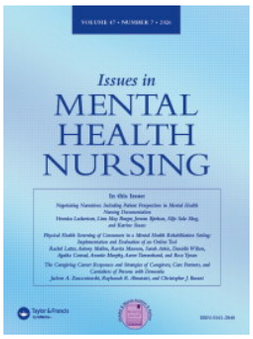

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An Exploration of Danish Forensic Hospital Staffs' Clinical Decision-Making about the Least Restrictive Alternative Principle

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ABSTRACT

The use of restrictive interventions within mental health care is greatly disputed and conflicts with human rights and autonomy principles. The least restrictive alternative principle was enacted in law to support mentally ill individuals' constitutional rights. The least restrictive alternative principle encourages staff to offer service users' the least restrictive treatment, preserving patient autonomy at the highest level possible. Previous studies identified that mental health staff have conflicting attitudes about which interventions are the least restrictive. This study investigates how Danish forensic hospital staffs perceive the least restrictive alternative principle and how these perceptions influence their perceptions of decision-making when choosing among restrictive interventions. A combination of two focus groups with nine staff members and seven individual interviews (10 nursing staff, 6 medical staff) were conducted. The data were thematically analysed, and three themes were identified: 'Staffs understanding of the least restrictive alternative', 'professional assessment', and 'individual and collective staff mechanisms'. Staff perceived clinical decision-making regarding the least restrictive alternative principle is shaped not only by adherence to legislation but also by staff composition, contextual factors, and situational dynamics. This highlights the need for both clear structural frameworks and flexibility to adapt decisions to the realities of everyday clinical practice.

Introduction

In mental health settings, staff employ coercion to manage critical situations involving a high risk of aggression or violence, aiming to prevent service users' from harming themselves or others (Völlm & Nedopil, 2016). Coercion constitutes both formal and informal measures. Informal coercion refers to a range of treatment pressures used to promote adherence, characterised by practices that fall outside formal regulatory frameworks (Hotzy & Jaeger, 2016; Norvoll & Pedersen, 2016). The formal perspective includes coercive measure encompassing a broad range of physically oriented practices that are subject to legal regulation and typically require formal documentation when implemented (Hem et al., 2018). The current study specifically focus on the objectively more restrictive coercive measures limited to constant observation, mechanical restraint, manual restraint and rapid tranquillisation referred to as restrictive interventions (NICE, 2015). The use of restrictive interventions limits service users' actions by restricting their freedom and liberty, hence conflicting with patients' constitutional rights and autonomy principles (Beauchamp & Childress, 2019; Chieze et al., 2021; Johnston & Sherman, 1993) and should only be used in order to secure safety and protect from harm (Völlm & Nedopil, 2016). While informal coercion constitutes an inherent and often subtle aspect of clinical decision-making, this study is delimited to formally regulated coercive measures in order to examine perceived decision-making within a legal framework, particularly in relation to the principle of the least restrictive alternative. The least restrictive alternative principle was introduced in mental health law in the U.S. in 1972 to protect the rights and dignity of individuals with mental illness. It has since shaped legislation and guidelines worldwide (Freeman & Pathare, 2005; Johnston & Sherman, 1993; WHO, 2008). According to the Danish Guidance on the Use of Coercion in Psychiatry, the principle of the least restrictive alternative

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stipulates that where less intrusive interventions are sufficient to achieve the intended purpose of treatment, these must be used, and any application of restrictive interventions must be carried out as gently as possible (Danish Ministry of Health, 2024). However, no specific guidance exists regarding the practical implementation nor how to determine what constitutes the least restrictive alternative (Hui, 2017; Riahi et al., 2016). The lack of clear legislative guidance and standardised procedures has resulted in considerable variation in the practical application of coercive measures (Birkeland & Gildberg, 2016; Linkhorst et al., 2022). At the same time, studies suggest that national psychiatric regulations may be of limited influence when staff make decisions about restrictive interventions (Laiho et al., 2016). Instead, staff characteristics such as gender, professional experience, and personal attitudes appear to play a significant role in shaping attitudes towards the use of restrictive interventions (Doedens et al., 2020; Laiho et al., 2013; Laukkanen et al., 2019). For example, quantitative studies have shown that male staff and those with less professional experience tend to hold more favourable views towards the use of restrictive interventions, and may therefore adopt a more intrusive approach (Bregar et al., 2018; Hottinen et al., 2012; Laukkanen et al., 2019). However, findings are not entirely consistent, as a German study including both nursing and medical staff found that female gender was associated with a greater tendency to justify coercion, while psychiatrists, compared to nursing staff, generally held more negative attitudes towards coercive practices (Vandamme et al., 2021).

Further, a Danish case vignette study demonstrates a high degree of variation in staff attitudes towards the use of coercive measures in critical situations across gender, professional background, and experience with coercion (Birkeland et al., 2024). This variation suggests that, in the absence of clear guidance, clinical decision-making may be inconsistently applied, potentially influencing how also restrictive interventions are used in practice. In addition, previous reviews have highlighted that staff often report limited availability of less intrusive alternatives (Butterworth et al., 2022; Doedens et al., 2020; Laukkanen et al., 2019), which may further challenge adherence to the principle of the least restrictive alternative.

In mental health care, clinical decision-making is commonly described as a complex and context dependent process in which clinicians integrate professional knowledge, experience, ethical considerations and situational risk assessments when making clinical judgements regarding treatment (Tanner, 2006; Thompson & Stapley, 2011). Decision-making is therefore not only shaped by individual clinician factors, but also by the organisational, legal and risk-related conditions under which care is delivered.

In forensic mental health settings, these conditions are particularly pronounced. Compared to general psychiatric settings, forensic services are characterised by a higher frequency and longer duration of coercive measures (Flammer et al., 2020; Hui et al., 2013), and typically presented with a higher baseline risk of serious violence (Hui et al., 2016). Staff in forensic mental health describe the use of restrictive interventions as more routine, recurrent, and embedded within legal frameworks, including custodial and treatment orders (Hui et al., 2016; Paradis-Gagné et al., 2025).

Against this background, it is therefore particularly relevant to examine how staff in forensic mental health settings perceive the principle of the least restrictive alternative, and how these perceptions influence their perceived clinical decision-making regarding the use of restrictive interventions.

Aim

The aim was to investigate how forensic mental health hospital staff perceive the least restrictive alternative principle, and how these perceptions influence their perceived clinical decision-making regarding the use of restrictive interventions.

Materials and methods

This qualitative study was informed by Herbert Blumer's symbolic interactionism, applied as a sensitising framework guiding study design, data collection, and interpretation (Blumer, 1986). Inspired by American pragmatism, the analysis focused on how such meanings inform concrete clinical actions. The aim led to the research questions presented in Table 1.

Table 1. Research questions and definitions of terms.

Research questions 1	What characterises forensic mental health hospital staff's perceptions of the least restrictive alternative principle regarding restrictive interventions?
Research questions 2	What characterises forensic mental health hospital staff's perception of their perceived clinical decision-making when using restrictive intervention and applying to the least restrictive alternative principle?
Definitions	
Mental health care staff	Nursing staff (including nursing assistants, and special educators') and medical staff working within forensic mental health settings.
Restrictive interventions (RI)	Close observation, seclusion, mechanical restraint, manual restraint and rapid tranquillisation (NICE, 2015).
Clinical decision-making	A situated process of professional judgement involving interpretation, experience and ethical reasoning (Tanner, 2006; Thompson & Stapley 2011).

Data collection and sampling

Data collection was carried out through qualitative semi-structured focus groups with nursing staff and one-on-one interviews with medical staff (Green & Thorogood, 2014). The study initially aimed to generate data through focus groups to capture a broad range of perspectives; however, due to scheduling constraints, medical staff were interviewed individually. The first author (CL) conducted the interviews. Focus groups were conducted with support from an assistant. The semi-structured interview guide (Appendix 1) was informed by the study aims and revised through ongoing testing and reflection of the interview guide (Blumer,

1986). Medical and nursing staff employed at one Danish forensic mental health hospital, with rich first-hand experience of participating in the decisions regarding restrictive intervention use, were recruited through a purposeful sampling strategy (Creswell & Poth, 2018). Staff agreeing to participate were introduced verbally and in writing to the study aim and interview. Medical staff were interviewed one-on-one at their work office and focus group interviews with nursing staff took place in conference rooms at the forensic mental health hospital. Both interviews and focus groups were digitally recorded and transcribed verbatim.

As shown in Table 2, a total of 16 staff participated: six individual interviews with medical staff, one individual interview with a nurse, and focus group interviews with four and five nursing staff members were conducted. The interviews lasted between 25 and 60 min (total mean: 39.48 min). Data collection took place between November 2023 and January 2024. Table 2 presents demographic data of the participants.

Table 2. Details of staff participating in individual and focus group interviews.

Staff group	N	Average age (range)	Gender (male)	Average years ward experience
Nursing staff	10	40.7 (30–58)	8 (2)	8.1
Medical staff	6	44.8 (34–69)	3 (3)	7.2

Data analysis

The data were analysed using empirical testing thematic analysis (ETTA) informed by Gildberg et al. (2015a; Gildberg & Wilson, 2023). As reported in Gildberg and Wilson (2023) the analysis consisted of eight steps, and was empirically tested by constantly switching between the original interview text, codes, categories, and themes. Spradley-inspired semantic and taxonomic procedures were used as analytical tool to identify themes and sub-themes (Spradley, 1980).

Firstly, all transcripts were read, and interviews were listened to, to get an overview of the content and structure of the data. Guided by the research questions, the interview text were coded and condensed (Clarke & Braun, 2017). The condensed text were marked with authenticity (aut) markings from 1 to 3 (Gildberg & Wilson, 2023) in order to be able to asses to what extent analysis generated empirical grounded results (aut 1) or more elaborate interpretations (aut 3). This distribution of authenticity markings reflects a deliberate epistemological commitment, informed by American pragmatism, to remaining close to the participants' practice-near accounts, rather than imposing interpretive distance on the data. In the present study, the vast majority of data were marked authenticity level 1, consistent with this analytical commitment. Next, codes were merged into categories and grouped in themes and written into a coherent theme text (Appendix 2). The software tool NVivo (Lumivero, 2023) was used to manage this process. Finally, categories were placed into a theme classification matrix and taxonomical relations were uncovered by identifying semantic relationships [a is part of b], and functionality using appropriate semantic analysis (Gildberg & Wilson, 2023). ETTA entails continuous movement between the original data and emerging analytical results to reduce the risk of skewed data. The first author (CL) conducted the primary coding and led the analysis, with themes and taxonomical relationships iteratively discussed with the last author (FG) in reflective dialogue.

Ethical considerations

The study received full approval at all organisational levels and adhered to ethical guidelines outlined in the Declaration of Helsinki (The World Medical Association (WMA), 2001). Prior to commencement, the study was reported to, and approved by the Danish Data Protection Agency, and all data was managed and stored in compliance with the EU General Data Protection Regulation (GDPR). The study was registered and approved by the Regional Committees on Health Research Ethics for Southern Denmark (no. 21_61394). Oral and written information and subsequent informed consent was obtained from all informants before each interview. All participants were guaranteed confidentiality.

Results

Three main themes were identified from the analysis: 'Staff understanding of the least restrictive alternative', 'professional assessment', and 'individual and collective staff mechanisms'. Together these themes characterise staff's perceptions of the least restrictive alternative principle and how they influenced their perceived clinical decision-making regarding the use of restrictive interventions. The following section provides a comprehensive account of the identified themes and their taxonomic sub-themes. An overview is available in Appendix 2.

Staff understanding of the least restrictive alternative

The first theme, 'staff understanding of the least restrictive alternative, was characterised by staff members' perceptions of what the least restrictive alternative principle entailed. Their understanding was twofold: (1) aiming to prevent restrictive interventions use by implementing alternative strategies and (2) when restrictive interventions were used, applying them as gently as possible. However, some disagreement was present among staff since some perceived the least restrictive alternative principle to be either to use restrictive interventions as gentle as possible or preventing restrictive intervention use as this quote describes:

> *"[…] whatever it may be. That's what I think is the least restrictive alternative. So, it comes long before an agitated situation arises."*
>
> Nurse_9

This duality is further explored through the sub-themes *'alternative strategies'* and *'gentlest practice'*, which are presented below.

Alternative strategies

'Alternative strategies' were characterised by a broad range of approaches and interventions that staff applied as the least

restrictive alternative with the aim of preventing the use of restrictive interventions. 'Alternative strategies are also part of the theme 'professional assessment'. When using 'alternative strategies' as the least restrictive alternative, staff referred to several non-pharmacological interventions and treatment options like physical or occupational therapy, and activities such as walking in the garden or using a massage ball. Staff also referred to more creative or leisure-based strategies, as illustrated by one participant:

> *"[…] go over and do something creative in the workshop or similar […] Turn on the radio, read a book, watch television, play computer games."*
>
> Medical_5

Meaningful dialogue with service users was frequently highlighted by staff as a key intervention, both in preventing the use of restrictive interventions and during their application. Staff described how such dialogue could serve to de-escalate situations by calming the service user, clarifying the seriousness and potential consequences of their behaviour, and fostering a sense of involvement in decision-making processes. This included listening to the service user's preferences, such as whether female patients felt more comfortable being restrained by female staff or if patients had specific wishes regarding medication. Staff acknowledged that engaging in dialogue both prior to and following restrictive intervention episodes was mentioned as an area in need of further development and improvement. According to the informants, alternative strategies could also encompass interventions of a more intrusive nature, such as PRN ('as needed') medication, time-out, or temporary confinement to a designated area.

Gentlest practice

Applying restrictive interventions as gentle as possible was described by staff as causing the least possible distress and harm to the service user, while choosing the restrictive intervention expected to have sufficient effect. Nursing staff also described that each restrictive intervention could be made gentler when showing respect, listening to the service user, regulating on the equipment used to restraint, and keeping the duration to a minimum as stated in the following quote:

> *"The mildest approach could then be, […] that we don't use all four straps […] and then you can loosen them again after 8 minutes. […] you can easily assess the least restrictive alternative in a most intrusive coercive situation."*
>
> Nurse_2

Professional assessment

The second theme 'professional assessment' was characterised by formal and informal evaluations of the situation. The formal assessment included legal requirements and tools that were formally integrated into local care plans. These tools comprised the Intervention Team, the Brøset Violence Checklist, and the Acute Coercive Intervention Plan. The informal assessment involved clinical strategies based on experience, intuition and context, not standardised or formally documented, but were instead shaped by clinical practice and represented a dynamic evaluation process, dependent on the specific situation and the individual service user. According to staff, the way in which professional assessment was managed during coercive situations, and how it influenced decision-making, appeared to depend on the level of professional experience (as elaborated in the sub-theme 'work experience'). The various types of assessment highlighted by staff are further explored in the following sub-themes: 'assessment of the situation and considering safety', 'patient-related knowledge and service user preferences', and 'legal requirements'.

Assessment of the situation and considering safety

The sub-theme 'assessment of the situation and considering safety' was informed by what was at stake in the specific situation and how to ensure safety. Nursing staff members reported assessing the situation as a constant assessment of changes in the environment and service user actions. Staff described a range of scenarios, varying from verbal disagreements and threats made by service users to physical aggression directed at objects or individuals. Situations also included service users in distress who either threatened with or inflicted harm upon themselves. In cases of severe self-harm, staff argued that mechanical restraint could be considered the least restrictive alternative. However, constant observation, rapid tranquillisation, or physical restraint were more commonly assessed as the least restrictive alternative in such situations.

Another situation mentioned by staff involved service users experiencing distress due to formal or content-related thought disturbances and hallucinations. In these cases, staff more often resorted to alternatives to restrictive interventions, or considered medication rather than manual restraint. For manic service users who were highly restless and unable to find ease, staff decided to use temporary area restrictions to reduce external stimuli. Several staff argued that in cases where service users lacked sleep and medication was perceived as ineffective, mechanical restraint was occasionally implemented as the least restrictive alternative. Further decisions depended on whether the service user genuinely intended to carry out their threats to harm the staff or themselves or if the threats were just expressions of frustration. However, it was expressed as a difficult balancing act illustrated in this quote:

> *"Sometimes they can also rant and say a lot of things, because they are mad, because they are angry. […] Is [there] an imminent risk of you doing something to me, or is it just words, or what will help? Does it help, just withdrawing and then that's it? Or do we have to do something, that is, more, um. And it's an assessment that can be really difficult sometimes, right?"*
>
> Nurse_7

Assessment also included evaluation of the pace at which the situation unfolded, as this influenced the choice of intervention. Staff described how situations either escalated gradually over time or emerged suddenly and unexpectedly. When situations emerged suddenly, several staff members

argued that decisions regarding what constituted the least restrictive alternative were made through rapid safety assessments. These assessments aimed to protect and keep staff, other in-patients, and the service user in question safe. In such cases, more intrusive interventions were often considered necessary, with staff justifying their use as the least restrictive alternative under the circumstances to maintain safety.

Patient-related knowledge and service user preferences

'Patient-related knowledge and service user preferences' was also characterised by both formal and informal dimensions. The informal aspect referred to knowledge acquired through observation and dialogue with the service user. In contrast, the formal aspect was often linked to the legal framework surrounding the use of advance directives, which staff frequently mentioned as a means of gaining insight into service user preferences.

The informal part of 'patient-related knowledge and patient autonomy' encompassed staff awareness of patient's individual triggers and sources of frustration, through familiarity with the service user. Familiarity with, and a sense of comfort around, the service user, despite episodes of aggressive behaviour, was perceived to empower staff to engage in dialogue about alternative strategies and to postpone the initiation of restrictive interventions. This was attributed to their understanding that the service user was expressing frustration rather than intending harm.

Conversely, familiarity with a service user's history of violent behaviour was, according to some staff members, seen to negatively influence decision-making. In such cases, decisions to implement restrictive interventions were made more swiftly, sometimes even before the situation had escalated. Staff point to a delicate balance when drawing on familiarity: one must neither disregard the service user's history of harmful behaviour nor compromise safety as illustrated here:

> *"It might paint a wrong picture, because he/she "used to be" that way, and of course you need to bring that with you. But we also need to step back and watch: 'well, how is the situation right now'. […] It might be that the service users once have been violent to staff members, but we haven't seen that in the past two years."*
>
> Nurse_9

Regarding the formal perspective, staff spoke of the importance of making agreements with service users during periods of stability, based on knowledge of individual triggers and preferences. These agreements were to be documented in the service user journal, outlining both preferred alternative strategies and, which specific restrictive interventions the service users considered more acceptable. This approach was illustrated by one staff member, who reflected on how such agreements could reduce the frequency and duration of restrictive interventions:

> *"Well, I think that if we listen to the service users, really listen to what they experience as the best way to receive help, if there is a need for restrictive interventions, then the restrictive intervention might be shorter, for example. That is, they might not be subjected to restrictive interventions as often because agreements have been made. […] And they know we have an agreement to avoid e.g. manual restraint at all costs, because 'for me, that is the most intrusive form of restrictive intervention'."*
>
> Nurse_3

Further, staff reflected on how such knowledge and agreements could help both to prevent conflicts thereby reducing the likelihood of situations escalating into coercion, and to assist service users when they became agitated. According to staff, in doing so, restrictive interventions could potentially be implemented in a less intrusive manner.

Long-term hospitalisations and previous admissions were described by staff as facilitating a deeper understanding of service users. Staff described how patient-related knowledge was often shared across wards and utilised collaboratively to support decision-making regarding the least restrictive alternative. According to staff, the better they knew the service user and the stronger the therapeutic relationship, the more likely they were to implement less intrusive coercion.

The aspect of patient-related knowledge concerned service users' individual preferences for alternative strategies and restrictive interventions. However, there was disagreement among staff regarding which factor should carry the greatest weight in decision-making: professional assessment of the situation and safety, or the service user's preferences. On the one hand, staff acknowledged that each service user had their own opinion of what constitutes the least restrictive alternative. These staff members believed that involving service users in decision-making could lead to less intrusive use of coercion. This recognition was considered central to tailoring approaches that respected patient autonomy.

For example, staff report several cases where service users view manual restraint as the most intrusive and would rather be mechanically restrained. If manual restraint was decided as the least restrictive alternative, the staff assessed whether the service user had a history of abuse as this could potentially re-traumatise the service user and manual restraint may not be the service users preferred least restrictive alternative.

On the other hand, other staff members argued that professional judgement should take precedence, particularly in cases where service users preferred interventions that were assessed more intrusive than alternatives, e.g. preferences for mechanical restraint, or when the preferred option was not considered safe. In this regard, staff gave examples of situations where service users due to their mental illness have illogical conclusions based on psychosis. In such cases, service users sometimes insisted on making decisions that staff perceived as clearly harmful to their well-being. It was emphasised by staff that the least restrictive alternative principle should not be interpreted as an unconditional obligation to meet all service user demands. Rather, it was understood as a clinical and ethical guideline. One staff member reflected on this tension:

> *"Sometimes I also feel that the least restrictive alternative principle gets a bit distorted, in the sense that it's interpreted as meaning that one should actually accommodate the service user quite a lot in order to prevent a coercive situation, and that's not the idea. The idea is to do exactly what is necessary: no more, no less […]*

it's not necessarily about agreeing with the service user or fulfilling every need or something like that."

Medical_4

Legal requirements

'Legal requirements' was characterised by formal policies and legislation affecting staff decision-making. Participants referred to the legal mandate to reduce the use of restrictive interventions, noting that the revised Mental Health Act in Denmark had prompted more frequent discussions about what constitutes the least restrictive alternative. In some cases, staff perceived legal requirements as a supportive factor guiding their decisions towards less intrusive practices. However, staff also shared more critical reflections, noting that at times there was an excessive focus on reducing the use of restrictive interventions, which, in some cases, came at the expense of safety. This prioritisation was perceived to increase the risk of injury, as problematised in the following quote:

"The problem is actually greater in the lack of use of restrictive interventions in certain specific situations. […] Because there are actually some who end up in really bad shape, you know, and get seriously injured and such. And that fear of using restrictive interventions, it can actually become a big problem."

Meidcal_4

According to staff, their understanding of the least restrictive alternative principle reflected a perceived hierarchy of restrictive interventions. Constant observation was described as the least intrusive measure within this hierarchy, whereas mechanical restraint was considered the most restrictive. Consequently, staff understood that all other forms of restrictive interventions must be considered before deciding to use mechanical restraint. However, uncertainty remained among staff regarding how to interpret the legislation, whether manual restraint or rapid tranquillisation should be considered the second or third least restrictive alternative.

Another aspect of legal requirements, primarily highlighted by medical staff, concerned the role of the Danish Patient Complaints Board (DPCB)[1] in handling cases related to coercion. Participants described how previous rulings influenced their decision-making, regarding what constitutes the least restrictive alternative. Some medical staff expressed uncertainty regarding how the DPCB weighs its decisions in relation to patients' autonomy versus their professional assessment of the situation. Some participants held the view that the DPCB based its decisions solely on a rigid legal framework, without giving sufficient weight to the specific circumstances of individual cases. Medical staff advocated for recognition from the DPCB that their actions were guided by the best interests of the service user. However, their experiences often contradicted this expectation. One participant perceived that the DPCB actively sought to identify minor procedural errors in the documentation of restrictive interventions, reflecting a broader sense of mistrust towards clinicians' professional judgement. Another participant perceived that DPCB rulings contributed to a culture of apprehension, particularly among younger colleagues, who were described as hesitant to use restrictive interventions even in situations involving violence due to fear of facing a formal complaint:

"The word 'complaint' makes you think twice about whether you dare to use restrictive interventions, doesn't it? And that's really unfortunate because there are potentially people who will get hurt if you don't."

Medical_4

Staff described the legal framework as constraining their professional judgement, particularly in determining what constituted the least restrictive alternative and in incorporating service user preferences into decision-making. A commonly cited issue was the requirement to administer medication prior to mechanical restraint, which, according to staff, sometimes led to medication being used primarily to fulfil documentation standards rather than clinical necessity.

Staff also noted that legal obligations did not always align with service users' individual preferences or support autonomy. Views among staff differed on whether mechanical restraint could, in certain cases, be considered the least restrictive alternative. Some staff, who prioritised patient autonomy, argued that requests for mechanical restraint should be respected, despite mechanical restraint being legally defined as the most intrusive intervention. Others emphasised the importance of clinical judgement, viewing mechanical restraint based solely on service user preference as an inappropriate coping strategy.

Individual and collective staff mechanisms

The third theme 'individual and collective staff mechanisms' reflected psychological mechanisms operating both at the individual level and within staff groups, influencing consensus in decision-making. This theme encompasses three interrelated sub-themes: 'mental strain', 'consensus' and 'work experience'. Below is a detailed breakdown of each sub-theme.

Mental strain

'Mental strain' was described by nursing staff as a form of psychological overload, which they recognised, both in themselves and in colleagues as a factor influencing decision-making. Medical staff also acknowledged the presence of mental strain, not necessarily based on their own experience, but as a factor they needed to navigate in their decision-making to support nursing staff.

Nursing staff described experiencing momentary stress during acute violent situations, as well as repeated strain from ongoing verbal threats from service users. They explained how this resulted in fear and insecurity, both at the individual level and within the group dynamic. Both medical staff and nursing staff acknowledged that mental strain could impair rational thinking when determining the least restrictive alternative. Staff explained the importance of understanding the psychological mechanisms at play in agitated situations to be able to manage their own anxiety and fear without letting it affect decision-making and base their assessments on objective judgments rather than their emotions as stated in this quote:

"Are we doing this because we're scared? Are we doing it because as a staff group, we don't feel like we have control? Well, there are a lot of factors, nothing is, you know, it also depends on the day, it's like a football or handball match."

Nurse_5

However, according to staff, how mental strain is managed during agitated situations and how it influenced decision-making may, like professional assessment, depend on the level of experience (further elaborated in 'work experience').

Consensus

Medical staff and nurses agreed that 'consensus' plays a crucial role when deciding how to manage a situation in a less intrusive manner. Staff described that consensus is achieved through continuous knowledge sharing about service users during staff meetings, as well as in agitated situations. Interviewees said that decisions should be made collectively, and no one is solely responsible for the decision, even though, legally the medical staff has the final say. However, consensus in decision-making was experienced as challenging by some participants. For example, conflicting views were expressed regarding staff members' differing understandings of what constitutes the least restrictive alternative, and how various elements within the professional assessment—such as legal requirements, safety considerations, or patient autonomy—are prioritised.

Nurses' perspectives on consensus included a wish to be involved by medical staff in the final decision regarding what is considered least intrusive in each situation. Consensus was described negatively when medical staff made decisions without involving nursing staff. Another challenge described by staff was the difficulty in reaching consensus, which stemmed from differing priorities—specifically, a focus on reducing the use of restrictive interventions rather than ensuring safety. One of the nurses reflected:

"We sometimes experience, you know, that there's a doctor who won't make a decision about restrictive interventions, even though there's a whole group of staff saying […] 'we shouldn't be out there in that environment with that service user.' […] maybe because of this whole project to reduce coercion."

Nurse_1

Staff experienced that decision-making could be prolonged when disagreement prevented consensus from being reached regarding the assessment plan to manage the situation with the least restriction. According to staff, this delay could potentially result in a more intrusive outcome.

Work experience

The sub-theme 'work experience' was characterised by being interlinked with professional assessment and individual and collective staff mechanisms. Staff report how work experience influence decision-making regarding the use of coercion—either positively, towards less intrusive practices, or negatively, towards more intrusive ones. For example, staff reported that substitutes and inexperienced personnel, both nurses and medical staff, tended to decide more quickly in favour of restrictive interventions. This was attributed to limited familiarity with service users' preferences and needs, as well as insufficient knowledge of alternative strategies. One staff member explained:

"We have a service user who benefits greatly from some calming methods, and it works really well during the day when the regular staff are in shift, but at night, when there are substitutes or those who are unfamiliar with the service user, they're not as good at communicating with the service user."

Medical_1

It was staff's perception that, with increased experience, skills were developed to make decisions based on professional assessment, as more experienced staff become better at managing pressure from colleagues. Both nursing staff and medical staff reported that it was often challenging to question decisions involving use of restrictive interventions, even in situations where they assess that alternative strategies were an option. Nurses expressed that it became easier to voice disagreement with medical staff decisions when they had more professional experience and could draw on a broader selection of arguments, as illustrated by the following quote from a nurse:

"One need to have a professional reflection, but it also requires that one has professional knowledge and experience, I think, before one dares to bring it into play. […] What's the reason you think he needs medication right now, because I don't see what you see."

Nurse_2

When 'considering safety', staff argued that experienced colleagues tend to make less intrusive decisions while still maintaining safety for both staff and service users. This was attributed to their ability to remain calm and less affected by threats or violence, partly due to their greater familiarity with service users' needs and reactions.

In relation 'mental strain' and 'work experience'. Experienced staff were seen as more capable of recognising how internal states, whether their own or others', affected decisions. In contrast, staff with less experience were, perceived as less likely to possess these reflective competencies. Medical staff described how they have experienced less experienced colleagues were influenced by nursing staff's mental strain when deciding on restrictive interventions, choosing more intrusive interventions than objectively necessary. However, some participants also recognised that it could be challenging for experienced staff to accurately assess the actual level of danger and determine whether the agitated situation prompting their involvement was due to acute risk or a reaction to prolonged mental strain. This was explained by the fact that medical staff often come from outside the ward and have not been exposed to the same stressful environment as nursing staff. Consequently, if a service user did not appear outwardly aggressive at the time of assessment, medical staff explained that they were inclined to decide against nurses' assessment to implement restrictive interventions, as they did not perceive an objective need or legal basis of using restrictive interventions.

Several informants pointed out that consensus was influenced by work experience. For instance, both medical staff

and nurses explained that having several years of experience made it easier to reach consensus, as colleagues know each other well, improving communication, and staff consequently feel calm and confident in their interactions.

The findings presented above may appear immediately recognisable to readers familiar with forensic mental health practice highlighting key empirical insight. Across themes, staff describe their perceived decision-making regarding restrictive interventions as balancing legal principles, professional judgement, safety considerations, and collective dynamics. Data reflects how the least restrictive alternative operates as a practical and interactional guideline rather than a clearly operationalised rule. The analysis thus highlights how restrictive interventions become normalised through shared understandings, professionalism, and collective sense-making, revealing how variability arises not from ignorance of the principle, but from its situational interpretation and enactment in everyday practice.

Discussion

This study explored how forensic mental health hospital staff describe and make sense of the least restrictive alternative principle when reflecting on situations involving restrictive interventions. Importantly, the findings do not provide direct insight into actual decision-making processes or clinical behaviour. Rather, they illuminate the interpretive frameworks, professional reasoning, and processes of legitimation through which staff articulate the meaning and relevance of the least restrictive alternative in their work.

The findings indicate that forensic mental health hospital staff hold a twofold understanding of what constituted the least restrictive alternative principle. This understanding, in the context of staff perceived decision-making, was marked by its multidimensional and dynamic character, incorporating both formal procedures and informal, experience-based considerations that shaped how staff view the decision-making process. Similar multidimensionality in how the least restrictive alternative principle is articulated by staff have been observed in earlier studies, suggesting that interpretive variability is a stable feature of professional discourse around coercion (Green et al., 2018; Laiho et al., 2016; Pedersen et al., 2023). When decision-making is characterised by experience-based considerations rather than structured assessments, it may give the impression of being arbitrary or lacking systematic rigour as found by Gildberg et al. (2015b). However, within participants' narratives, such reasoning functioned as a legitimate professional resource, mobilised to explain how complex, rapidly evolving situations are navigated. This aligns with research on clinical judgement in nursing and psychiatry, which identifies tacit knowledge and experiential pattern recognition as central to professional reasoning in uncertain environments (Tanner, 2006).

Psychological and relational mechanisms such as mental strain, consensus, and professional experience were also prominent in staff accounts. Previous research similarly demonstrate how stress, fear, and group dynamics are central to how staff explain coercive practices, even when these mechanisms cannot be directly observed (Laiho et al., 2013; Tingleff et al., 2026).

Formal tools such as risk assessment instruments and advance directives were described by staff as resources supporting staff in making more consistent decisions, enhance shared understanding and include service users autonomy in the decision process. Previous research on formal assessment has explored the use of specific risk assessment tools, such as the Brøset Violence Checklist, as a means to systematically document changes in the environment and service user behaviour (Brenig et al., 2023; Jones et al., 2023; Lawrence et al., 2022). Research has also suggested that service users regard advance directives as a valuable tool for strengthening their involvement in treatment decision-making (Braun et al., 2023). Although advance directives are legally recognised instruments, this does not guarantee that they will be used by staff, nor that service users' statements will be followed (ibid). In the present study, participants' narratives suggested that such limitations reflect a broader tension in coercion related work, where formal tools and legal frameworks often coexist with, rather than replace, informal professional reasoning shaped by situational complexity.

Our findings highlight the role of alternative strategies as an important factor in staff perceptions of decision-making when describing how the least restrictive alternative is understood and how restrictive interventions might be avoided. This aligns with previous research indicating that staff report actively considering alternative strategies, including de-escalation techniques and patient-related knowledge, when reflecting on the management of conflict situations (Laiho et al., 2013), and on efforts to reduce the use of restrictive interventions (Doedens et al., 2020; Gildberg et al., 2025; Laukkanen et al., 2019; Pedersen et al., 2023, 2024). Such knowledge has been described as developing through experience and engagement with the service user, enabling more individualised and tailored intervention choices (Tanner, 2006). Consistent with this, participants in the present study articulated how decision-making was reasoned to be adapted in response to individual service user contexts and considerations of autonomy. At the same time, staff narratives revealed disagreements regarding how such individualisation should be balanced against formal professional assessment strategies. This tension was also evident in how restrictiveness was described and justified. While participants referred to a general understanding of mechanical restraint as the most intrusive intervention, this perception appeared to be closely linked to legal classifications rather than to experiential reasoning alone. In their accounts, staff acknowledged that some service users were perceived to prefer mechanical restraint and that, in certain situations, it was reasoned to represent the least intrusive option. Although previous research has predominantly reported mechanical restraint as being viewed as the most intrusive intervention (Bak & Aggernæs, 2012; Doedens et al., 2020; Lindekilde et al., 2024), participants' narratives in the present study highlighted variation in how restrictiveness was interpreted and weighed, resonating with earlier findings indicating that perceptions of restrictiveness differ among staff (Birkeland & Gildberg, 2016).

In some situations, participants described that conflicts were perceived to have escalated to a point where the primary concern became safety, and where uncertainty arose regarding whether alternative strategies could be applied or which restrictive intervention might be considered. Previous research indicates that safety assessments represent a significant factor shaping how staff reason about decision-making and conflict management (Baker et al., 2007; Doedens et al., 2020; Gildberg et al., 2021; Green et al., 2018; Pedersen et al., 2024; Riahi et al., 2016; Wynaden et al., 2002). In the present study, several staff members described that organisational and policy-driven efforts to reduce the use of restrictive interventions were at times experienced as placing safety under pressure. When safety was perceived to be at risk, participants reported heightened mental strain, which they described as influencing how situations were interpreted and managed. This resonates with previous research showing that staff experiences of trauma, burnout and mental strain are associated with more coercive environments, although not necessarily reflecting individual decision-making behaviour (Gildberg et al., 2021; Riahi et al., 2016).

Participants further emphasised that the safety was understood as a multidimensional concern, a point of particular relevance within forensic mental health settings, where the risk of violence (Flammer et al., 2020; Jones et al., 2023) and threat levels (Lawrence et al., 2022), are higher than in general mental health contexts. Nevertheless, some evidence suggests that staff approaches to conflict management may be broadly similar across both general and forensic wards (Gildberg et al., 2013).

Inexperience was described as being associated with a greater reliance on restrictive interventions rather than alternative strategies, thereby reinforcing challenging care environments. Previous research has similarly demonstrated that lack of experience and the use of substitute staff can negatively affect both conflict dynamics and decision-making processes (Holzworth & Wills, 1999; Tingleff et al., 2026). However, other previous studies found no such association (De Benedictis et al., 2011; Doedens et al., 2017; Kodal et al., 2018). Taken together, these divergent findings suggest that decision-making are likely shaped less by staffing characteristics in isolation and more by team composition and individual clinicians' interpretations and clinical reasoning in specific situations (Gildberg et al., 2010, 2021).

Throughout the findings, tensions between patient autonomy and professional assessment were articulated as unresolved and ongoing dilemmas rather than as conflicts with clear solutions. Staff accounts suggested that service user preferences were more readily incorporated when discussing alternative strategies than when reflecting on restrictive interventions, consistent with previous research indicating that autonomy is constrained as perceived risk increases (Baker et al., 2007; Green et al., 2018; Holmes et al., 2015; Lawrence et al., 2022; Nedopil, 2016). When prioritising professional assessment over service users' preferences, decisions conflict with patient autonomy and could compromise person-centred care (Muir-Cochrane et al., 2018; Wynaden et al., 2002).

In summary, decision-making regarding restrictive interventions is a complex and challenging area of practice (Lindekilde et al., 2024; Power et al., 2020) and calls for consideration of several ethical aspects and the notion of staff obligations to search for alternatives to restrictive interventions that are more respectful of patient autonomy and rights (Chieze et al., 2021). Suggestions have been made to specify legislation by developing a formalised solution and approach (Braun et al., 2023; Nedopil, 2016). The challenges of specifying legislation include the questions of how to manage safety and service user preferences equally. On the one hand, legal specification may limit the extent to which individual service user preferences and professional judgement can coexist. On the other hand, a lack of legal clarity may create greater scope for disagreement and contribute to staff uncertainty in decision-making. This tension highlights the need for a framework that supports both clarity and flexibility, enabling staff to navigate complex relational dynamics with confidence. Further research is warranted within forensic mental health settings to explore decision-making processes concerning the use of restrictive interventions and the application of the least restrictive alternative principle. This includes investigating both service user and staff perspectives on how legislation might be improved and more effectively implemented in clinical practice. Such inquiry could contribute to bridging the gap between legal frameworks and everyday relational dynamics, thereby supporting more ethically and practically grounded approaches to care.

Limitations

Credibility in this study was supported through empirical testing, involving iterative movement between the original transcripts and interpretative analysis, as well as peer discussions with the last author (FG). Transferability should be considered when interpreting the findings. The study drew data from a small sample of professionals working within a single hospital, which may limit the transferability of the results to other mental health wards, as they reflect a specific local and organisational culture. Attempts were made to recruit participants across multiple organisational settings; however, access was limited. Including data that represent cultural, policy-related, and professional perspectives from other wards could have further strengthened the empirical grounding of the study (Blumer, 1986).

In the present study, the aim was to achieve a comprehensive exploration of a specific phenomenon and to capture a range of perspectives, rather than individual experiences (Green & Thorogood, 2014), which informed the choice of focus group interviews. However, due to practical constraints, it proved nearly impossible to gather medical staff in groups, which led to the decision to combine both interview formats. While individual interviews and focus groups generate different types of qualitative data, the analysis in this study focused on identifying patterns across the dataset rather than comparing data by method. However, it is acknowledged that group dynamics in focus groups and the more individual nature of one-to-one interviews may have influenced how participants articulated their perspectives.

In line with Blumer's emphasis on *respecting the nature of the empirical world*, the findings are not explicitly theory-driven but grounded in participants' situated experiences. The interview approach was primarily exploratory, aiming to elicit participants' perspectives in their own terms. As such, participants were not consistently challenged or extensively probed in relation to their responses. While this may have supported openness, it may also have limited the depth of critical reflection and the exploration of underlying assumptions.

Using the ETTA framework (Gildberg et al., 2015a; Gildberg & Wilson, 2023) as the specific thematic analysis approach contributed to methodological rigour and ensured a transparent handling of the data. However, it could be argued that the structured nature of this method allows less room for interpretative creativity. Further exploration or analysis between differences in results from the two groups could add more in-depth analysis of the current study data.

Conclusion

In response to research question one, staff perceived the least restrictive alternative principle as twofold: (1) aiming to prevent the use of restrictive interventions by implementing alternative strategies, and (2) applying restrictive interventions as gently as possible.

Addressing research question two, staff reported that professional assessments, as well as individual and staff mechanisms, influenced their perceived decisions both in terms of whether to implement alternative strategies and in assessing which restrictive intervention option constituted the least intrusive in each situation.

Ideally, decisions regarding alternative strategies were to be made when staff were not 'mentally strained', were experienced, and when consensus between staff was achievable. Such conditions also allow for the inclusion of patient autonomy while meeting legal requirements.

In practice, however, several factors may push decision-making in a more intrusive direction. These include staff 'mental strain', tensions surrounding the concept of patient autonomy, and a workforce lacking the experience and competencies necessary to implement alternatives to restrictive interventions effectively.

The metaphor of decision-making being like a football or handball match illustrates how decision-making was not solely guided by formal protocols but were also shaped by the composition and dynamics of the team present on a given day. Much like in team sports, success depends on each member understanding the rules, taking responsibility, and working collaboratively towards a shared goal. The metaphor underscores the importance of both clear structural guidance and the flexibility to adapt to contextual realities in the everyday application of the least restrictive alternative principle.

Implications for practice

The findings highlight the need for a more nuanced approach and sensitivity to context and individual service user preferences in the implementation of the least restrictive alternative principle in forensic mental health settings. To support staff in making ethically sound and legally compliant decisions, the following implications for practice are suggested:

There is a need for clearer guidelines and shared understandings of the legal requirements on how to implement least restrictive alternative acknowledging both professional assessment and psychological mechanism. Staff need support in navigating the tensions between respecting patient autonomy and ensuring safety. Service user involvement in care planning may help align clinical decisions with both legal standards and individual rights. Developing and introduce further structure to already exciting tools, such as advance directives, could help staff navigate more confidently and consistently (Chieze et al., 2021), however more research in this area is needed.

Ongoing training should focus on enhancing staff competencies in de-escalation techniques, ethical reasoning, and patient-centred care. Special attention should be given to equipping less experienced staff with the skills needed to implement alternatives to restrictive interventions effectively. Further, organisations should prioritise creating working conditions that reduce mental strain among staff. This includes ensuring adequate staffing levels, fostering interdisciplinary collaboration, and providing opportunities for reflective practice and supervision (Tingleff et al., 2026 Jan-Mar 01).

Note

1. The DPCB handles service user complaints regarding restrictive intervention or involuntary treatment that have occurred during hospitalisation in a mental health hospital.

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Author contributions

CRediT: **Camilla Rosendal Lindekilde**: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Writing – original draft; **John Baker**: Supervision, Validation, Writing – review & editing; **Søren Birkeland**: Supervision, Writing – review & editing; **Jacob Hvidhjelm**: Supervision, Writing – review & editing; **Frederik Gildberg**: Supervision, Writing – review & editing.

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Appendices

Appendix 1. Interview guide

Theme	Question	Supporting questions
(1) Introduction	What do you understand by the least restrictive alternative principle in relation to restrictive interventions?	
(2) Challenges and opportunities	What are the challenges of applying the least restrictive alternative principle when using restrictive intervention?	When is it difficult versus easy?
(3) Decision-making regarding restrictive intervention	Describe a situation involving restrictive intervention where the least restrictive alternative principle was applied.	Can you describe a restrictive intervention situation where the least restrictive alternative principle was not applied?
Empirical testing—Testing factors mentioned in previous interviews:	With the least restrictive alternative principle in mind: How do you make decisions about which type of restrictive intervention to use (based on the range of options you have)?	
	Experience, competencies, professional reflection/argument, familiarity with the doctor, disagreement within the staff group. Service user preferences, service user history, illness/symptoms, substance abuse, relationship, advance directives, culture, Mental Health Act	
(4) Least restrictive alternative hierarchy	What do you perceive can make restrictive intervention less restrictive?	What do you perceive can make restrictive intervention more restrictive?
(5) Alternatives to restrictive intervention	What do you think could be less intrusive alternatives to restrictive intervention?	What do you think it would mean for practice to use [x] as an alternative?
Empirical testing—Testing factors mentioned in previous interviews:	Following, indoor periods, observation in own room, 'agreements', upright fixation.	Informal/indirect coercion, disagreement about definitions from ward to ward, what/when is coercion documented.

Appendix 2. Themes and sub-themes

Themes	Sub-themes
Staff understanding of the least restrictive alternative	Alternative strategies
	Gentlest practice
Professional assessment	Assessment of the situation and considering safety
	Patient-related knowledge
	Legal requirements
Individual and collective staff mechanisms	Mental strain
	Consensus
	Work experience