, thought their responses to aggression could be linked with their perceptions of their shifts capacity to deal with risk:

> "*you are always assessing can we manage it, if you know we're not going to be able to manage it it's a horrible, horrible feeling"* (p.7 ln 243).

This also highlighted a perceived link between resources and staff wellbeing, when dealing with potential incidents of violence and aggression. Three participants also described an awareness of themselves as resources on the ward. Considered reflective of this, Iain described frequently "*parcelling themselves out*" (p.10 ln 328). An experience characterised by reduced autonomy, role ambiguity and conflict, usually noted to occur when staffing resources were strained. This was problematic as it was considered dehumanising by participants, and often reduced staff-patient interactions to simply ensuring basic needs were met.

The quality of staff relationships in secure contexts was raised by all participants in the present paper. The majority also talked about the importance of staff working proactively as team as a way of preventing incidents of violence and aggression. As Maddie further explained:

> "*So if we all work together we get the respect from the patients"* (p.7 ln 233-234).

Using humour peer to peer also appeared to have a protective function for the majority of participants when reflecting on their responses to violence and aggression. This was thought to diffuse tension around challenging experiences. It was also noted this appeared to help develop a shared narrative and understanding in staff teams, often in highly challenging circumstances. This was also noted as relevant in the related subtheme: *Being vulnerable*.

Participants also found their colleagues to be supportive. One participant, Simon, contrasted their current experience of having a "*good shift team*" (p.15 ln 527) with previous healthcare teams they had worked in where there had been "*cliques*" (p.15 ln 536). On occasion participants also referred to historical breaches of trust between staff, and the impact this had on working relationships. As Iain reflected:

> "*He should have been there at my back… I don't know what happened and I don't know why. I didn't make an issue out of it but I wasn't happy or sure I could trust them again."* (p. 14 ln 474-476).

<u>Theme Two - Balancing the Boundary scales</u>

All participants described having strong boundaries to separate their personal and professional lives. For example, Callum reflected on: "*leaving their work at the door*" (p. 10 ln 338). This was also described by another participant Maddie as "*having a thick skin and not taking anything to heart"* (p. 11 ln 401) to protect their emotional wellbeing. Three participants also described the process of reflecting on their own past care experiences, and how these influenced their approach and boundary development as part of their role. Eve, described using some of her own understanding to support service users, in addition to finding she had to develop different ways of responding than those she used in her personal life:

> *"My sister is like a lot of the service users in here and I've said to the staff it's been a learning curve to change how I react and realising this isn't appropriate in the ward environment… I have had to relearn my responses to certain things…"* (p. 11 ln 401-403).

Also demonstrating an awareness of boundaries, the majority of participants considered the use of humour, or a more conversational tone could be an effective if somewhat risky strategy with which to engage patients. Two participants considered it may also relate to confidence in their work-based identity and capacity to exert appropriate influence in more challenging situations, such as exposure to service user aggression. Eve reflected on boundary development in this regard:

> *"Sometimes the way I respond to the guys it's in a jokey manner – but you kind of go home and worry about how you appear."* (p. 12 ln 436-437).

Staff and service user boundaries can change after an incident

In the context of elevated risk, or after a significant incident, they had been involved in and were approaching a service user afterwards with a view to facilitating relational repair, or when a patient was new to the ward; the majority of participants thought it was important to approach service users tentatively. As Iain reflected:

> *"Sometimes, we're going to be walking on eggshells till we understand something or someone better" (*p. 1 ln 27).

Another participant, Eve, reflected on the challenges of having to manage a situation of relational repair after an incident of verbal aggression when the service user did not want to talk to them. They tried to do this as sensitively as possible while being respectful of the service user's boundaries, also demonstrating an awareness of staff and especially service users being unable to leave:

> *"He kept saying to me… 'Go and sit down. I don't want to talk to you', which is unfortunate 'cos it's not the kind of environment you can really do that, you can't take anything personally. It's a difficult line to kind of try and tread."* (p.9 ln 327-328).

An awareness of service users, and by implication staff, being unable to leave, was also highlighted in the main theme **Being human together in a secure setting** sub theme: *The ward is a community of people we are part of*. The participants therefore did not have a straightforward template of how to respond either in the moment or distally to incidents, and especially during relational repair processes afterwards. Instead, they had to make sensitive inter-personal judgements, balancing their knowledge of the person with the demands of their role, wider service and environment. The majority of participant reflections on relational repair processes also indicated that they perceived they had less control after incidents of violence

and aggression. This was also noted as relevant when they did not think the service user's apology was genuine, or when they were worried about the risk that they continued to pose. Participant experiences of disempowerment were also noted in this context. Eve, reflected: *"There were no consequences for his actions."* (p.14 ln 498). Max further described that relational repair processes could feel "*depersonalised at times*" (p. 7 ln 244) due to necessity and the limitations of the role. In a similar vein three participants emphasised and accepted that usually, as Cath noted, both staff and patients often *"moved on"* (p. 5 ln 200) after incidents. Perceptions of a lack of control, associated with in the moment reactions to violence and aggression, were also noted as relevant to participant perspectives in a subtheme of the main theme **Being human in secure settings** - *Being vulnerable*.

Using boundaries to promote fairness for staff and service users on the ward

From a relational or more teamwork-based perspective, an awareness of service context, staff hierarchy, and ward boundaries, especially around service users getting their needs met day to day, were also important for the majority of participants for providing a sense of equanimity. One participant, Maddie, explained that having a less obvious hierarchy helped to prevent staff members with less status from being treated worse and with less respect by service users:

> *"You know so it's not like they're a higher grade than you, I'm going to go to them. We stick together"* (p.7 ln 233).

A proactive consideration of the interaction of ward boundaries and patient awareness of hierarchy was described as a protective distal strategy for managing violence and aggression. This is because it reduced the risk of staff being targeted or patients feeling they were being treated unfairly. Although it was also acknowledged that it was not just service users who sometimes treated nursing assistants as less important members of staff. As Maddie also explained:

> *"I don't know after covid it seemed nurses are you know more important* (p.11 ln 376-377)*.*

Thus, emphasising the potentially disempowering nature of the secure nursing assistant role in the inpatient forensic mental health system. Experiences of disempowerment were also relevant to participants in the related **Balancing the Boundary scales** subtheme *Staff and service user boundaries can change after an incident.*

Theme three - Making sense of violence and aggression on the ward

All study participants reflected upon incidents of aggression and used several different strategies for making sense of these experiences. At points this appeared to serve a meaning making and/or processing function where the majority of participants would make sense of these experiences primarily from an emotional perspective. Broadly protective strategies employed across participants for making sense of incidents of violence and aggression included, contextualising, perspective taking, depersonalising, humour, and normalising service user experiences. Managing expectations and acceptance were also highlighted as key protective coping strategies that seemed to help the majority of participants make sense of more challenging aspects of their roles. These and further strategies for making sense of violence and aggression are described further in the subthemes below.

Knowing & understanding the service users and the wider context helps

From a professional perspective, the majority of participants reported proactively engaging in self-directed learning including using materials on the ward where available, and training when it could be accessed. Unsurprisingly, this was key to developing their understanding, and ultimately making sense of their experiences day to day, which also appeared empowering for participants. Relatedly, all participants thought it was important to not to take incidents of aggression personally, to avoid getting caught in a cycle of conflict. Ben reflected:

> *"We don't hold grudges and we start afresh each day" (*p. 7 ln 221).

The majority of participants also described managing their expectations around exposure to violence and aggression in secure settings and accepting the potential consequences as part of their role. They found this was helpful for making sense of their experiences. Iain stated:

> *"You wouldn't be normal if you walked into this kind of job when it was unsettled, and you looked forward to it" (*p. 12 ln 427).

Furthermore, all participants reflected positively on the knowledge and understanding they had developed through the role, including ID presentations, and how this helped them to make sense of the violence and aggression they sometimes faced on the ward. In addition to the importance of perspective taking and empathy skills. One participant, Maddie, described this process as having a sense that the service users were "*not out to be malicious"* (p. 11 ln 393-394). Similarly, Eve said:

> *"There's an expectation they're not going to have a full understanding of some things …you're going to have to explain things, so I think it does make it easier to handle when someone does shout at you over something you see as silly"* (p. 9 ln 307-309).

The majority of participants also reflected on the importance of getting to know and developing an understanding of service users. They felt this helped them to provide good person-centred care and to be able to make sense of, prevent if possible, and otherwise manage incidents of aggression appropriately. One participant, Simon, reflected on this as an important part of responding to aggression in the moment and also on a preventative basis:

> *"We have to know our patients well and be vigilant for signs of escalation - recognising there is a problem early on and deescalating is the better outcome"* (p.14 ln 521-522).

Hence, managing and making sense of aggression was not merely about having a good understanding of the service users clinically. It was also about being actively focused on service users internal world experiences. This is also noted as relevant to participant experiences in the main them **Being human together in a secure setting**, and additionally highlights the clinical and relational complexity associated with the secure inpatient clinical support staff role.

Theme four - The impact of incidents and barriers to accessing support can be isolating

Participants discussed the ways experiences of violence and aggression impacted them at work and at home. They also reflected on managing the impact of experiences of aggression on themselves, their families, service users and colleagues. Participants also reflected on their wider support needs and limitations they found getting these needs met in an occupational context and at home. Finally, it was noted overall there was less clarity about the personal and/or external or systemic support available.

Talking about my feelings can be a double-edged sword

Study participants reflected on the limitations of talking about experiences of aggression in different ways. This included describing their preferred individual support needs and wider constraints on speaking about the impacts of being exposed to violence and aggression. In a work setting, one participant, Cath, reported it could be hard to talk to peers in a heightened emotional state, when they were anxious that an incident might happen:

> *"Everyone's in the same boat - there's nowhere to go once you have admitted you're scared*". (p.12 ln 494).

Cath therefore recognised that their colleagues had limited capacity to offer emotional support when they were struggling with their own anxiety. After incidents of violence and aggression had occurred, another participant, Maddie felt that it may not always be helpful to talk about what had happened, as they may need to be ready to go back into the situation again quickly and manage the ward. As she explained:

> *"There's no point in discussing it and trying to calm down when you know you will just need to get ready to deal with something again"* (p. 8 ln 285-286).

However, one participant valued and perceived benefit from being open about their feelings with peers and colleagues. Iain reflected on the value of peer support when dealing with exposure to violence and aggression in the following way:

> *"People just need to be honest and say I'm scared, and anxious, fearful or whatever it is sometimes! Means other staff can empathise and say I've been there; and it's not great it's not a good feeling. It helps me anyway." (*p. 14 ln 482-484)

Even when it was possible to discuss incidents of violence and aggression with friends or family at home, one participant, Max, thought that it could be counter-productive:

> *"Talking about it too much at home - you basically end up reliving it - it's pointless"* (p. 10 ln 337).

Some parts of the role don't stop

All participants talked about the impact of their sometimes challenging work environment on their home lives, and the support they received there. Confidentiality requirements meant that there were practical limitations as to how much participants were able to discuss incidents with friends and family. Some participants also thought that a lack of shared understanding and language was limiting. As Callum reflected:

> *"People don't understand the role, setting, and its complexities – it's not black and white in here and I can't talk about it anyway"* (p.10 ln 344).

Relatedly, the majority of participants found it could be challenging to talk about sensitive issues with friends and family. As Ben further explained:

"Sometimes I'm sore from restraining and it can be hard to explain to my family what's happened". (p. 10 ln 340).

One participant felt that their work role had contributed to the breakdown of relationships. Another, Simon, also reflected on the cumulative impact of providing mental health care at work and at home:

"It can be harder to manage when someone at home has mental health issues - I feel guilty listening to people at home when I'm already tired from listening to patients." (p.17 ln 633).

The majority of participants also reflected on having to manage and limit the amount of stress they experienced outside of work, at a cost to their personal life, especially when their lives became more challenging. One participant, Iain, reflected on the challenges of managing significant caring duties at home and at work stating:

"You just have to cope you can't implode because you can't choose between the two, but you can't do much else" (p.10 ln 355-354).

The majority of participants seemed to accept that their work had an emotional impact on their wider lives in some aspect. Max said that he was more of a *"jumpy person"* (p. 12 ln 402) since working in an inpatient forensic setting. This also included descriptions of taking precautions without conscious awareness. As Iain, said: *"Sometimes when I'm out I realise I've always got my back to the door".* (p. 12 ln 404).

The majority of participants also reflected on the difficulty of recovering at home when incidents of aggression and/or interpersonal conflict persisted over a prolonged period across shifts. As Ben explained:

"The dread of coming back to work the next day after an incident can last all day. You can even end up taking it home and then having the dread (of) going back into your shift and that's not pleasant." (p. 12 ln 425).

After an incident - how I and others respond makes a difference

In part due to COVID-19 related issues and staffing challenges, it was difficult for participants to reflect on specific examples of formal post incident support they found beneficial, such as debriefs. One participant, Cath, described operating in the reality of resource constrained

staffing contexts: *"There's not really enough time to go over things after an incident unless its serious."* (p. 13. Ln 530). Where it was available, the majority of participants found a formal or informal debrief or opportunity to reflect with colleagues, or Reflective Practice (RP) as helpful for normalising and processing their feelings towards service users. One participant, Maddie, felt this was useful when dealing with recent exposure to aggression from a service user that they felt had an interpersonally challenging nature. The majority of participants also valued support and feedback from more senior colleagues as this was noted to offer validation. Another, Iain, especially valued peer support in this context:

> *"Staff checking in with each other, and 'completing the cycle' – also being objective and offering reassurance is important after a difficult incident is important" (*p.15 ln 521).

Support from other non ward based colleagues, including informal support from senior management, was also found to be valuable by the majority of participants. They felt that ward and off ward based support from senior staff provided a moment to reflect, to be honest about how they were feeling and to receive validation.

On an individual level, one participant, Cath, reflected on needing to "*teach themselves to cope*" (p.14 ln 620) with the everyday nature of experiences of aggression in secure forensic settings. Similar perspectives were noted in two further participants and appeared empowering. A proactive approach was also noted as relevant to participant experience and empowerment in the main theme: **Making sense of violence and aggression on the ward*.*** Further protective strategies that participants talked about as helpful included mindfulness and distraction. One participant, Ben, reflected getting outside to a green space for 10 - 15 minutes was a useful way to manage emotions after a difficult incident (p.12 ln 434). Other helpful ways of coping were described and included one participant, Max, who also valued mindfulness or distraction at home:

> "*Being with pets or playing with my kids is the best thing to do after a difficult shift - they keep me in the moment*" (p.11 ln 411).

Alternatively, one participant, Eve, considered:

> *"Journaling helps things to feel real when I can't talk about them out loud*" (p.7 ln 232-233).

Despite participants describing a number of noted coping strategies, unsurprisingly it could still be challenging to stop ruminating about incidents of aggression on occasion. One participant Eve, was noted to reflect with a sense of over responsibility and worry about potential future consequences. Eve explained:

> *"Me going oh maybe I shouldn't have been in the doorway - I should have moved but it's kind of an eternal struggle…"* (p.7 ln 244-245).

DISCUSSION

Main findings

These are described briefly in relation to research aims and integrated into the relevant literature below under the subheading **Wider context**. Key findings included i) the protective nature of positive therapeutic and supportive wider relationships for staff with both service users and colleagues in these complex occupational settings, which were also characterised by significant exposure to the threat of, and less frequent incidents of violence and aggression exposure. Noted impacts of exposure to violence and aggression included ii) reduced perspectives of control and autonomy, also associated with more distal impacts of exposure, including experiences of disempowerment. When exposed to more significant incidents of violence and aggression, the impacts at home could also be described as notable in terms of physical injury, in addition to related emotional and psychological impacts. Relating to the latter research aim (iii) present study participants found support needs especially challenging to address outside of the work environment. While secure support staff valued external systemic occupational supports, such as Reflective practice, there were also challenges in accessing these. In general terms individualised protective strategies were emphasised, related to the current resource challenged NHS landscape, and included the value of a proactive approach day to day. Areas where secure ID inpatient nursing assistants could be at increased risk of deleterious occupational consequences in the secure forensic mental health system, were also highlighted.

Wider context

In line with wider research findings (Hammarstrom et al., 2019) and practice literature (Markam, 2022; Tighe & Gudjonsson, 2012; Georgiou et al., 2019) present study participants emphasised the value of an open and person-centred approach to their practice. This included descriptions of the importance of developing trust day to day to maintaining therapeutic interactions with service users, in addition to helping to ensure wider safe and effective practice in the context of exposure to violence and aggression. Similarly, present research participants also emphasised supportive working relationships enhanced clinical practice and

their perspectives of wellbeing and safety. The importance of the quality of working relationships to day to day occupational experiences also mirrored findings from wider research. A survey-based vignette study of burnout, boundary infringement and patient facing staff in secure settings found staff perspectives of wellbeing were related to perceptions of interpersonal trust. These were also influenced by perceptions of staff boundary violations. Wider research also indicates occupational perspectives of safety are related to burnout (de Lisser et al., 2024). In line with wider literature (Husted & Dalton, 2021; Beryl et al., 2018) participant perspectives of their colleagues were also a significant part of their perspectives of the ward community

Also broadly in line with wider research findings and expectations, (Kelly et al., 2015; Newman et al., 2021; Husted & Dalston, 2021), study participants described frequently experiencing the threat of aggression. This was noted to have as significant an impact on participants roles as actual incidents of physical and verbal violence and aggression, even though, in line with wider research findings actual incidents were less frequent (Kelly et al., 2015; Beryl et al., 2018; Husted & Dalton, 2021). Participant perceptions of reduced control noted in the present study when exposed to violence and aggression were further characterised by reduced perceptions of autonomy. Reduced participant perspectives of autonomy were also relevant to relational repair processes, which were a noted occupational impact of exposure to violence and aggression that occupied a significant proportion of present research participants day to day role and practice. These had not been emphasised as strongly in comparable recent research examining secure inpatient ward based registered and unregistered nursing staff perspectives (Beryl et al., 2018; Hammarstrom et al., 2019; Husted & Dalton, 2021).

The present research focus exclusively on secure clinical support staff perspectives may have also allowed for more in-depth understanding of secure nursing assistant role and setting relevant day to day perspectives and experiences. Although in general terms, managing relationships with service users is noted as a significant challenging aspect of the secure ward based role. Present research findings are therefore also broadly in concordance with wider research findings in this respect (Beyrl et al., 2018; Hammarstrom et al., 2019; Husted & Dalton, 2021). Outlined present study findings on the immediate and distal impacts of violence and aggression on staff perceptions of autonomy, were also broadly in concordance with wider comparable qualitative ethnographical research. Bailey (2015) indicated reduced autonomy was a feature of the nursing assistant role day to day for clinical support staff operating in older adult residential settings. This was primarily related to the nature of the role as ambiguous, and subject to change based on wider service based influences such as reduced staffing levels, which was also in accordance with present paper participant perspectives.

However, nursing assistant staff in the present research setting may also be subject to elevated perceptions of reduced occupational autonomy associated with the secure inpatient clinical support worker role and context. In line with wider research (Harris et al., 2015; Husted & Dalton, 2021; Oates et al., 2020) issues specific to the secure inpatient mental health system and setting were noted to be of relevance to present research participant perspectives. The nature of the role in secure settings is predominantly patient facing and is associated with significant exposure to threat and occupational violence and aggression (Beryl et al., 2018; Husted & Dalton et al., 2021; Kelly et al., 2015). The emotional and procedural consequences of these more challenging encounters, including relational repair scenarios, in addition to the hierarchical forensic mental health inpatient structure, could also contribute to participant perspectives of reduced autonomy associated with experiences of disempowerment. This is broadly reflective of psychoanalytic literature indicating support staff in secure inpatient settings can be at risk of disempowerment in the forensic mental health system hierarchy (Menzies-Lyth, 1988; Barnes et al., 2022). In comparable qualitative research that examined both registered and unregistered secure nursing staff perspectives (Husted & Dalton, 2021), experiences of disempowerment for those at the lower end of the secure forensic mental health system hierarchy (unregistered nursing staff) were also noted. Also, of relevance for secure inpatient staff wellbeing, experiences of disempowerment at work have been linked to burnout in healthcare staff in the wider literature (Galletta et al., 2016; Winstanley & Hales, 2015; Husted & Dalton, 2021).

The reduced perception of autonomy noted by participants in the present study could also be related to the frequent medico-legal challenges that can present in secure environments and regulatory and procedural consequences that can accompany significant incidents of violence and aggression (Harris et al., 2015; Critchon et al., 2009). This is in addition to operating in a more physically restrictive environment which is typically characterised by less opportunities to engage in ‘healthy distancing’, or stimulus reduction type approaches (Oates et al., 2020), which can usually be employed in other residential healthcare settings such as older adult services (Bailey et al., 2015). Also, of wider importance to the clinical support staff role and wellbeing, a lack of autonomy is associated with burnout because it limits the capacity for staff to modify their roles to support individual functionality (O’Conner et al., 2018; Bailey et al., 2015).

A number of individual level approaches considered to be protective in these environments were also described by present research participants. Managing expectations was noted as a helpful strategy employed by participants when faced with the threat of exposure to violence

and aggression. Similar protective processes were highlighted as helpful for secure ward based nursing staff in the wider qualitative forensic interview literature (Husted & Dalton, 2021; Hammarstrom et al., 2019). Managing expectations is broadly considered to buffer systemic impacts and frustrations that can be associated with reduced staff and service user perceptions of control (Bailey et al., 2015; Harris et al., 2015). These can be typically related to the unpredictable nature of the criminal justice system, and the often highly unpredictable nature of forensic inpatient environments day to day (Harris et al., 2015; Husted & Dalton, 2021; Kelly et al., 2015). Participants also valued mindfulness, finding this a supportive practice to engage with day to day. Mindfulness has also been highlighted as protective for secure in patient ward based nursing staff in the wider survey-based literature (Kiriakous et al., 2019).

Nursing assistants in the present research also described proactively engaging in self-directed learning and training. This included reflecting and developing their understanding of experiences of exposure to aggression in a protective and at times empowering manner. This appeared to also reduce risks of role ambiguity and related potential risk of reduced autonomy in the secure inpatient setting (Bailey et al., 2015; O'Connor et al., 2018; Hammerstrom et al., 2019). Using a similar qualitative interview method in a majority secure clinical support staff group, Hammarstrom (2019) also found that secure inpatient staff perspectives emphasised a proactive approach to learning and practice development which helped staff to feel safe and more confident clinically day to day. The emphasis participants placed on the value of an approach-based mind-set to operating in secure settings overall broadly mirrored wider quantitative forensic secure staff wellbeing research. Cramer's (2020) survey-based findings also indicated the protective nature of an approach-based mindset to nursing staff operating in high secure settings.

Similarly, participants in the present research also emphasised the value of taking a consistent and active approach to the internal experiences of service users. Some medium secure participants considered this helpful and protective in the context of immediate exposure to verbal aggression. This latter finding could be indicative of the importance of an at times assertive approach in higher levels of inpatient security, due to noted increased exposure to risk and related threat from service users and increased focus on control aspects of the role (Oates et al., 2020; Critchon et al., 2009). Wider forensic research in concordance with these findings was also based in equivalent and higher security settings (Hammarstrom et al., 2019; Mistry et al., 2022). In Hammerstrom (2019) it was also noted that high secure inpatient nursing staff offering a proactive, open and person centred approach when faced with secure service user difficulties such as verbal aggression, was key to high quality safe and rewarding

nursing practice. Present research findings in this domain are also broadly reflective of the majority of participants' occupational environments because five of the eight nursing assistants interviewed operated in medium secure settings.

It is also potentially relevant that male participants valued a more assertive approach in the immediate context of exposure to verbal aggression. However, the majority of female nursing assistants recruited (two of three interviewed) operated in a low secure environment. This limited comparability because a medium secure appropriate clinical approach also likely influenced the majority of participants operating in this occupational environment (Critchon et al., 2009; Georgiou et al., 2019). Although it could be noted from female participant descriptions overall that they appeared to experience threat and its impacts as intensely, if not even more so, than their male counterparts. They also didn't endorse a proactive approach to service users in the context of immediate exposure to verbal aggression. Given the likely physical differences and potential increased threat associated with male mental illness forensic ID service users for female nursing assistant staff, this explanation offers ecological validity. Especially, considering reduced exposure to intensity if not frequency of violence and aggression noted in the wider research as typical in low secure settings, in comparison to medium secure settings (Critchon et al., 2009; Georgiou et al., 2019). Female participants may also have been more open to identifying and accepting experiences of emotional vulnerability associated with the role, in line with more stereotypical gender norms, roles and biases. This may have also conversely influenced male participants in the opposite direction, in the socio-cultural milieu of the West of Scotland where the present research was based (Cleary, 2012).

In regard to support needs, akin to an informal debrief process, constructive support from peers post incident was also important to participants, and could offer immediate, objective feedback and support to staff. The judicious use of a dry wit or humour was employed on a peer-to-peer basis in response to violence and aggression. These processes served a number of functions, including developing a shared narrative. This is also broadly in line with the wider evidence base in the area indicating the importance of developing a narrative of difficult experiences for the purposes of trauma processing and this can also contribute to improved trauma related mental health outcomes (Johnson, 2017; Amateau et al., 2023). In the wider literature others who deal with extremely stressful situations, like emergency service personnel, have been observed to use dark humour (Charman 2013). This humour has also been shown to help people persevere through difficult work (Young 1995) and normalise and develop understanding of these experiences (Myers, 2005).

At work it was also highlighted that support staff found existing external occupational support mechanisms such as debriefs and/or Reflective practice valuable. The complexity of the secure ID nursing inpatient clinical support role and environment also emphasised the importance of clinical secure support staff having access to regular supervision (Coats & Jones, 2020; Berry & Roberson, 2019) and accessing wider supportive resources, such as Reflective Practice (Lillian & Basterfield, 2020). However, in line with wider research findings, it was noted it could be challenging for frontline staff to access external occupational support (Billings et al., 2021). This indicates potential systematic resource driven access or availability issues. Support and learning opportunities with senior staff also helped clinical support staff feel more confident in their interactions with service users and were noted to empower staff. Participant perspectives also echoed wider healthcare research indicating the value of leadership empowerment for more junior healthcare staff who experience reduced perceptions of job control and autonomy (Galletta et al., 2016).

The impact of violence and aggression was also felt outside work by the participants, sometimes for a significant period of time. However, outside of work, the nursing assistants had limited sources of support. They faced practical barriers to accessing support from family and friends at home due to the need to maintain confidentiality, and a lack of understanding of the nature of secure settings from friends and family. Hence secure clinical support staff may have limited opportunities at home to talk about or process challenging experiences. This could also be problematic when viewing direct care staff experiences through a trauma informed lens (Amateau et al., 2023; Johnson, 2017). Relatedly, participants also described developing their own coping strategies at home. A noted protective strategy employed outside work was journaling, as this allowed the staff member to process challenging experiences, while offering more control over confidentiality. Therapeutic writing is also noted as helpful for registered nursing staff in the wider literature (Dmitrov et al., 2017). Study participants in the main also described strong boundaries between work and home, and mindfulness practices or distraction were helpful when away from the work environment. However, echoing wider qualitative review research (Billings et al., 2021), overall, a lack of available support was noted, especially outside of work. The latter of which it was also noted had not been widely described previously in the available literature (Billings et al., 2021; Beyrl et al., 2018; Husted & Dalton, 2021; Hammarstrom et al., 2019).

Conclusion

Overall, secure support staff in the present study reported having positive engagement with service users and their colleagues. They valued this while operating in a complex, often stressful and relationally tense environment characterised by frequent exposure to threat (Coats & Jones, 2020; Markam, 2022; Kelly et al., 2015; Husted & Dalton, 2021). Aspects of the secure role and context where inpatient ID clinical support staff may be at risk of deleterious occupational impacts were also highlighted. These included immediate and distal consequences of violence and aggression which were associated with reduced perceptions of autonomy and experiences of disempowerment (Bailey et al., 2015 Winstanley & Hales, 2015). Wider wellbeing implications for secure nursing assistant participants were noted as a potential consequence of occupational impacts of exposure to violence and aggression, including burnout (O'Conner et al., 2018; Galletta et al., 2016). The value of developing further understanding of staff wellbeing in secure settings is also emphasised in the present research findings. Particularly for staff who may be more at risk of disempowerment and exposure to violence and aggression due to the nature of their roles, in the secure forensic mental health system.

Systemic and individual level strategies to ameliorate against the impacts of operating in a more complex and challenging occupational setting were also noted. Participant individual level coping strategies were emphasised in the present research findings, because individual strategies appeared more accessible in the systemically resource challenged NHS post Covid-19 occupational landscape (Bronfenbrenner, 1979; Bailey, 2021; WHO, 2023). The value of systemic staff support systems was also highlighted. Potential impacts on trauma processing that could be relevant to secure inpatient support staff in the context of exposure to more significant incidents of violence and aggression, and challenges accessing appropriate support, especially at home, were also highlighted (Amateau et al., 2023). Relevant insights obtained are summarised and recommendations made below.

Clinical implications and recommendations

Please see below for an overview of individual protective coping strategies noted as relevant to safe and effective practice for secure ID support staff in the current paper, and in the wider literature. This is also noted where relevant, in addition to service or systemic level recommendations.

- Developing and maintaining a proactive approach day to day, around what helped them individually pre and post incident and a sense of openness to their own and in particular service user experiences, when it was safe to do so (Hammarstromm et al.,

2019), were highlighted as potentially protective and empowering approaches for secure support staff (Galletta et al., 2016).

- Mindfulness was also described positively and was used to protect against stress at work and at home (Kiriakous et al., 2019)
- Journaling or writing things down at home also offered participants opportunities to reflect in a more controlled manner without the same risks of breaching confidentiality, which in person discussions might cause (Dimitrov et al., 2017).

Service and Systemic level

- The present paper highlighted the importance of macro and meso level continued systemic investment in support and training for frontline staff working in secure settings, and the potential impact on staff wellbeing in the current resources strained NHS landscape (Bronfenberner, 1974; Bailey, 2021). This could enhance both staff wellbeing and patient care in these environments.
- The present paper highlighted the need for current occupationally based staff support systems such as Reflective Practice to be clearly signposted and easily accessible.
- The potential value of having protected time during working hours to allow staff to access resources to promote wellbeing, noted in the context of ongoing wider health care staffing shortages, was also highlighted (WHO, 2023). This could offer choice and control to frontline staff in these areas on how they could utilise this time, which is also in concordance with the wider trauma informed approach literature (Johnson, 2017) and significant individual variation in this area noted in present study findings.

Strengths and limitations

In summary, it appeared beneficial to explore secure inpatient ID clinical support staff perspectives exclusively. Where it is noted, this hadn't been addressed in an emerging research area previously (Billings et al., 2021). In-depth insight could also be offered towards addressing study aims. This included developing understanding in areas where staff with less power may be at risk of burnout associated with the impacts of violence and aggression in the hierarchical forensic inpatient health care settings (Menzies-Lyth, 1998; Barnes et al., 2022). Similar understanding could be offered when addressing study aims focused on support needs where significant barriers to accessing support at home were also observed. Insights into present research participant's perspectives of unmet support needs outside of work, could also be potentially relevant for one of the most populous UK NHS healthcare staff groups (Billings et al., 2021). Further understanding was also offered as to how support needs may be addressed at a service and/or systemic level and noted helpful individual level protective strategies could also be developed towards guidelines and/or wider intervention, in line with

the wider evidence base in this area (Oates et al., 2020; Newman et al., 2020). Present paper findings are also therefore of relevance during a challenging period for healthcare services worldwide (WHO, 2023).

However, while all of the participants had met basic NHS standard secure nursing assistant enhanced training on how to deal with violence and aggression, it would also have been interesting to explore the impact of other training-based influences on the participants' responses, including relational security approaches (Markam, 2022). These were noted as potentially relevant to staff perspectives but were beyond the scope of the present research to further explore. Similarly participant characteristics breakdown, including sex and level of security they operated at (low vs medium), and challenges separating these issues in participant responses, limited further understanding that could be offered in these areas that were noted as potentially relevant to participant perspectives but were outwith present study scope to further explore. Finally, attempts were made to ameliorate power imbalances in NHS secure forensic settings (Barnes et al., 2022; Menzies-Lyth, 1998). It is important to mention that endemic structural issues such as these can only be acknowledged, and not mitigated against in their entirety (Garton & Copeland, 2010). Participants may not have been comfortable disclosing issues with someone they perceived as more powerful in the NHS system (Barnes et al., 2022).

Future research

Echoing wider review recommendations (Billing et al., 2021) the development of peer support processes was noted as relevant for present study participants and could represent an important area for further research. Group based peer support processes may offer additional choice and protection for staff against the potentially traumatic impacts of exposure to violence and aggression in the current resource strained NHS landscape (Johnson, 2017; Bailey, 2021; WHO, 2023). Additional research could also offer further understanding on wider relevant issues raised by the present study, including possible sex differences in staff responses to service user aggression. Of relevance to noted potential risk of burnout that can be associated with aspects of the secure forensic ID nursing assistant role and context, further research and practice-based consideration should also be given in the area, especially as to to how the support needs of frontline nursing assistant staff could also be met at work through existing support mechanisms, and outwith the work setting.

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APPENDICES

Appendix 1.1 – Journal Author Guidelines

Extract from author guidelines for the). Full guidelines available at:

https://www.frontiersin.org/journals/psychology/sections/forensic-and-legal-psychology/for-authors/author-guidelines

Systematic Review (Chapter 1): Appendices

Appendix 1.2 Database Search Terms

PSYCHINFO – EBSCO	
1.	(DE "Institutional Attendants") OR (DE "Forensic Psychiatry") or (DE "Forensic Nursing") or (DE Forensic Psychology")
2.	("frontline care" or caregiver or "forensic occupational therap*" or "nursing assistant" or "HCSW" or "HCA" or "Forensic Health Care Professional" or "FHCP" or "Secure inpatient staff" or "Multi-Disciplinary" or "MDT" or "healthcare staff*" or "healthcare professional*")
3. (MDT frontline secure inpatient staff Component)	S1 OR S2
4.	DE (DE "Psychiatric Hospitals") OR (DE "Mentally Ill Offenders")
5.	Forensic* or "forensic mental health" or offender* or "forensic client* or "Forensic Inpatient*" or "Forensic Hospital*" or "Secure Psychiatric" or Secure OR "Secure Hospital* or "forensic psychiatric care" or "secure forensic*" or "secure psychiatric setting*" or medium secur* or low secur* or high secur* or "LSU*" or "MSU*" or "HSU*")
6. [Forensic Inpatient Component]	S4 OR S5

7.	DE (DE "Occupational Stress") OR (DE "Job Satisfaction")
8.	“occupational wellbeing” or "occupational subjective wellbeing" or "job satisfaction" or workplace or “workplace stress” or stress* or "compassion satisfaction")
9.[OSW/Stress Job Satisfaction component]	S7 OR S8
10. [Perception Component]	staff* or clinician* or perspective* or perception* or attitude* or experience* or “lived experience” or phenomenology* or interview or "semi-structured" or semistructured or "in-depth" or indepth or "face-to-face" or questionnaire*)
11 [whole search]	S3 AND S6 AND S9 AND S10

Appendix 1.3: Data Extraction

JBI QARI Data Extraction Form

Reviewer	Date
Author	Year
Journal	Record number

Study description

Methodology

Method / Data Collection

Setting

Participants / Sampling

Data analysis

Results

Themes

Authors' conclusions

_____

_____

Comments

_____

Appendix 1.4 Quality Appraisal

Quality Indice tool employed: Mixed method appraisal tool (MMAT)		**Qualitative**			**Quantitative descriptive**			**Mixed method**
		Husted & Dalton (2021)	**Mistry et al., (2022)**	**Hammarstrom et al., (2019)**	**Degl' Innocenti et al., (2021)**	**Cramer et al., (2020)**	**Morris et al., (2021)**	**Henshall et al., (2020)**
Quality Indices items	**Item descriptor**							
MMAT Screening Item S1	**Are there clear research questions?**	Y	Y	Y	Y	Y	Y	Y
MMAT Screening item S2	**Do the collected data allow to address the research questions?**	Y	Y	Y	Y	Y	Y	Y
+	**Total screening score**	4	4	4	4	4	4	4
+	**Total specific quality indices score**	9	9	10	8	8	8	9
=	**Total quality indices score**	13	13	14	12	12	12	13
	Overall study quality rating	**Good**	**Good**	**Good**	**Moderate**	**Moderate**	**Moderate**	**Good**

Response Key

Yes	Y (2)
No	N (0)
Can't tell	CT (1)

Major Research Project (MRP) (Chapter 2): Appendices

Appendix 2.1.1 Ethical approval documentation: NHS GGC REF: GN22PH063

Senior Research Administrator: Kirsty Theron
Telephone Number: NA
E-Mail: Kirsty.theron@ggc.scot.nhs.uk
Website: https://www.nhsggc.org.uk/about-us/professional-support-sites/research-innovation

Research & Innovation
Dykebar Hospital, Ward 11
Grahamston Road
Paisley, PA2 7DE
Scotland, UK

1/07/2022

Mhairi McDonald

NHS GG&C Board Approval

Dear M McDonald

Study Title:	Working with people with learning disabilities who present with aggression in Secure Forensic settings: Nursing assistant everyday experiences.
Principal Investigator:	Mhairi McDonald
GG&C HB site	Secure Forensic Learning Disability Services (Rowanbank clinic) & Secure Forensic Learning Leaning Disability Services (Leverndale Hospital)
Sponsor	NHS Greater Glasgow and Clyde
R&I reference:	GN22PH063
REC reference:	NA
Protocol no: (including version and date)	Version 0.6 02/05/22

I am pleased to confirm that Greater Glasgow & Clyde Health Board is now able to grant **Approval** for the above study.

Conditions of Approval

1. **For Clinical Trials** as defined by the Medicines for Human Use Clinical Trial Regulations, 2004
   a. During the life span of the study GGHB requires the following information relating to this site
      i. Notification of any potential serious breaches.
      ii. Notification of any regulatory inspections.

It is your responsibility to ensure that all staff involved in the study at this site have the appropriate GCP training according to the GGHB GCP policy (www.nhsggc.org.uk/content/default.asp?page=s1411), evidence of such training to be filed in the site file. Researchers must follow NHS GG&C local policies, including incident reporting.

2. **For all studies** the following information is required during their lifespan.
   a. First study participant should be recruited within 30 days of approval date.
   b. Recruitment Numbers on a monthly basis
   c. Any change to local research team staff should be notified to R&I team
   d. Any amendments – Substantial or Non Substantial
   e. Notification of Trial/study end including final recruitment figures
   f. Final Report & Copies of Publications/Abstracts
   g. You must work in accordance with the current NHS GG&C COVID19 guidelines and principles.

Please add this approval to your study file as this letter may be subject to audit and monitoring.

Your personal information will be held on a secure national web-based NHS database.

I wish you every success with this research study

Yours sincerely,

Kirsty Theron
Senior Research Administrator

CC: C Montgomery Sardar, Prof A Jahoda

Appendix 2.1.2 Ethical approval documentation: Forensic Directorate research and audit committee email approval

Local forensic service level ethical approval

From: O'brien, Darryl <Darryl.O'brien@ggc.scot.nhs.uk>
Sent: 22 April 2022 09:36
To: Mcdonald, Mhairi <Mhairi.Mcdonald@ggc.scot.nhs.uk>
Cc: Meade, James <James.Meade@ggc.scot.nhs.uk>; Slavin, Kirsteen <Kirsteen.Slavin@ggc.scot.nhs.uk>
Subject: Major Research Project (MRP) development

Hello Mhairi,

We discussed your MRP project at yesterday's Forensic Directorate Research and Audit Committee and I am pleased to let you know that we have approved it on behalf of the Directorate management.

If you could keep us up to date with your project and present your findings at one of our Research and Audit days that would be appreciated.

Regards,
Darryl.

Appendix 2.1.3: Ethical approval documentation: University of Glasgow college of Medicine, Veterinary & Life sciences ethics committee

University of Glasgow

MVLS College Ethics Committee

Professor Andrew Jahoda

Working with people with Learning Disabilities who present with aggression in secure forensic settings: Nursing Assistant everyday experiences. 200210123

The College Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. We are happy therefore to approve the project, subject to the following conditions

- Relevant NHS approvals are also required.
- Project end date as stipulated in original application.
- The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research: (http://www.gla.ac.uk/media/media_227599_en.pdf)
- The research should be carried out only on the sites, and/or groups defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment, except when it is necessary to change the protocol to eliminate hazard to the subjects or where the change involves only the administrative aspects of the project. The Ethics Committee should be informed of any such changes.
- For projects requiring the use of an online questionnaire, the University has an Online Surveys account for research. To request access, see the University's application procedure at https://www.gla.ac.uk/research/strategy/ourpolicies/useofonlinesurveystoolforresearch/.
- You should submit a short end of study report within 3 months of completion.

Yours sincerely

Dr Terry Quinn

Terry Quinn
FWSO, FESO, MD, FRCP, BSc (hons), MBChB (hons)
Reader / Honorary Consultant

College of Medicine, Veterinary & Life Sciences
Institute of Cardiovascular and Medical Sciences
New Lister Building, Glasgow Royal Infirmary
Glasgow G31 2ER
terry.quinn@glasgow.gla.ac.uk
Tel – 0141 201 8519

Appendix 2.2: Final approved MRP proposal and 2018 cohort/2021 archive submission documents including: health and safety and costing forms.

The proposal and further archive submission documents can be accessed online at: https://osf.io/yuebr/files/osfstorage

Appendix 2.3: Participant Information Sheet

STUDY AND PARTICIPANT INFORMATION SHEET

Study title:

Forensic LD Support Worker: Everyday Experiences of Aggression

(short title)

We would like to invite you to take part in a research study. Before you decide to take part you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. It is recommended that you take 24 hours to consider the information provided. Talk to others about the study if you wish. Ask us if there is anything that is not clear or if you would like more information; the researcher's details are overleaf.

Who is conducting the research?

The research is being undertaken by

- Mhairi McDonald, Trainee Clinical Psychologist and Principal Researcher
- Chief Investigator; Professor Andrew Jahoda
- Dr Jamie Kirkland, Consultant Clinical Psychologist

What is the purpose of the study?

Nursing Assistant Support staff in Forensic Learning Disability inpatient services can sometimes face challenging situations, including experiencing aggression from service users. Given the important role support staff play in the day to day lives of Forensic Learning

Disability inpatients, it is important to understand more about how you experience aggression from patients and the impact this may have on you. To the researcher's knowledge a similar study has not been carried out before.

Why am I being asked to take part in this research?

- You have been invited to take part in this study because you are a Nursing Assistant staff member in a Secure Forensic Learning Disability setting in NHS GGC.
- Please take time to read the following information carefully and discuss it with others if you wish.

What's involved?

- Taking part will involve receiving information about the study, providing basic information about yourself and taking part in an interview about your experiences of violence and aggression from patients/service users and the impact of these experiences and your support needs.
- Dependent on COVID-19 related restrictions, the interview could take place at your place of work, or it could also take place over a secure video link platform such as Teams somewhere you feel safe and comfortable to speak. The interview will last approximately one hour and will be audio-recorded. The audio-recordings will be transcribed verbatim by the Principal Researcher (Mhairi McDonald).
- Every effort will be made to arrange an interview at a place and time of your choice. The researcher can also talk to you on the phone to discuss the study and answer any questions you may have.
- Nursing Assistant staff participating in the study should have worked in the service for at least 6 months and must have experienced at least one incident of aggression in the last three months that they would be willing to discuss in a research interview. They will also be expected to have taken part in all mandatory NHS staff training.
- Once you feel satisfied that you understand the study and what participation involves you can decide if you would like to take part or not. We recommend taking at least 24 hours to reflect on the information provided.

If you would like more information and/or are interested in taking part please contact the researcher via email on mhairi.mcdonald@ggc.scot.nhs.uk.

Appendix 2.4 Research log and reflective field notes excerpt (semi redacted to protect author and research participant confidentiality) can be accessed at https://osf.io/yuebr/files/osfstorage

Appendix 2.5 Topic guide and interview schedule

Topic 1: General introductory element

- Support staff were initially asked to reflect on their role e.g., how long have they worked in this capacity, with a view to building rapport and funnelling the interview by starting with broader questions before focusing in on more specific, and potentially more sensitive issues. Similar non-threatening issues were also revisited throughout where appropriate.

Topic 2: Description experiences of aggression

- Based on the Cognitive Interview format, participants were asked to recall and describe at least one and a maximum of three 'everyday' incidents of aggression (dependent on number of incidents available for recall, suitability of incident for discussion, and length of narration).
- Participants were asked to recall an incident involving themselves that has a clear emotional trace.
- They were then asked to describe the context, including time and immediate environment to aid memory, and the incident from beginning to end, including how they felt at the time.
- Participants then answered open-ended questions about their interpersonal perceptions of the client and how they had wanted to react at the time, what had stopped them reacting in that way, how they made sense of these experiences in the here and now, and what they found helpful in these scenarios.
- Rippon's (2000) definition of aggressive behaviour will be provided if staff are unsure about what constitutes aggressive behaviour. However, it is preferred participants draw on their own understandings of aggression.

Topic 2: General and Positive aspects of role

A less emotive topic was then explored to reduce possible negative impacts of interview experience on participants**.**

- What are the most enjoyable things about your job?
- What do you find is most helpful when it comes to building positive relationships with service users?

Topic 3: Perceived impact of experiences of aggression and what helps

- How do experiences of aggression impact secure clinical support workers inside and outside of a work environment? What do they find helpful in this regard?

<u>Inside Work environment questions and prompts</u>

- How does experiencing incidents of aggression impact you at work? Is there anything you find un/helpful in this context?
- Additional Qs/prompts can include: how do you perceive incidents of aggression impact your relationship with the patients involved? How do these experiences impact your relationship with staff involved/more generally? Is there anything you find un/helpful in this context?

<u>Outside work environment question prompts</u>

- How does the NA role and experiencing incidents of aggression at work impact you outside work and at home? Prompts can include wellbeing and is there anything you find un/helpful in this context?

Final topic/ question:

The interview ended using an open-ended participant led format, to capture any further information not already covered by the interview on the topic of support needs. If not previously discussed. Prompts can include further consideration of impacts of aggression on their identities inside/outside work; impact on relationships with service users.

Appendix 2.6: Coding key

Main theme	Sub themes
Being human together in a secure setting	*Being vulnerable*
	The ward is a community of people we are part of
	Working together as a single unit is hard but rewarding
Balancing the boundary scales	*Staff and service user boundaries can change after an incident*
	Using boundaries to promote fairness for staff and service users on the ward
Making sense of violence and aggression on the ward	*Knowing & understanding the service users and context helps*
The impact of incidents and the barriers to accessing support can be isolating	*Talking about my feelings can be a double-edged sword*
	Some parts of the role don't stop
	After an incident - how I and others respond makes a difference

Appendix 2.7: Coded transcript- participant no 3/Maddie

Yes, so you've got somethings at home that help (45 mins) And what about your sense of who you are and the ward and your job. I know you're saying sometimes you want to leave but you're not sure about what else you would do. Can you say anything more about that?

Now yes -there's more negative than positives but that's a lot of the negative is due to no staff, no breaks, just a lot, just things like that especially after covid it's been quite tough with the lockdown. I have good days… but everyone is leaving as well so that doesn't help. When a lot of staff go you really just have to get back to you-you have to start again. But it's like swings and roundabouts-you have a good period then a bad period. I think you probably have more good periods than bad to be honest with you.

And thinking about before how you were saying you used talk about things more sometimes but now you realise people may not understand the situation., do you find you keep things back?

Probably, maybe when I was younger when I first started, I was like…. But now I don't want to talk about my work. I just don't go into detail at all.

Thinking about during covid the NHS staff were heroes, do you ever feel that in terms of your job?

No I never felt anything. I used to get embarrassed actually when they did the clapping for the nhs.

Ok so you don't feel you'd drew on the support for your job or thinking about what you do?

No mainly because, I don't know with the covid and all that nurses are you know more important… While we're on the back burner. Unfortunately, people just don't get that perception of what we do. Nobody understands. This is why I like the male learning disability ward because they've got a learning disability and it's more, you can see how different it is from like an admission ward or the acute ward. This ward you can, not like sympathise but what's the word I'm looking for-it's just different and I love it. I'd cry if they told me I was moving to another ward. It's probably the only ward in the clinic that I've really enjoyed working in.

You've seen more positives aspects of this role compared to others… that's interesting could you tell me more about that…

Its fun coming in here. You're not on edge as what you are with the females. You can, it's totally different, it's like night and day in here.

So, you think that feeling more positive about your role currently in this case is related to the patient group?

I don't know. Maybe. I don't know if it's maybe just males. When I worked in females-eh I've got a knot in my shoulder, and I worked there for 5 years and for 5 years solid I'd a problem with my shoulder. And I think what I was doing coming into work was, I was like this constantly (mimics shoulders up). In here I'm more relaxed even though I know that things can happen. They're not out to be just malicious, you know there's something going on. Not all the time but you know there's something going on in the background and they're just trying to get their frustration out and it's not just because -I don't know-they've had a fight or bored or something with another patient. They need to take it out on somebody do you know.

That's really interesting, thank you. Iv just got a couple more questions.,. So, we're going to talk about… Regarding the more difficult experiences you can have as part of your job… what do you feel would be helpful to be known or understood or done differently. Is there anything you've thought would be better in terms of experiencing these incidents?

Well, I don't know…(laughing) you just have to have a thick skin-not take anything to heart. It's –I

Well, I don't know…(laughing) you just have to have a thick skin-not take anything to heart. It's –I hate saying it's part of the job, but I don't really agree with it because you're not here to be assaulted. We used to get debriefs, not had debriefs in a while but I don't think they work because no-one wants to highlight an issue if there was an issue. You know it would just be "everything's fine" …. We used to have reflective practice as well and to be honest with you, that was quite good. It was more you got to say what you wanted, and you weren't judged…this is making me feel-why is it making me feel like this, is thre another like insight? We can't always get on with someone so reflective practice is very good-you just talk about maybe just one or two patients – if they've been doing something during the week and like you feel they're being so annoying this week, you can talk about it.

Mhmm,.. so sometimes talking about feeling difficult emotions towards patients helps

Maybe even talking to you, just saying you're allowed to think like that. You know instead of your like thinking-aw such and such is annoying me and then you're like they shouldn't be annoying me or I'm in this job if they're annoying me, I shouldn't really be here. But when you're talking to someone,

like another psychologist or something and they're like "no it's normal to feel like that-everyone gets to a point and they you're "I don't feel bad-you know, I am human I 'm not a robot, we can think these things you know. So that's quite good, I quite like reflective practice.

So, you have found reflective practice beneficial in the past…

Yes, it's normal to think like that, you can't constantly be on that straight path you know thinking…" you can't think like that". And it's fine he's acting like that… no one says "you should be more understanding why he's acting like that". They end up explaining that it's fine to think like that.

That sounds helpful. Is there anything you find unhelpful?

Unhelpful. No…

I don't know if there's something you've found didn't work in the past…

Eh…No. I like the reflective practice, I've been moved before after an incident and it didn't help me, it made me worse. But it was a case of we need to try and do something as it was that or I was going off on the sick, so you know it was try and keep me, but it didn't work.

Why was that?

Appendix 2.8 Consolidated criteria for reporting qualitative studies (COREQ): 32 item checklist

Developed from:

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
Personal Characteristics		
1. Interviewer/facilitator	Which author/s conducted the inter iew or focus group?	P57
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	P1
3. Occupation	What was their occupation at the time of the study?	P59
4. Gender	Was the researcher male or female?	N/A
5. Experience and training	What experience or training did the researcher have?	P59
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	No
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Participants were briefed on the purpose of the study and understood it. Participants also reviewed the participant information documentation prior to giving their written informed consent to be involved.
8. Interviewer characteristics	What characteristics were reported about the inter viewer/facilitator? e.g. Bias,	P59

	assumptions, reasons and interests in the research topic	

Domain 2: study design		
Theoretical framework		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	P59
Participant selection		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	P56
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	P56
12. Sample size	How many participants were in the study?	P58
13. Non-participation	How many people refused to participate or dropped out? Reasons?	N/A
Setting		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	P57
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	**No**
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data	P58
Data collection		

17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	P57, N/A
18. Repeat interviews	Were repeat inter views carried out? If yes, how many?	**No**
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	**Yes**, P57
20. Field notes	Were field notes made during and/or after the inter view or focus group?	P56
21. Duration	What was the duration of the inter views or focus group?	P57
22. Data saturation	Was data saturation discussed?	P58
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	**No**
Domain 3: analysis and findings		
Data analysis		
24. Number of data coders	How many data coders coded the data?	One (The author)
25. Description of the coding tree	Did authors provide a description of the coding tree?	Appendix 2.6 P102
26. Derivation of themes	Were themes identified in advance or derived from the data?	Themes were derived from the data P59
27. Software	What software, if applicable, was used to manage the data?	Microsoft Word and Excel
28. Participant checking	Did participants provide feedback on the findings?	**No**
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	**Yes** throughout analysis section

30. Data and findings consistent	Was there consistency between the data presented and the findings?	**Yes** see Results section and Table 2: P60
31. Clarity of major themes	Were major themes clearly presented in the findings?	**Yes** see above
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	**Yes** see discussion under the subheading of **Wider Context** on P76