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A Qualitative Synthesis Exploring the Potential Role for Mental Health Occupational Therapists Working with Patients in Seclusion

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ABSTRACT

Despite guidance to minimize restrictive practice within the UK, seclusion and long-term segregation are necessary to maintain the safety of patients and clinicians. There is little evidence to guide the work of occupational therapists with secluded patients. A literature search identified seven papers that met the study inclusion criteria. A deductive approach to thematic analysis was conducted using the 'Model of Human Occupation' as a theoretical framework to identify issues related to occupational need during a period of seclusion. Findings indicate ways in which occupational therapists could engage with patients in seclusion and suggest a need for future research.

Introduction

Seclusion and long-term segregation in mental health

In the United Kingdom (UK), patients who have been detained under the Mental Health Act (1983) are cared for in mental health hospitals or secure settings. Sometimes, patients become increasingly unwell in the ward environment and their behavior poses a risk to themselves or others. If de-escalation is unsuccessful, as a last resort, patients may be secluded to maintain safety (Bowers et al., 2017). Seclusion and long-term segregation in mental health units are both defined as a form of restraint or force (Mental Health Units Use of Force Act, 2018) used when behavioral disturbance in patients poses significant risk of harm to the patient or others. The Mental Health Act (1983) Code of Practice (2015) outlines the variances in the use of restraint. Seclusion is designed to manage risk in the short term, with the patient being isolated from other patients and staff members, often in a specialist seclusion room or suite. Although there is no time limit on

seclusion, UK legislation and policy state that it should be used for the shortest possible duration (Social Care, Local Government and Care Partnership Directorate, 2014). In the UK guidelines suggest that patients should be continuously observed, with regular nurse and medical reviews and a multi-disciplinary team (MDT) meeting after eight hours, followed by subsequent daily MDT meetings to assess the patient's wellbeing and potential to reintegrate into the ward (Southern Health NHS Foundation Trust, 2019). Long-term segregation is utilized when periods of seclusion have not been successful in reducing the risk to self and others and the potential for harm remains too high to reintegrate the patient into the ward environment. When a patient is cared for in long-term segregation, the environment should be comfortable and personalized, rather than the clinical environment of a seclusion suite (Care Quality Commission, 2015). While in long-term segregation, the patient should be encouraged to participate in meaningful therapeutic activities and to continue to develop and engage in therapeutic relationships with staff (Mental Health Act 1983 Code of Practice, 2015). These therapeutic relationships may be seen as protective factors and time spent working with a patient while in seclusion or segregation can be used to build trust and rapport, potentially reducing the need for seclusion in the future (Chieze et al., 2019).

Legislation and policy

Although the Care Quality Commission (CQC) in the UK set out guidelines for seclusion facilities in order to maintain safety (CQC, 2015), the published interim report on seclusion and segregation of people with mental health problems, learning disabilities and autism (CQC 2019) found many seclusion areas were not fit for purpose. Furthermore, there were not sufficient staff members with adequate training to provide the specialist care, resulting in a negative impact on patients. Specialist occupational therapy (OT) services working within the sector could be part of the multi-disciplinary team, delivering this specialist care and training less qualified members of staff.

In the United Kingdom, there are currently no National Institute for Health and Care Excellence (NICE) guideline for long-term segregation, however NICE Guideline 10 (NICE, 2015) outlines the short-term management of patients whilst in seclusion. Local policy, such as the Southern Health NHS Foundation Trust seclusion and long-term segregation policy (Southern Health NHS Foundation Trust, 2019) are informed by overarching government legislation, so the lack of NICE guidelines means fewer sources of information to draw from and therefore local policies are less informed. The Royal College of Occupational Therapists (RCOT) have

published guidance for Occupational Therapists (OTs) working in secure hospitals (RCOT, 2017a) illustrating the importance of identifying and addressing occupational deprivation. Patients in seclusion are at heightened risk of this and OTs are well placed to work with patients to reduce the negative effects of isolation, by supporting engagement in meaningful activity. These guidelines do not provide advice for OTs working in seclusion, however, do recognize the need for further research in this area.

Occupational therapy working with patients in seclusion

OT in a mental health inpatient setting aims to promote engagement in meaningful activity whilst undertaking assessment of functional skills to better understand the impact of the patient's mental illness; using this understanding to provide patient centered care (RCOT, 2017b). The Mental Health Act (1983) Code of Practice (2015) states that during periods of seclusion or long-term segregation patients should be supported to engage with activities that hold meaning, suggesting OTs are well placed to offer interventions that meet patient's occupational needs. Despite this, there is a lack of evidence to support occupational therapists in their clinical practice, highlighting the importance of further research in this area to illustrate the benefits of OT to employers (Fitzgerald, 2016).

Maintaining an occupational focus could address potential occupational deprivation experienced in long-term segregation (Whiteford et al., 2020), with patients unable to access the range of activity usually available to them. Continued participation in meaningful activity facilitates the maintenance and development of skills and motivation, increasing potential to reintegrate into the ward environment and progress to eventual discharge (Whiteford et al., 2020). OTs in mental health inpatient services often receive training in sensory processing that can be adapted for therapeutic use in seclusion (Dunn, 2007). The use of sensory strategies such as education around triggers and coping strategies, individual sensory kits, and modification of the environment may prevent prolonged or further episodes of segregation or make the period of segregation more therapeutic for the patient (Andersen et al., 2017). The range of skills OTs are equipped with in understanding patients' occupational needs and facilitating engagement make them a valuable part of the multi-disciplinary team and have potential to improve outcomes for service users (Evatt et al., 2016).

Aims and objectives

The Mental Health Act Code of Practice (2015) outlines an expectation for care providers to reduce the use of seclusion and restraint. As a result,

there is a growing body of quantitative research that aims to understand seclusion duration and how external factors may affect this (Cullen et al., 2018), however, quantitative research does not recognize the human experience of seclusion. Qualitative research in this area aims to understand the views and experiences of service users, staff and carers who have lived experience of seclusion. Highlighting the patient voice, can aid healthcare providers in improving service delivery by gaining insight into the personal experiences, views, and opinions of people with lived experience of receiving mental health care. At the time of writing, there was little qualitative literature examining the experience of seclusion, and no qualitative syntheses could be found. Therefore, this review aimed to identify and synthesize qualitative studies that examined the patient, staff or carer experience of seclusion or long-term segregation.

In order to provide an occupational therapy lens through which to view the data within the articles, a deductive approach was taken, using the concepts within MOHO (Kielhofner, 2002) as outlined in Figure 1.

The literature review question developed from these aims was: Can the experiences of patients, staff and carers inform the potential role for occupational therapy in seclusion and long-term segregation?

Materials and methods

This literature review aims to synthesize existing qualitative literature and analyze the qualitative findings to inform future OT practice. A qualitative research synthesis (QRS) was adopted for this review, and a three-phase results process implemented (Savin-Baden & Major, 2010):
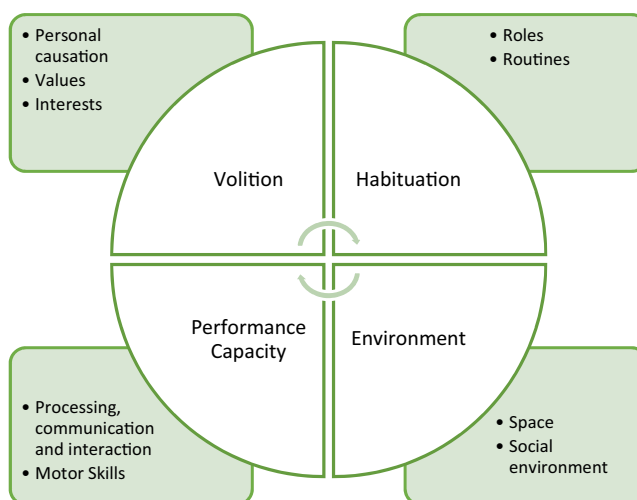
Figure 1. Illustrating Kielhofner's (2002) model of human Occupation.

1. Data analysis: developing themes across individual studies selected for review.
2. Data synthesis: unifying themes from the individual studies into over-arching themes.
3. Data interpretation: interpreting themes and drawing conclusions.

Database selection

To ensure the search was robust and identified as many appropriate articles as possible, searches were made on the following databases which encapsulate the majority of OT and psychiatric care journals: Delphis, MEDLINE, CINAHL, PsycInfo, and AMED. To ensure relevant OT articles were included, searches were also performed on the British Journal of Occupational Therapy, Canadian Journal of Occupational Therapy, Australian Journal of Occupational Therapy, and The American Occupational Therapy Journal websites, in line with the search strategy.

A hand search of reference lists was performed and screened using the inclusion and exclusion criteria to determine suitability. Grey literature databases were not searched due to time constraints as illustrated in Table 1.

Search strategy

Search terms were developed using the SPIDER tool (Cooke et al., 2012), illustrated in Appendix A. A thesaurus was used to identify potential search term synonyms, and key terms in relevant papers were reviewed to include subject specific terminology. The key terms used were 'seclusion' (or long-term segregation, psychiatric intensive care, PICU), 'inpatient' (or detained, hospital, mental health unit/hospital), 'occupational therapy' (or meaningful activity) and 'mental health' (or mental/psychiatric illness, mental/psychiatric disorder). After articles were selected, abstracts were screened against the inclusion and exclusion criteria. Those that were included were full text screened, refer to Appendix B for excluded articles.

Screening process

To ensure transparency and to clearly illustrate the screening process (Liberati et al., 2009), a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram was used (Moher et al., 2009), illustrated in in Figure 2.

Table 2 illustrates the studies selected for inclusion in this synthesis.

Table 1. Search inclusion and exclusion criteria and justifications.

Include	Exclude	Justification
Service users with personal experience of seclusion. or long-term segregation.	Alternate settings where service users may be secluded, such as prisons or detention centers.	Seclusion may be experienced differently and for reasons other than mental illness.
Service users aged 13 and over.	Service users under 13.	Secure mental health services provide care from adolescent onwards. All research examining qualitative data from forensic and non-specialist mental health inpatient hospitals will be included.
Mental health hospital and secure/forensic settings.	Specialist settings such as dementia care or neurological mental health.	Seclusion may be experienced and researched differently in these settings, this review intends to focus on the experience of seclusion by mental health inpatients, clinicians and carers. Extending the inclusion criteria to include additional settings is beyond the remit of this synthesis.
Clinicians with direct experience of caring for or working with patients while in seclusion.	Clinicians experience that does not reflect on the experience of seclusion.	In order to expand and triangulate the results, qualitative data from clinicians with experience of working with patients in seclusion will be included.
Carers of service users who have cared for people experiencing seclusion	Carers of service users that have not been secluded.	The sensitive nature of the research topic may mean that service users are too unwell to ethically participate. Therefore, carers views will be included.
Papers published between 2007 and 2020	Sources published prior to 2007	Due to the lack of contemporary research in this area, as suggested in the pilot search, the publication date was extended to 2007. This is in line with the year of the most recent update to the Mental Health Act (2007), despite this it was necessary to further widen the search to incorporate research from other nationalities due to lack of UK based research.
Peer reviewed qualitative research papers	Reports, grey literature, unpublished research	Due to time constraints and this review being completed by one researcher, only peer reviewed, published research was considered. The peer review process ensured the quality of papers selected.
Qualitative primary research	Quantitative research, existing literature reviews	Primary research was selected to avoid repetition and ensure originality. Qualitative research will examine patient experience of seclusion and is best suited to answering the research question.
Research from journals based in: U.K, Europe, The USA, Australia and Canada	Journals from other geographical locations	Due to lack of UK based research, the inclusion criteria were expanded to include countries listed by the British Journal of

(*continued*)

Table 1. Continued.

Include	Exclude	Justification
		Occupational Therapy as associated journal countries of publication (RCOT, 2021) Additionally, European articles will be considered due to similar healthcare viewpoints between Europe and the UK.
Published in English language	Publications not in English language	Financial and time constraints preventing translation.
Patient, carer and staff views and experiences of seclusion and segregation that could have implications for occupational therapy practice. Current occupational therapy interventions for patients in seclusion/segregation..	Qualitative data that does not have implications for occupational therapy practice.	Ensures data answers research question.
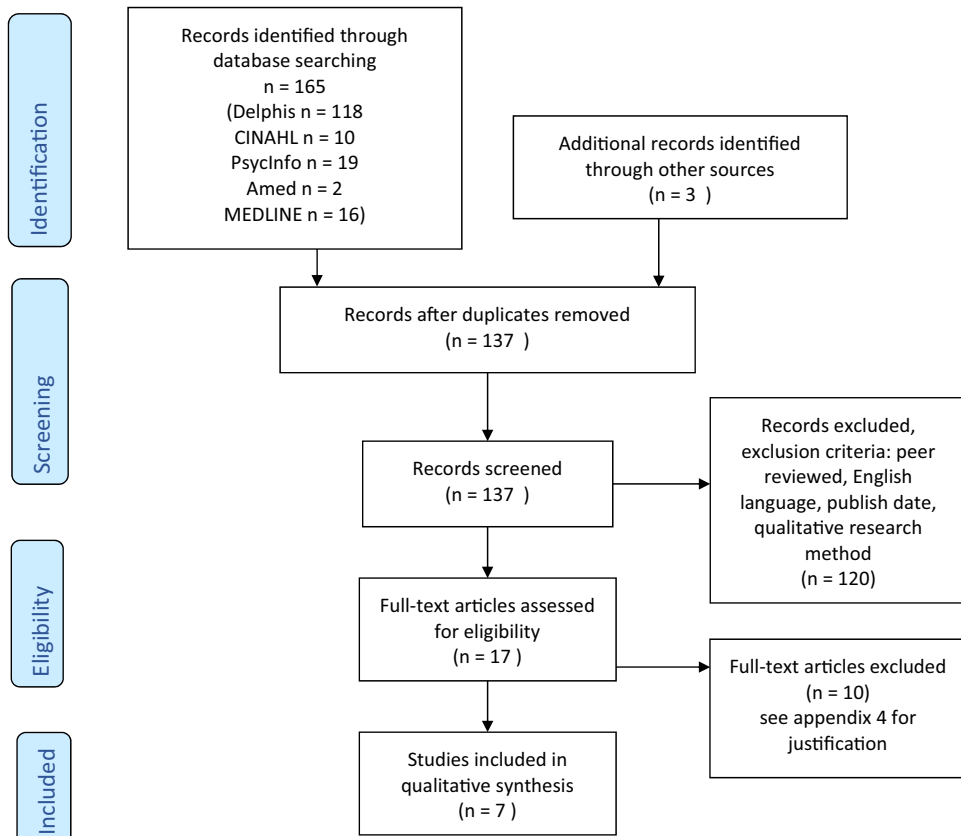
Figure 2. PRISMA (2009) Diagram illustrating the screening process.

Table 2. Overview of papers selected for synthesis.

Paper	Author and Year	Title	Aim	Design	Context	Sampling	Participant information	Data collection	Analysis Method	CASP Score
1	Brophy et al. (2016)	Consumers and Carer perspectives on poor practice and the use of seclusion and restraint in mental health settings: results from Australian focus groups. Theming approach.	Expand literature base looking at seclusion in multiple jurisdictions.	Focus groups	Five focus groups conducted in Australian cities: Brisbane, Perth, Shepparton, Sydney and Melbourne	Convenience sample	Group one, family members of secluded patients – 29 female and 7 male participantsGroup two, patients with experience of seclusion – 13 males and 17 femalesAge 20 – 70+	Researchers: mental health practitioner alongside research lead and team.Recordings and transcription.	General inductive	18
2	Konito et al. (2012)	Seclusion and Restraint in Psychiatry: Patients' Experiences and Practical Suggestions on How to Improve Practices and Use Alternatives	Gain insight into patients' experiences and ideas for seclusion practice improvement. To aid consideration of alternatives to seclusion. Inform education and training providers.	Descriptive qualitative approach. Open ended focused interview questions.	Interviews conducted in two psychiatric hospitals in Finland	Purposive sample	30 patients aged 20-64 that met the inclusion criteria and gave consent.Mixture of male and female participants.	Researchers: professional researchers with background in nursing.Interviews Transcribed verbatim	Inductive content analysis	24
3	Holmes et al. (2015)	Experiencing Seclusion in a Forensic Psychiatric Setting: A Phenomenol-ogical Study	Understand the experience of seclusion. Inform nursing staff of the impact of seclusion.	Modified Interpretative Phenomenol- ogical Analysis (IPA) Semi-structured interviews	Interviews conducted in one Canadian psychiatric Inpatient facility	Purposive sample	13 participants made up of patients with experience of seclusion and nurses working in the singular psychiatric facility. Gender split not discussed.	Separate researchers for patients and nurses interviews.Interviews digitally recorded.	Content analysis principles used to code and theme data.	20
4	Askew et al. (2020)	Being in a Seclusion Room: The Forensic Psychiatric Inpatients' Perspective	Better understand the lived experience of seclusion. Expand the knowledge base around patients' psychological needs during seclusion.	Interpretative Phenomenol-ogical Analysis (IPA)	Interviews conducted in one English medium secure forensic hospital across three wards. Interviews conducted on the wards in a private room.	Combination of convenience and purposive sampling	7 patients with experience of seclusion who met the inclusion criteria and gave consent.	All interviews conducted by lead researcher. Interviews recorded and transcribed.	Systematic analysis following analysis guidelines. Second researcher reviewed coding and themes prior to publication	17

Table 2. Continued.

Paper	Author and Year	Title	Aim	Design	Context	Sampling	Participant information	Data collection	Analysis Method	CASP Score
5	Allikmets et al. (2020)	Seclusion: A Patient Perspective	Appraise the use of seclusion from the patients' perspective.	Questionnaire to assist structured face to face interview	Interviews conducted in one English hospital with a psychiatric intensive care unit	Purposive sampling	14 male patients with experience of seclusion aged 18–65 that met inclusion criteria and gave consent	Pilot questionnaire followed by questionnaire including open and closed questions	Systematic coding, analysis and theming following a framework.	19
6	Holmes et al. (2004)	The mentally ill and social exclusion: a critical examination of the use of seclusion from the patient's perspective	Using patient experience to adapt and challenge current nursing care.	Heideggerian phenomeno-logical research framework	One Eastern Canadian psychiatric unit	Purposive sampling	6 patients, male and female with experience of seclusion that met the inclusion criteria	Non-directive interviews with two open ended questions and subsequent secondary questions	Coding, theming and categorizing following a framework	23
7	Ezeobele et al. (2014)	Patients' lived seclusion experience in acute adult psychiatric hospital in the United States: a qualitative study	To explore and describe the patients' lived seclusion experience	Qualitative phenomeno-logical design	One large (250 bed) acute psychiatric hospital in South-western USA	Purposive sampling	20 patients, male and female, aged 19–53 with experience of seclusion that met the inclusion criteria.	Advanced psychiatric nurses conducted semi-structured interviews with open ended questions.	Coding, theming and categorizing following a framework.	23

Table 3. CASP scores of papers selected for synthesis.

Author and Paper number	Research Design	Recruitment Strategy	Data Collection	Researcher Relationship/ Bias	Ethical Issues	Data Analysis	Statement of Findings	Research Value	Score
Brophy et al. (2016)	3	3	2	2	1	2	3	2	18
Konito et al. (2012)	3	3	3	3	3	3	3	3	24
Holmes et al. (2015)	3	3	3	2	3	2	3	1	20
Askew et al. (2020)	3	3	3	1	2	1	2	1	17
Allikmets et al. (2020)	3	3	2	1	1	3	3	3	19
Holmes et al. (2004)	3	3	3	3	2	3	3	3	23
Ezeobele et al. (2014)	3	3	3	2	3	3	3	3	23

Study characteristics

Seven papers met the inclusion criteria, with the study characteristics outlined in Table 2. Further information regarding the strengths and limitations of the research papers is outlined in Appendix C.

Although the search strategy aimed to include research that incorporated data from nurses, patients and carers, the majority of papers collated only patient data. Brophy et al. (2016) obtained qualitative data from the perspective of patients and carers, while Holmes et al. (2015) examined data from both patients and nursing staff. As a result, there was insufficient clinician or carer data to include in the synthesis, so only the patient data from these research papers will be included.

None of the selected papers examined long-term segregation. The data extracted from the articles, therefore, will only include qualitative data examining patient experience of seclusion.

Critical appraisal process

All articles that met the requirements were appraised using the Critical Appraisal Skills Programme (CASP) (Critical Appraisal Skills Programme, 2018) for qualitative research, in order to assess their quality and suitability for inclusion in the synthesis, as outlined in Table 3. Seven studies met the first two criteria on the CASP (2018) checklist. In line with existing qualitative syntheses (Stomski & Morrison, 2017), the remaining eight CASP (2018) questions were scored as follows: three points where there is data to comprehensively answer the question; two points when the issue had been somewhat addressed but not comprehensively; one point when it was unclear whether the issue had been addressed or there were no details to answer the question. The studies could achieve a maximum score of 24, and all studies scored 17 and above. No studies were excluded from this review as a result of their CASP score, however if any had scored less than average (16), they would have been excluded. The critical appraisal process did not highlight any ethical issues within the studies, despite selecting studies from a variety of countries, all studies had obtained the required ethical approval. CASP scores are illustrated in Table 3.

Thematic analysis and data synthesis

As the search strategy allowed for the inclusion of research from disciplines other than OT, an OT model was selected in order to provide an occupational lens when analyzing the research. This ensured data gathered was relevant to the research question.

Several models were considered, however as OT models are designed to be applied to individuals, some were unsuitable to be applied to research. The Person-Environment-Occupation-Performance model (Baum et al., 2015) was considered but when applied to a research paper in a trial, was not as efficient at extracting data as the Model of Human Occupation (MOHO) (Kielhofner, 2002). MOHO is also suggested to be the most used and evidence-based model of OT practice (Lee et al., 2012), furthermore, RCOT recommend MOHO for use in secure mental health services (RCOT, 2017a). Consequently, MOHO (Kielhofner, 2002) was selected to provide the framework.

The data extraction and thematic analysis process began with a single researcher reading and re-reading the articles to familiarize themselves with the data (Clarke & Braun, 2013). Stage one involved categorizing any relevant data into the four main concepts within MOHO (Kielhofner, 2002); volition, habituation, performance capacity and environment. Stage two involved following thematic analysis (Clarke & Braun, 2013) processes and line by line coding the data within each of these concepts. The third stage involved grouping the codes and developing key themes within each concept. Appendix D outlines the sub theme refining process. To ensure a rigorous process was carried out, the data trail and emerging themes were reviewed and verified within the multidisciplinary research team.

Findings

Quotes will be used from the original studies in support of the synthesis, in this section, the studies have been referred to by numbers, as illustrated in the overview of papers in Table 2.

Volition

The need for human connection

Desire to have increased or improved human contact while in seclusion was expressed in all seven of the research papers and as such, was the most common theme across all four concepts. This highlights the meaning patients place on human contact. Patients across the studies found the experience of solitude difficult, with participants commenting: "I only

wanted the real presence of a human being, with nurses and physicians, more communication, human touch …" (2). Other participants found this need for human connection negatively impacted their mental health: "I wanted to get out of there because I was depressed to be alone, to be locked up. I was depressed from being alone, without people" (6).

Freedom of choice

Frustration around the removal of freedom of choice was a theme in four of the papers selected for review (1–3 and 7). Risk management in seclusion practice means that often, patients' ability to make small decisions is impacted. This participant highlighted the lack of control they felt: "I don't like being in the cell thing, because you're not allowed snacks and stuff" (3) another patient in this study also commented: "I didn't get much to eat, and that I didn't like" (3). Patients in other studies felt the practice of seclusion was used to enforce rule following: "Seclusion and restraint is about compliance" (1) which was also echoed by a patient in study two: "it was like shock treatment, punishment and deprivation of liberty, nothing good in it."

Meaningful activity

Boredom and a lack of meaningful activity was identified as an issue in four papers (1–3, and 5). Some patients recognized the need for risk assessment and understood supervision would be needed for risk items while highlighting the importance of meaningful activity in reducing boredom and the negative impact of seclusion on their mental health: "If in supervised confinement, you should be allowed newspapers/books or a bible. It's boring, you end up going mad." (Study 5). Boredom was mentioned again in study two:" I did not have anything to do in the seclusion/restraint room, it was a long time, boring, distressing …" this view harmonizes with a patient from paper three who used the terms "boring" and "demoralising" to describe their experience of seclusion.

Patients in study two provided insight into the activities that held meaning for them that they felt would reduce their seclusion rate: "I need physical activities when I am restless, a boxing sack on the ward, going out cycling or walking, something sensible to do …". When patients are secluded, they are often deemed to be at risk of causing harm to themself, or others. In order to minimize this risk, patients are not always offered meaningful activity whilst in seclusion, as a participant in study three stated: "we all have programs in this building, we're all doing things, so they're really taking away from what we're doing… we miss all the programs, we miss our job, we miss outings".

Habituation

Routine

Being secluded removes the option for patients to engage in their regular routine. Participants in four papers (1–3, and 5) identified having no control over their routine, or their routine being disrupted as a negative aspect of seclusion. A participant in paper one used the term "learned helplessness" in describing the effect of seclusion on their ability to maintain their usual routine.

Role loss

Removing a patient from the ward environment limits the maintenance and development of roles that form an important part of their self-identity, impacting on both their roles within the hospital and their ability to make contact and preserve their roles in their regular home environment. Loss of role was explored in four of the papers (3, 5, 6 and 7). Patients in three papers (5, 6 and 7), reported lack of contact with their families as being a negative aspect of seclusion, and the restrictions placed on their role as a family member or friend was expressed as a contributing factor to the patient's unhappiness: "my sister doesn't come, my brothers don't come … and I have no one. I don't even have friends that come … and I have no one, I don't even have friends that come. I have nobody … I feel sadder the others don't come … I wonder why they [the staff] don't come".

The meaning found in ward-based roles, such as through vocational rehabilitation was addressed by a patient in paper three who when discussing their experience of seclusion stated: "we miss our job".

Performance capacity

Seclusion is necessary

Despite patients finding seclusion a difficult and sometimes traumatic experience, there was an awareness among participants in two papers (2 and 3) of the need for seclusion in order to minimize risk to self or others. In this sub theme some patients spoke positively of seclusion: "I think it can be a great tool for people, it keeps people safe"; "When you have patients that don't want to follow the rules or people that have negative symptoms … it's pretty much a necessity" (3). "They told me how aggressive and unpredictable I was before seclusion. I understood that this was the only alternative and a part of my treatment … " (2)

Feeling human

Four papers identified how the experience of seclusion impacts on how patients feel about themselves as human beings (papers 1, 2, 3, and 5). Patients in three studies (1, 3 and 5) reported feeling dehumanized by the seclusion experience: "Angry and animalistic … cage, cold … felt treated like an animal" (5); "Nothing is important about seclusion rooms. It's just wrong. They treat people like animals. It's just like keeping a dog in a cage" (3); "you literally just get dehumanized and its sort of that once you have become part of that system you do become almost, well not completely, but treated in a sub-human way. You can do things that you would not normally do. If you had a cancer patient in that same situation the furor would be terrible with the treatment, they receive" (1). A participant in paper two spoke of compassionate treatment holding equal value to regular ward treatment, while in seclusion: "I hope that I am a human being in a psychiatric hospital and in the seclusion room too. I want polite, humane treatment from the staff … "

The environment

Access to activities of daily living

In addition to restricting patients' freedom of choice, in some cases the procedure of seclusion and the design of the seclusion room restrict the access to activities of daily living (ADL's), such as washing, dressing, eating and drinking. Several of the papers included in this review suggest the seclusion room did not include free access to a bathroom, preventing patients from meeting basic human needs such as using the toilet. Six out of the seven papers included in the review discussed the restriction of access to ADL's. with three papers (2, 3 and 6) highlighting the restrictions around bathroom access. A participant in paper two used language that emphasized the infantilisation and humiliation of the seclusion experience: "They washed my hair once a week and I didn't have a chance to brush my teeth. I was thirsty and peed into the floor drain". This feeling of neglect was echoed by a participant in study six: "Sometimes you're hungry, they don't open the door, you want to go to the bathroom, they [staff] don't open the door".

Therapeutic environment

Some patients recognized that seclusion offers a safe space which enables risk reduction and time away from the ward environment can be beneficial. Participants in five of the papers discussed the therapeutic benefit of seclusion and in two studies, participants acknowledged the potential to use sensory strategies to improve the experience. A participant in paper two made

suggestions for sensory improvements: "beautiful colors on the walls and ceiling, cosy room with peaceful music, soft chairs". A participant in paper five had further sensory suggestions: "buttons on the wall you can press, and it plays sounds, sensory sounds, like thunder and classical music".

Discussion

The aim of this literature review is to understand the experiences of seclusion from the perspectives of patients, staff, and carers so that they can inform the role of occupational therapy in this unique environment. There was very little staff (one paper) and carer (one paper) data, so this was not incorporated into the themes. However, all seven of the reviewed papers included the patient's perspective which enabled the development of themes relating to their experiences. Qualitative data which develops an understanding of the patient experience can help clinicians and policy makers to provide improved patient centered care (Crowe et al., 2015).

The most common subtheme was 'the need for human connection'. Patients spoke of their desire for continued therapeutic relationships during their period of seclusion, and their subsequent distress when this did not happen. Research has suggested that working with patients whilst in seclusion can build trust and rapport, potentially reducing the need for future seclusion (Chieze et al., 2019). Lack of continued contact between the patient and their trusted clinicians, including the OT, could result in re-traumatisation and feelings of abandonment, delaying recovery and damaging the therapeutic relationship (Muskett, 2014). Without continued input from a patient's regular clinician during seclusion, restorative work would be required to rebuild trust. Recent literature by Sherwood (2021) has highlighted how in the past, occupational therapy has paused while a person is in seclusion, but that in current practice, OTs in the UK are increasingly continuing their work during periods of patient seclusion, which is vital to preventing occupational deprivation and facilitating recovery. The Mental Health Act (1983) Code of Practice (2015) also recognizes the need for therapeutic relationships with staff to be maintained. Therefore, it is essential that OTs understand the importance of maintaining the therapeutic relationship with the patient by continuing to provide therapy sessions in seclusion.

It is unsurprising that he next two most discussed subthemes (therapeutic environment and access to ADL) relate to the environment as it is accepted that seclusion areas by design are very restrictive and often not fit for purpose (CQC, 2015). Several patients felt they benefited from the low stimulus environment of the seclusion room, although across the papers positive patient experience was minimal. More patients reported finding

the seclusion environment oppressive and felt that it negatively impacted their mental health and recovery. Recommendations were made for the improvement of the seclusion experience by participants who suggested making the décor and fittings more therapeutic. This aligns with research by Meehan et al. (2000) where participants felt a therapeutic environment would reduce feelings of distress when secluded.

This type of environment where patients cannot access their usual activities, such as the self-care activities described in the reviewed papers, can lead to occupational deprivation. However, it has been recognized that engaging patients in occupations can reduce the potential for occupational deprivation (Whiteford et al., 2020). OTs have the skills and knowledge to provide appropriate occupations and support the engagement of the patient. They also understand how the environment in which a person lives affects occupational performance (Kielhofner, 2002), and should advocate for patients to have a therapeutic environment in which to be secluded. This could include risk assessed artwork or interactive media panels, which allows the patient some control over their environment (National Association of Psychiatric Intensive Care Units, 2017).

Patients also discussed the need for sensory strategies to improve the seclusion environment. Andersen et al. (2017) support this view reporting that strategies such as education for staff around sensory triggers, modification of the environment and the use of individual sensory kits can make the experience more therapeutic and reduce the length of seclusion. Patients with mental health conditions are more likely to have sensory processing dysfunction (Javitt & Freedman, 2015) and OTs working within these services are often the only discipline trained in sensory processing (Dunn, 2007). OTs can provide guidance to the multi-disciplinary team around incorporating sensory strategies into practice (Cromwell, 2013). A study by Wright et al. (2020) highlighted the important role OTs play in delivering training to the wider team and promoting sensory strategies to clinicians from other disciplines. Andersen et al. (2017) found the use of restraint was reduced by 40% after staff received training in utilizing sensory modulation strategies, this is supported by Yakov et al. (2018) who found a 72% reduction in restraint after analysis of patients' sensory needs and subsequent implementation of sensory strategies. In this study no literature was found around the use of sensory modulation during a period of seclusion, however, having awareness of patients' sensory needs while in seclusion could allow OTs to use patients' sensory profiles or diets to help patients co-regulate.

Four of the subthemes, 'freedom of choice', 'meaningful activity', 'role less' and 'routine' are closely related. Patients discussed the removal of choice within their day-to-day life, the loss of their daily routine, roles and

subsequent lack of any meaningful activities often leading to feelings of boredom. Continued participation in meaningful activity facilitates the maintenance and development of skills and motivation, increasing potential to reintegrate into the ward environment and progress to eventual discharge (Whiteford et al., 2020). Furthermore, the Mental Health Act (1983) Code of Practice (2015) states that during periods of seclusion patients should be supported to engage with activities that hold meaning, suggesting a clear role for occupational therapy.

It is also acknowledged that one of the aims for OTs working in mental health settings is to promote engagement in meaningful activities whilst undertaking functional assessments (RCOT, 2017b). OTs are well placed to address the occupational deprivation that comes with being secluded (Kearns Murphy & Shiel, 2019). OT's core values include enabling patients to participate in occupations that are meaningful to them, and fulfill their occupational potential, while providing patient centered care (RCOT, 2017b).

Patients in the reviewed studies identified the restrictions around freedom of choice and meaningful activity as elements of seclusion that they felt negatively impacted them. Dike et al. (2021) found that using Wellness Recovery Action Plans (WRAP) (Copeland, 1997) significantly reduced the amount of time patients spent in seclusion. OTs could play an integral role in care planning when a patient is stable by assisting patients to write a WRAP, which could include the patient's wishes on which occupations they would like to engage in if they are secluded (Gardner et al., 2012), including meaningful OT interventions and sensory strategies that had been shown to regulate the patient.

The remaining two themes have conflicting views. There was a positive acknowledgement in two papers that 'seclusion is necessary' for the safety of staff and patients but in contrast to this, there was a negative view in four papers that seclusion leads to 'feeling inhuman' with patients describing their feelings of being treated like animals. It is widely accepted that seclusion is necessary in mental health units to manage risk (Holmes et al., 2015), however, the patient experience should be considered, and adaptations made where possible to increase the therapeutic benefit and make seclusion more recovery orientated. Traditional risk assessment can restrict recovery and therefore positive risk taking is acknowledged as a significant element of mental health care (Boardman & Roberts, 2014). The RCOT emphasizes the importance of positive risk taking and highlights it as an essential element of effective OT practice (RCOT, 2018). Combining positive risk taking with the knowledge that OTs have regarding activity analysis and the ability to grade and adapt occupations puts them in a good position to identify meaningful occupations with patients that can be adapted so that they are safe to be

used in seclusion. Maintaining a person-centered approach in psychiatric inpatient settings has been shown to increase patient satisfaction and occupational performance (Schindler, 2010).

There is a need for further research to explore the role of OT within this specialist area. It would be beneficial to have a better understanding of the positive impact that OT has on service users in seclusion. It would also support OTs to have a deeper understanding of which interventions are the most effective.

Strengths and limitations

Due to a lack of OT research, this synthesis included interpreting research from other disciplines. A primary qualitative research design from an OT perspective could have better answered the research question but was outside the parameters of this study. Long term segregation is used to maintain safety in secure hospitals, however the literature search did not identify any research in this area, from any mental health disciplines, as a result only the seclusion element of the research question could be addressed.

Although the search strategy aimed to retrieve qualitative information from studies examining seclusion as experienced by patients, healthcare staff and carers, there was insufficient data from the healthcare staff and carer groups to include in this synthesis. The lack of triangulation resulting from this could have resulted in bias toward the patient experience, future research could examine the use of seclusion from staff perspectives to better understand their lived experience of seclusion as a therapeutic tool and necessity to reduce risk.

A strength of this review was the systematic approach taken to identify relevant research and the rigorous process used to analyze the data. Taking a qualitative synthesis approach has illustrated how there is a clear need for further research to inform the clinical practice of occupational therapists and other healthcare disciplines.

Conclusion

Despite the lack of specific literature relating to the role of occupational therapy in seclusion, through collating qualitative experiences across papers, this review has added to the understanding of the experiences of seclusion from a patient's perspective. The Model of Human Occupation (Kielhofner, 2002) has provided the occupational lens to synthesize these perspectives and aid the consideration of ways in which the role of OT can be further developed. It has highlighted how important it is for OTs to continue working with patients whilst in seclusion thus maintaining the therapeutic

relationship. OTs are skilled in using a person-centered approach which helps them to find occupations that are meaningful to patients and then facilitate their participation. Moreover, combining their unique skills in activity analysis and grading occupations with positive risk-taking enables them to adapt occupations so that they can be safely carried out in seclusion. OTs have expertise in adapting the environment and can therefore advocate for environmental changes, which may include sensory strategies which better meet the needs of the patient. OTs could also work with patients when they are stable to care plan their wishes in relation to occupational engagement should they be secluded, for example, their sensory preferences and occupations that are important to them. Overall, this illustrates the importance of taking a person-centered occupationally focussed approach in all aspects related to seclusion.

Disclosure statement

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Appendix A. SPIDER tool for development of research question

The SPIDER mnemonic has been designed to aid qualitative research question development and was selected rather than PICO due to the lack of comparator and due to the subjectivity of the outcome, in qualitative research there is sometimes no outcome and the objective is to simply gain insight. The table illustrated below demonstrates the use of SPIDER in this instance.

Table A1. llustrating development of research question using SPIDER.

SPIDER mnemonic	To be included in literature search
Sample	Service users aged 12 and over with experience of seclusion or long-term segregation in a mental health hospital OR clinicians with lived experience of working with this client group.
Phenomenon of interest	Patient experiences of seclusion and the role occupational therapists could have working with this client group.
Design	Primary qualitative research, e.g., Focus groups, phenomenological interviews
Evaluation	Not applicable
Research type	Qualitative

Appendix B. Articles excluded after full text screening

Author(s)/Year	Journal	Article	Reason for Exclusion
Wright et al. (2020)	International Journal of Mental Health Nursing	'"Why didn't you just give them PRN?": A qualitative study investigating the factors influencing implementation of sensory modulation approaches in inpatient mental health units'	Study exclusively focused on nurses' perspectives, limited generalizability to occupational therapy practice, no qualitative patient data included.
West et al. (2017)	Australian Occupational Therapy Journal	An evaluation of the use and efficacy of a sensory room within an adolescent psychiatric inpatient unit'	No qualitative results collected.
Wood et al. (2019)	Psychology & Psychotherapy: Theory, Research & Practice	'The role of psychology in a multidisciplinary psychiatric inpatient setting: Perspective from the multidisciplinary team'	Focus on MDT working, not seclusion as experienced by the service user. Little content around the literature review topic.
Sustere, and Tarpey (2019)	Journal of Forensic Psychiatry & Psychology	Least restrictive practice: its role in patient independence and recovery	Minimal qualitative information on the topic of seclusion. Does not answer the research question.
Estrella et al. (2019)	Occupational Therapy in Mental Health	Exploring the Experiences of Individuals With Serious Mental Illness in a Modified Treatment Mall: Centralized Off-Unit Programing With Extended Hours, a Mixed Methods Study	Seclusion not practiced within the service examined in the article
Wiglesworth and Farnworth (2016)	Occupational Therapy International	An Exploration of the Use of a Sensory Room in a Forensic Mental Health Setting: Staff and Patient Perspectives	Mixed methods study where the qualitative element does not include information on seclusion experience/the impact of sensory room on seclusion.
Tully et al. (2016)	CNS Spectrums: The International Journal of Neuropsychiatric Medicine	Innovation and pragmatism required to reduce seclusion practices	Quantitative data – not appropriate for literature review.
O'Connell et al. (2010)	International Journal of Forensic Mental Health	Time Use in Forensic Psychiatry: A Naturalistic Inquiry into Two Forensic Patients in Australia	Patients included in the study had not experienced seclusion.
Sutton et al. (2013)	International Journal of Mental Health Nursing	Optimizing arousal to manage aggression: A pilot study of sensory modulation	Not appropriate for literature review as the article does not include experience of seclusion. Useful for discussion around potential for OT
Goodman et al. (2020)		Barriers and facilitators to the effective de-escalation of conflict behaviors in forensic high-secure settings: a qualitative study	Data collected does not answer research question

Appendix C. Table illustrating strengths and limitations in papers selected for review

Study Number/Author/Publication Year	Strengths	Limitations
1. Brophy et al. (2016)	• Examined experience of both carers and patients meaning better triangulation. • Study took place across four Australian locations, increasing variety of participants. • Ethical approval and method guided by advisory group • Independent researcher assisted in analysis. • Results well evidenced with quotes.	• Although advisory group could have positively influenced the ethical standards, having prior patients contribute to the method could also result in bias. • Focus groups conducted in English but had wide variety of nationalities taking part – potential for language barrier. • No clear explanation of informed consent. • No plan for debrief/how to manage distressed participants. • No recommendations for future practice/research. • Little acknowledgement of limitations • Reduced generalizability outside of Australia
2. Konito et al. (2012)	• Ethical approval • Detailed information re. consent and right to withdraw. • Clear explanation of method and rationale. • Researchers had appropriate background in psychiatric care. • Clinical evaluation of participants wellbeing before interview increased ethical standards. • Data analysis performed by separate researchers to minimize risk of bias • Thorough results section well supported by quotes. • Steps to minimize bias clearly illustrated. • Implications for future research and practice well defined.	• Interviews conducted a short duration after seclusion, could be distressing for participants. • Setting was two hospitals in Finland, potentially reducing generalizability. • Only patient views taken into account, suggesting increased risk of bias.
3. Holmes et al. (2015)	• Examines experience of both patients and nurses, triangulating data and reducing bias. • Clear methodology and explanation of the different methods used for nurses and patients. • Ethical approval received. Informed consent gained and detailed. • Illustrated separate plans for nurses and patients, should a participant become distressed, showing regard for patient welfare. • Clear results section supported by quotes.	• Setting was one Canadian hospital, appearing to reduce generalizability. • Method of analysis briefly explained. • No clarification on researcher experience or whether the researchers were known to the participants. • No discussion of researcher bias. • Minimal recommendations for future research or implications for practice. • No discussion of limitations.
4. Askew et al. (2020)	• Ethical approval received. • Consideration of ethical sampling technique well evidenced. • Topic guide informed by service users, suggesting resulting topics were more patient centered.	• Small sample ($n = 7$) from one hospital, resulting in less data for analysis and reducing generalizability. • No discussion of right to withdraw or plan for managing potential distress.

Appendix C. Continued.

Study Number/Author/ Publication Year	Strengths	Limitations
	• Consideration of duration since last seclusion, 28 days means patients had time to recover before being interviewed.	• Relatively minimal data presented, unclear how themes were drawn from data. • No identification of areas for future research/practice. • No data collected from other participant groups, i.e., nurses, carers to provide balance, and as such, the discussion does not include the potential benefits of seclusion.
5. Allikmets et al. (2020)	• Clear explanation of consent process and justification of data excluded from publication. • Mental health qualified staff conducted interviews to ensure participant welfare, and bias taken into account. • Informed consent and right to withdraw explained. • Thorough discussion of bias and methods used to reduce bias. • Discussion around implications for future practice and research, both in the country of research taking place (UK) and worldwide, for both people experiencing seclusion, and healthcare staff. • Comprehensive discussion of limitations of the study.	• Ethical approval deemed not required, although similar studies have had ethical committee approval. • Participants interviewed over a period of four months, but no reference is made to potential for fluctuations in mental health impacting the research, or to regaining consent. • Small sample ($n = 10$) of male adult participants from one hospital, resulting in less data for analysis and reducing generalizability to other locations, ages and genders. • Using a structured interview format may have reduced the amount of data collected.
6. Holmes et al. (2004)	• Participants were both male and female, ensuring representation of views from both genders. • Informed consent received. • Clear, appropriate explanation of research method and data analysis.	• Setting was one Canadian psychiatric hospital and the sample was small ($n = 6$) resulting in less data for analysis and reducing generalizability to other locations. • Nursing notes and care plans for patients accessed but no discussion of consent gained for this. • No discussion of potential for researcher bias, however researchers were not involved in care of participants. • Only patient data collected, no triangulation of data via additional participant groups. • Acknowledgement of the sensitive nature of the research, but no plan for participant debrief or managing the potential for distress. • No identification of areas for future research/practice.
7. Ezeobele et al. (2014)	• Participants ($n = 20$) were both male and female, ensuring representation of views from both genders. • Informed consent received and evaluated by psychiatrists. • Ethics committee approval received, right to withdraw clearly detailed. • Discussion around how confidentiality was maintained.	• Participants were from one psychiatric hospital in the USA, reducing generalizability to other nationalities. • Only patient data collected, no triangulation of data via additional participant groups.

Appendix C. Continued.

Study Number/Author/ Publication Year	Strengths	Limitations
	• Methods of bias reduction discussed, including utilizing an additional, neutral researcher. • Patient welfare considered, researchers had nursing backgrounds but were not care providers for the participants. • Clear explanation of data collection and analysis process. • Clear discussion of limitations of study. • Implications and suggestions for future practice and research clearly outlined.	

Appendix D. Theme development

Third row illustrating all themes drawn from research, fourth row illustrating finalized themes. Third row themes were either able to be incorporated into fourth row themes, or there was not enough data to complete synthesis on the topic.