



City Research Online

City St George's, University of London

Citation: Belayneh, Z., Lee, D. A., Haines, T. P., Aluh, D. O., Onu, J. U., Newton-Howes, G., Masters, K., Kohn, Y., Sin, J., Goulet, M., et al (2025). Co-Designing Case Scenarios and Survey Strategies to Examine the Classification and Reporting of Restrictive Care Practices in Adult Mental Health Inpatient Settings: Perspectives From International Stakeholders. *International Journal of Mental Health Nursing*, 34(1), e13479. doi: 10.1111/inm.13479

This is the accepted version of the paper.

This version of the publication may differ from the final published version. To cite this item please consult the publisher's version.

Permanent repository link: <https://openaccess.city.ac.uk/id/eprint/34391/>

Link to published version: <https://doi.org/10.1111/inm.13479>

Copyright and Reuse: Copyright and Moral Rights remain with the author(s) and/or copyright holders. Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge, unless otherwise indicated, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way. For full details of reuse please refer to [City Research Online policy](#).

Co-designing case scenarios and survey strategies to examine the classification and reporting of restrictive care practices in adult mental health inpatient settings: Perspectives from international stakeholders

Zelalem Belayneh^{*1&2}, Den-Ching A. Lee^{1,3&4}, Terry P. Haines^{1&4},
Deborah Oyine Aluh^{5&6}, Justus Uchenna Onu^{7&8}, Giles Newton-
Howes⁹, Kim Masters¹⁰, Yoav Kohn¹¹, Jacqueline Sin¹², Marie-Hélène
Goulet^{13&14}, Tonje Lossius Husum¹⁵, Eleni Jelastopulu¹⁶, Maria
Bakola¹⁶, Tim Opgenhaffen¹⁷, Guru S. Gowda¹⁸, Birhanie
Mekuriaw^{2&19}, Kathleen De Cuyper²⁰, Eimear Muir-Cochrane²¹, Yana
Canteloupe²², Emer Diviney²³, Vincent Staggs²⁴, Melissa Petrakis^{1&25}

¹School of Primary and Allied Health Care, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia

²Dilla University, College of Health and Medical Sciences, Department of Psychiatry, Dilla, Ethiopia

³Rehabilitation, Ageing and Independent Living (RAIL) Research Centre, Monash University, Frankston, Victoria, Australia

⁴National Centre for Healthy Ageing, Peninsula Health and Monash University, Frankston, Victoria, Australia

⁵Lisbon Institute of Global Mental Health, Comprehensive Health Research Centre (CHRC), NOVA Medical School, NOVA University of Lisbon, Lisbon, Portugal

⁶Department of Clinical Pharmacy and Pharmacy Management, University of Nigeria Nsukka, Nsukka, Nigeria

⁷Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

⁸Federal Neuropsychiatric Hospital, Enugu, Nigeria

⁹University of Otago, Wellington, New Zealand

¹⁰College of Health Professions, Department of Clinical Sciences, Division of Physician Assistant Studies, Medical University of South Carolina, Charleston, South Carolina, USA

¹¹Jerusalem Mental Health Centre, Hebrew University-Hadassah School of Medicine, Jerusalem, Israel

¹²School of Health and Psychological Sciences, City St George's, University of London, UK

¹³Faculty of Nursing, Université de Montréal, Québec, Canada

¹⁴Centre de recherche de l'Institut universitaire en santé mentale de Montréal, Québec, Canada

¹⁵Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway

¹⁶Department of Public Health, School of Medicine, University of Patras, Greece

¹⁷Faculty of Law and Criminological Sciences, Institute of Social Law, KU Leuven Vrije Universiteit Brussel, Belgium

¹⁸Department of Psychiatry, National Institute of Mental Health and Neuroscience (NIMHANS), India

¹⁹Faculty of Health, University of Technology Sydney, Australia

²⁰LUCAS-Centre for Care Research & Consultancy, KU Leuven Vrije Universiteit Brussel, Belgium

²¹College of Nursing and Health Sciences, Flinders University, Adelaide, South Australia

²²Rehabilitation Outreach Mental Health Service, Eastern Health, Naarm Melbourne, Australia

²³Self Help Addiction Resource Centre, Melbourne, Australia

²⁴International Drug Development Institute, Inc., Raleigh, NC, USA.

²⁵Mental Health Service, St Vincent's Hospital, Melbourne, Australia

***Corresponding author:** Zelalem Belayneh

Email : zelalem.muluneh@monash.edu and zelalembe45@gmail.com

Abstract

There is a global initiative to reduce restrictive care practices in mental health settings. Variations in the reported rates across regions complicate the understanding of their use and tracking trends over time. However, it remains unclear whether these discrepancies reflect real differences in the implementation of these practices or are sourced from inconsistencies in incident classification and reporting methods. This study employed a co-design approach to identify contexts influencing the classification and reporting of restrictive care practices. The research involved 29 mental health stakeholders, including 22 professional experts from 13 countries across Europe, Africa, North America, Asia, and Australasia, and seven service users and family carers from Australia. Recruitment was conducted through email invitations, snowball sampling, and social media outreach. Six web-based panel meetings, each lasting 90 to 120 minutes, were held. These discussions focused on exploring various contexts that might lead to uncertainty among professionals when classifying and reporting restrictive care practices. A final list of 23 contexts was identified and considered for the development of 81 case scenario items. Finally, all 29 panel members selected 44 case scenarios for inclusion in an upcoming international survey to examine variations in the classification and reporting of restrictive care practices. The findings from this co-design work emphasize the involvement of a wide range of factors in the classification and reporting of restrictive care practices, contributing to inconsistencies in the reported rates. The case scenarios developed in this study will support future research and serve educational purposes, illustrating real-life situations in the mental health care context.

Keywords: Co-design, engagement, inpatient, lived experience, mental health, seclusion, service user, chemical restraint, physical restraint, restrictive care practice, coercion, case scenario

1. Introduction

Restrictive care practices (RCPs) are actions that limit an individual's movement, autonomy, and ability to make independent decisions (Australian Mental Health Commission, 2019). Examples of RCPs include physical or mechanical restraint, chemical restraint, seclusion, forced medication, involuntary admission, verbal coercion, and other coercive measures (Lawrence, Bagshaw, Stubbings, & Watt, 2022). While the use of RCPs is often justified as a safety measure to manage behaviour and reduce the risk of harm, RCPs raise ethical and legal concerns due to the potential physical and psychological harms they cause (Chieze, Hurst, Kaiser, & Sentissi, 2019).

Various policy reforms and strategies have been introduced globally to reduce the use of RCPs (Bennetts, Pepin, Moylan, Carolin, & Lucas, 2024; Hext, Clark, & Xyrichis, 2018; Huckshorn, 2006). Evaluating the success of these efforts in minimizing RCPs requires comparing the frequency of such practices and monitoring their reduction over time (Hofstad, Rugkåsa, Ose, Nytingnes, & Husum, 2021). However, the variations in reported rates of RCPs across different countries hinder the ability to draw meaningful international conclusions about current practices. A recent systematic review revealed significant variations in reported rates of RCP use across different countries (physical restraint, ranging from 0.3% to 54%; seclusion, ranging from 0.2% to 56%; and chemical restraint, ranging from 1% to 58%) (Belayneh, Chavulak, Lee, Petrakis, & Haines, 2024). It has been noted that the differences in reported rates of RCP use in mental health settings cannot be fully explained by regional variations in the actual implementation of these practices. Inconsistencies in definitions and reporting methods can also contribute to the observed discrepancies (Griffith, Meyer, Maguire, Ogloff, & Daffern, 2021; Staggs, 2020). This raises the question of whether there is truly a significant difference in the implementation of these practices and if reduction strategies are more effective in some countries than others, or if the observed differences can be attributed to inconsistent definitions and reporting errors that may not accurately reflect the actual practices in clinical settings (Savage et al., 2024).

The documentation and reporting of RCPs in psychiatric settings are influenced by inconsistencies in legal definitions, practice standards, monitoring systems, regulations, and reporting mechanisms (Staggs, 2020). These inconsistencies often create ethical and legal dilemmas for professionals, leaving them to rely on subjective interpretations (Al-Maraira & Hayajneh, 2019; van Dorp, Nijhof, Mulder, & Popma, 2021). Moreover, epistemic disparities

among healthcare workers create disagreements on what constitutes RCPs and what should be documented in the hospital's reporting system (De Benedictis et al., 2011; Hofstad, Rugkåsa, Ose, Nytingnes, Kjus, et al., 2021). These reporting discrepancies could introduce biases that obscure the true prevalence of RCPs (De Monte et al., 2023; Ruud, Haugom, Pincus, & Hynnekleiv, 2021). This, in turn, hinders efforts to promote evidence-based, least restrictive, and more recovery-oriented care (De Cuyper et al., 2023).

In a study conducted by Savage et al. (2024) (Savage et al., 2024), significant variations were observed in the definitions and types of RCP techniques that were reported within national databases across nine regions. Another study highlighted challenges in collecting reliable data due to differences in the interpretation of these practices and reporting errors, revealing persistent problems in defining and accurately documenting these practices (Muluneh, Chavulak, Lee, Petrakis, & Haines, 2024). However, these studies did not deeply explore how RCP scenarios are currently classified and reported in mental health settings. Additionally, the contexts that may lead to disagreements in the classification and reporting of these actions have not been thoroughly examined. Therefore, further research is needed to understand how professionals classify and report different cases of RCPs in mental health care settings (Staggs, 2020). One potentially effective approach to accurately examine the variation in the classification and reporting of RCPs is to use case scenario descriptions that reflect common actions observed in inpatient mental health settings in different regions (Russ & Saleem, 2018) and examine how the same case scenarios could be classified and reported across different settings and countries.

Case scenarios provide detailed insights into practitioners' roles and objectives, helping readers understand the contexts and encouraging critical analysis of the situations (Paparini et al., 2020). Well-designed case scenarios can help establish valid and reliable data collection strategies (Istanboulian, Rose, Yunusova, & Dale, 2023). Designing case scenarios in mental health care requires a collaborative effort involving various stakeholders to ensure that the scenarios accurately reflect real-world situations and address the complexities of restrictive care practices. By involving professionals, their clinical expertise helps ensure the scenarios reflect practical challenges and ethical dilemmas that occur in everyday practice. Service users, on the other hand, provide invaluable insights into the lived experience of restrictive care practices, highlighting potential areas of concern that professionals may overlook (Bird et al., 2021).

2. Aims

The purpose of this study was to gather insights from individuals with service user lived experience (consumers and carers) and professional experts in the mental health sector to achieve the following objectives:

- 1) Identify the contextual factors affecting the classification and reporting of RCP use
- 2) Co-develop case scenario descriptions that reflect these contexts
- 3) Design data collection strategies and instruments for an upcoming international survey

3. Methods

3.1. Study design

This study employed a co-design approach (Bird et al., 2021; Istamboulian et al., 2023) to engage individuals with different mental health research and practice experiences in web-based panel discussions. Co-design is a collaborative process that involves stakeholders, such as researchers, clinicians, service users, families, advocacy groups, and policymakers, in the design, development, and implementation of mental health services or programs (Zamenopoulos & Alexiou, 2018). This approach was chosen to ensure that the identified contexts and case scenarios accurately reflect real-world conditions and are representative of practices across different geographical regions and culturally diverse backgrounds (Hawke, Sheikhan, Bastidas-Bilbao, & Rodak, 2024).

3.2. Participants and inclusion criteria

The participants in this study included individuals with lived experience as service users, as family members, healthcare practitioners and researchers in the mental health sector. Operational definitions of terms are provided below.

Service users: In this study, the term “service users” is used to refer to stakeholders who have received care in adult mental health inpatient settings.

Family carers: This refers to individuals who have lived experience in providing informal care/support to family members, friends, or others who have been admitted to such settings.

Mental healthcare practitioners: This refers to stakeholders who are currently employed or have previously worked as healthcare professionals in adult mental health inpatient settings.

Researchers: This involves panel members who have at least one research publication related to the use of RCPs in mental health.

These specific participant groups were selected for their unique insights drawn from their professional expertise and lived experiences in inpatient mental health services (Belayneh, Abebaw, Amare, Haile, & Abebe, 2019). This diverse representation strengthens the validity of the findings, providing a nuanced understanding of challenges in the classification and reporting of RCPs from personal, professional, and academic perspectives. Different inclusion criteria were applied for each participant group (**Table 1**).

3.3. Phases of the co-design process

This study followed a three-phase process: pre-design phase, co-design phase, and post-design phase (**Figure 1**).

In the initial phase, researchers conducted a thorough literature review to establish a foundational understanding of RCPs, identify gaps, and prepare pre-reading materials for potential participants. The next steps included securing ethics approval, engaging panel members with relevant experience, obtaining informed consent and sharing pre-reading materials.

The second phase focused on collaborative panel discussions that brought together various stakeholders, through online meetings. These discussions examined contextual factors affecting the classification and reporting of RCPs, and participants co-designed RCP case scenarios based on real-life situations in mental health settings. Additionally, data collection strategies for the upcoming international survey were developed during this phase.

The final phase, the post-design phase, aimed to test, refine and approve the case scenario descriptions and questionnaire for data collection in the upcoming international survey. Feedback from this final phase enhanced the clarity and relevance of the descriptive case scenarios and survey questions to accurately reflect the complexities of RCP incident classification and reporting globally (**Figure 1**).

3.3.1. Pre-design phase

Recruitment

This project has been approved by the Monash University Human Research Ethics Committee (MUHREC Project ID: **39641**). Initially, an international team was established by sending email invitations to researchers with at least one publication related to RCP in mental health. The team was recruited from different countries to ensure diverse representation of panel members. Purposive and snowball sampling techniques were used by team members to identify participants with clinical and/or research experience in mental health settings. For service user and family carer participants, local recruitment was carried out in Australia through a flyer advertisement on social media and professional networks. Recruiting service user participants with lived experience in receiving care in adult mental health inpatient services was challenging in this co-design study.

Participants received an explanatory statement and were requested to provide written informed consent for participation. Upon consent, participants were supplied with pre-reading materials containing draft scenario contexts that could affect the classification and reporting of RCP incidents. The pre-reading materials were developed based on the researchers' systematic review works (Belayneh et al., 2024; Muluneh et al., 2024) and guidance documents from the WHO (World Health Organization, 2019), the Council of Europe (Jones & Kingdon, 2005), the Royal Australian and New Zealand College of Psychiatrists (Galletly et al., 2016) and the American Psychiatric Association (Crone et al., 2023).

Scheduling panel meetings

A total of six online meeting sessions, each lasting approximately 1.5 to 2 hours were held. Two groups were formed: Group 1 comprised international researchers and clinicians, and Group 2 represented service users and family carers. This approach was implemented to minimize potential re-traumatization for service users due to dynamics between the two groups and to create a safe environment for them to share their viewpoints. Two sessions were established for Group 1 participants to accommodate global time zone differences. Time Zone 1 covered Africa, Europe, and Asia, while Time Zone 2 included North America and Australasia. Participants from each time zone had two rounds of meetings, resulting in a total of four meetings for Group 1. Group 2 participants attended two rounds of meetings scheduled to accommodate local service users in Australia. This resulted in a total of six meetings. There was a three-week interval between sessions to allow panel members time to review resource

documents and prepare for the next meeting. Meeting schedules, including dates and times, were provided in advance.

3.3.2. Co-design phase

In this phase, panel members engaged in online discussions using Zoom video conferencing (**Table 2**). All these meetings were video recorded with the participants' consent. Before each meeting, researchers provided a brief introduction to outline the study objectives and explain the participants' roles in the co-design process. They also briefly reviewed the topics discussed in previous meetings. Following this, panel members were encouraged to actively engage in the discussion and share their perspectives. The chief investigator facilitated the discussion by inviting panel members to freely share their perspectives on the broader contexts that could influence the classification and reporting of RCP episodes. After identifying these broader contexts, specific real-life situations within each context were further explored to thoroughly examine the factors potentially contributing to disagreements in incident classification and reporting practices. Alternative options such as emails were provided for those unable to attend the panel discussions, allowing them to share their feedback. This option was also available to attendees, allowing them to share additional perspectives via email or through the Zoom chat during the panel discussion.

The researchers assigned specific roles to each team member: a facilitator (TH) guided the discussions to ensure fair participation and adherence to the agenda, an observer (ZB) took field notes, a meeting manager (AL) oversaw online chat communications and addressed technical issues, and a social worker (MP) ensured a supportive discussion environment. After each session, a resource document summarizing the identified contexts was created. Throughout the co-design panel meetings, a social worker with extensive experience in mental health counseling and clinical practice was available to assist participants if needed. The panel discussion was divided into two rounds.

Round One

Round One represents the first three panel meetings: two for Group 1 (one in each time zone) and one for Group 2. The goal of this round of meetings was to gather diverse perspectives from members with varying levels of mental health experiences and different cultural backgrounds. During each meeting, participants were encouraged to provide feedback on draft

contexts that were provided in the pre-reading material and to suggest any additional contexts that they believed could inform the classification and reporting of RCPs. Personal encounters with RCPs were not shared during this discussion; the focus was solely on hypothetical contexts and case scenarios (**Table 2**).

Round One feedback loop: After the Round One panel discussions, researchers combined resource documents produced from each meeting and revised the preliminary set of contexts. This document was then shared with each panel member for further input and refinement. Following this, case scenario descriptions reflecting the identified contexts were created, reviewed by the panel members and further refined based on their feedback (**Table 2**).

Round Two

The second round comprised the final three meetings where panel members from the first round reconvened in their original groups to develop data collection strategies for the upcoming survey. The objective of this round of meetings was to plan for the data collection instruments and strategies. The panel discussions in this round followed the same approaches as in Round One (**Table 2**). This round addressed the following questions:

- How should we phrase the survey questions?
- How many case scenarios and contexts should we include in the survey?
- Do we need to translate the survey questions into local languages?
- What are the legal and ethical requirements for recruiting participants and collecting survey data in your regions?

Round Two feedback loop: The researchers compiled the inputs received from Round Two meetings and developed survey questions and response options based on the input from the Round Two panel discussions. These survey questions were then shared with the panel members for additional feedback, and minor modifications took place for some case scenario descriptions (**Table 2**).

3.3.3. Post-design phase

The objective of this phase was to finalize data collection strategies and instruments for the upcoming survey. We conducted pilot testing to evaluate the clarity and applicability of the survey, as well as to estimate the time required for participants to complete all survey questions. Based on feedback, panel members selected the optimal number of case scenario items for data collection. The selection process involved a brief offline survey in which panel members were invited to evaluate and rank each case scenario on a scale of high priority (3), medium priority (2), or low priority (1) based on the potential that each context could create discrepancies in the classification and reporting of RCPs. The top-ranked case scenarios were included in the survey as "core set" items (**Figure 1**).

3.4. Data management

All information received through panel discussions and via emails has been consolidated. Multiple reviews of the panel meeting recordings were conducted to ensure a thorough understanding of the selected contexts. We also cross-referenced detailed field notes taken with pen and paper with the recordings to verify accuracy and completeness. Throughout the co-design process, researchers welcomed additional information on contexts from panel members and incorporated it into the list of existing contexts.

Lastly, a refined and final set of contexts was developed. The final set of contexts was examined, prioritized, and approved by the panel members for use in case scenario preparation (**Table 3**). The Likert scale question scores for each case scenario from a brief survey were summed and compared using descriptive statistics to select the top-ranked case scenarios to be included in the survey data collection.

4. Results

4.1. Socio-demographic characteristics of participants

A total of 29 mental health stakeholders participated in the co-design process. There were 22 international professional experts (clinicians and researchers) and seven service users and family carers. The professional experts came from 13 different countries: two from Asia (India, n=1; Israel, n=1), seven from Australasia (Australia, n=4; New Zealand, n=3), three from North America (USA, n=2; Canada, n=1), seven from Europe (UK, n=1; Greece, n=2; Belgium, n=2;

Norway, n=1; Switzerland, n=1), and four from Africa (Ethiopia, n=2; Nigeria, n=2). Two of them had affiliations with institutions in multiple regions.

In terms of the panel members' mental health backgrounds, five were researchers without clinical experience, while four were clinicians with no research background. The remaining 13 members had both clinical and research experience. Among those with clinical experience, five were currently working in adult mental health inpatient settings, and eight had previous experience in these settings. Within the lived experience group, two members of the service user group had personal experience as recipients of care in these settings. Additionally, five members had experience providing informal care or support to family members, friends, or loved ones with mental health challenges in adult inpatient settings.

4.2. Contexts involving the classification and reporting of RCPs

During the panel discussion process, various perspectives on contexts that could influence the classification and reporting of RCP incidents in adult mental health inpatient settings were explored and discussed. These contextual factors were identified and summarized as follows:

1. **Organizational contexts:** Factors such as the availability of less restrictive alternatives, staffing levels, availability and comprehensiveness of reporting mechanisms, hospital guidelines, approval systems of RCPs and legal definitions,
2. **Professional-related contexts:** Factors such as healthcare professionals' intentions and desired outcomes of the action, training levels, workload, types of professions applying the action, cultural norms, and the experiences and perspectives of healthcare professionals themselves,
3. **Service user-related contexts:** Factors such as a person's behaviour (the presence or absence of violence or harm, suicidal intent or practice), severity of the mental health challenges, ability to remove or easily control the action, previous history of violence, individuals' level of competency, consumers' consent, treatment adherence, advance directives and service users' preferences or expressed wishes,
4. **Context related to the implementation of the action:** Factors include methods of restriction, severity of the action, type of an individual's ability being restricted, timing and duration of the actions, patient positioning, inflation of pain and availability of service utilities during the action episodes,

5. **Policy and Legal Contexts:** This includes national law, professional codes, reporting requirements, and legal definitions of the action,

After identifying and refining the contexts, panel members selected 23 contexts to be used for the development of case scenario descriptions (**Table 3**). These contexts were chosen based on their potential to capture the complexities involved in classifying and reporting restrictive care practices, as well as their applicability across various regions. Contexts that are well known and implemented in different regions were prioritized. This was done to facilitate valid comparisons of variations in the classification and reporting of the same care scenarios across different areas for the upcoming survey.

Development of case scenario descriptions

The selected contexts were then utilized to co-develop a total of 81 detailed case scenario descriptions reflecting the specified contexts (**Supplementary file 1**). These scenarios were paired with comparator scenarios that shared similar descriptions but included different contextual variations, illustrating how various cases within a given context could influence the classification and reporting of restrictive care practice incidents. For instance, in scenarios related to risk assessment, four parallel descriptions were created for situations in which: 1) an action was implemented following a higher risk assessment indicating potential harm; 2) an action was taken after a risk assessment indicated minimal risk of harm; 3) an action was performed after a risk assessment that showed no risk of harm and 4) an action was taken without conducting a risk assessment. These comparators are intended to identify specific contexts that may influence how individuals classify and report RCP actions.

Finally, both service users and professional experts were invited to review the final set of case scenario descriptions and this journal article. This collaborative approach aimed to ensure that the perspectives and insights of different groups of participants were incorporated into the study. By including both service users and professional experts as co-authors of this publication, a more comprehensive and nuanced understanding of the contexts affecting the classification and reporting of RCPs was accurately reflected. This ultimately enhanced the credibility and relevance of the findings of this research work.

4.3. Designing data collection strategies and instruments for the upcoming survey

4.3.1. Phrasing future survey questions

The follow-up questions for each case scenario were initially structured as follows:

Do you think this scenario would be classified as an RCP? (Yes/No)

Do you think this scenario should be recorded as an RCP in the incident reporting system?
(Yes/No)

During the panel discussions, there was a debate over whether to use the terms "would" or "should" in these questions. It was decided to use both terms and add additional questions to explore both participants' perspectives and practices on whether the contexts in each case scenario should be classified and reported as RCPs. Each case scenario was followed by five questions: two focused on participants' perspectives regarding classification and reporting, two about their practices in classification and reporting, and one on how frequently they observed the scenario in adult mental health inpatient facilities. Researchers will respond to the first two questions, service users will answer the first two and the third question about their experience, and clinicians will respond to all five questions (**Supplementary file 2**).

Feedback from the panel discussions prompted a revision of the response options for the five questions mentioned above. Instead of limiting responses to "Yes" or "No," the options were expanded to four categories: "definitely yes," "probably yes," "probably no," and "definitely no." This adjustment was made to provide more nuanced choices and avoid forced decisions. The intention is to capture the level of certainty among respondents in classifying and reporting each scenario and to gain a more detailed understanding of variations in their perspectives and practices (**Supplementary file 2**).

4.3.2. Structuring the future survey completion

Four options were discussed and compared.

Option One: Every participant completes every scenario item.

Option Two: Every participant completes a smaller "core set" of items.

Option Three: Every participant completes a "core set" of items and one "additional set" selected at random.

Option Four: Every participant completes a "core set" of items and has the option to complete as many "additional sets" as they wish.

Options One and Three were considered impractical due to the potential length of the survey. As a result, Options Two and Four were examined more closely. Concerns about the challenge of addressing a wide range of contexts with a limited number of case scenarios (core set items) in Option Two led to a preference for Option Four. However, the selection of the "core set" and "additional set" of case scenarios was another issue of concern.

Based on preliminary survey results, 44 case scenario items reflecting 19 different contexts were chosen for the survey data collection (**Table 4**). The first 22 items were designated as the "core set," which all participants would complete. The remaining 22 items were classified as the "additional set," and answering these would be optional.

4.3.3. Translation, recruitment and data collection ethics

The translation, recruitment, and data collection ethics were discussed and addressed in panel discussions. Participants agreed to translate survey questions into local languages to encourage wider participation. Legal and ethical requirements for recruiting participants and collecting survey data across different regions were reviewed. The main issue was whether ethical approval from a single institution would suffice or if local Human Research Ethics Committees (HRECs) approval was necessary. Some argued against local HREC approval and suggested using social media for recruitment, while others emphasized the importance of obtaining local HREC approval and proposed additional recruitment methods, such as through health service settings.

Finally, the panel members decided to obtain ethical approval from a single institution and proceed with data collection, considering the low-risk nature of the survey. Additional local ethics approval would be obtained if required by local authorities.

5. Discussion

This study examined the complexities professionals face when classifying and reporting RCPs in adult mental health inpatient facilities. The study included perspectives from different mental health stakeholders and identified 23 critical contexts that contribute to uncertainties in classifying and reporting RCPs. These contexts include legal and policy considerations, organizational factors, and variables related to professionals and service users. The study developed 81 case scenarios to inform an international survey on how different cases of RCPs are classified across different regions.

The findings reveal that the classification and reporting of RCPs are shaped by the involvement of multiple interconnected factors, including situational, legal, environmental, and personnel-related factors (Hupé, Larue, & Contandriopoulos, 2024; Savage et al., 2024). Differences in healthcare workers' understanding of and responses to these factors can lead to disagreements on what constitutes an RCP (Muluneh et al., 2024). Individuals may only document actions

that they believe meet the criteria for RCPs, which can be influenced by their subjective interpretations and perspectives, potentially resulting in reporting errors (Hupé et al., 2024; Savage et al., 2024). This situation hinders the identification of trends and the formulation of effective care plans and policy reforms (Janssen et al., 2011). The contexts and case scenario descriptions identified in this study will provide valuable insights for advancing policy reforms and addressing training needs, facilitating a shared understanding of which practices are deemed restrictive and should be reported accordingly (Husum, Thorvarsdottir, Aasland, & Pedersen, 2020). Ultimately, this will foster consistency in clinical practice for managing these actions and support the ongoing global initiative to reduce restrictions and improve evidence-based healthcare services (Husum et al., 2020).

A key challenge in reporting RCPs is the lack of standardized definitions and the wide range of perceptions regarding mental illness in general and RCPs specifically. For example, "handholding" was a controversial topic during the panel discussion, with some considering it an RCP requiring reporting and others seeing it as a routine therapeutic intervention. These differing perceptions contribute to variations in how practices are handled across regions and within hospitals, highlighting the complexity of understanding current practices in the mental health sector (Bowers, Alexander, Simpson, Ryan, & Carr-Walker, 2004).

When comparing different perspectives, professional experts provided insights into technical and procedural aspects, such as clinical justifications, regulatory requirements, institutional protocols, legal definitions, and the comprehensiveness of reporting mechanisms. Service users, on the other hand, emphasized key factors such as consent, personal autonomy, dignity, timing, and the duration of RCP episodes as contexts that could influence an individual's intention to classify and report RCPs. The input of both groups enriched the design of the contexts, which would not have been achieved if the perspective of only one group had been considered (De Monte et al., 2023).

The participation of lived experience participants was essential to the study, actively engaging not only in panel discussions but also as co-authors throughout the research process. Their involvement spanned from the initial design phase to final manuscript revisions. During the design phase, their lived experience provided critical insights that shaped the objectives and methodologies, enhancing the relevance and applicability of the data collection methods (Veseth, Binder, Borg, & Davidson, 2017). These contributions grounded the development of case scenarios reflecting real-world situations faced by service users and their family members

(Lewis-Morton et al., 2017). This involvement enriched the study with different viewpoints and enabled the findings to be presented respectfully and meaningfully for those with firsthand mental health service experiences (Mahon, O'Neill, & Boland, 2024).

This study integrated perspectives gained from panel discussions with insights identified from a recent systematic review (Muluneh et al., 2024) to ensure that the identified contexts accurately represent current practices and real-world scenarios. While both sources identified common contexts (such as healthcare professionals' intentions and desired outcomes of the actions, methods of restriction used, severity of the restriction, conditions initiating the action, duration, frequency, and timing of episodes and consent), each contributed unique insights. The panel discussions provided additional contexts that were not identified by the systematic review (e.g. risk assessment, presence or absence of suicidal behaviour, legal attributes, staffing levels, patient positioning). Moreover, the panel discussions provided a detailed analysis of scenarios for the contexts that had already been identified in the systematic review. For instance, the panel delved into the controversies surrounding the classification and reporting of actions when they are performed by non-staff members, such as security personnel (guards or police) or family caregivers, indicating the possibility that healthcare staff could overlook and leave such actions unreported.

On the other hand, the systematic review emphasizes the importance of determining whether an action is considered restrictive based on service user consent. Discussions were held about situations where a third party, like a family member or other informal caregiver gives consent and when the individual has or does not have the competence to give consent. The review also mentioned that factors like the number of restraint points, body parts restrained, and types of devices used can influence the definition of physical restraint, which received less attention in the panel discussions. Integrating different approaches improves the rigor, relevance, and applicability of research outcomes (O'Brien et al., 2016).

6. Implications and future recommendations

The findings of this study reveal that the classification and reporting of incidents by healthcare professionals are influenced by various factors. This can lead to uncertainty about what actions should be considered RCP and documented in the incident reporting system. This lack of clarity can result in inconsistencies in clinical practice and service delivery, compromising service quality. It is important to establish standardized definitions and classification systems, as well as consistent reporting mechanisms, to facilitate objective and consistent classification of RCPs

and minimize potential errors. The improved classification and reporting practices of RCPs would enhance the effectiveness of initiatives to reduce the use of RCPs by streamlining clinical decision-making and offering clear baseline data for benchmarking (Ye et al., 2019).

Resources produced from this study can serve as a critical foundation for the development of standardized frameworks by identifying diverse local and regional contexts from an international perspective (Haines, Massey, Varghese, Fleming, & Gray, 2009). These insights will be valuable for ensuring that variations in practice, culture, and healthcare systems are considered during the standardization process, ultimately leading to more consistent and reliable classification and reporting of restrictive care practices across different settings (Larue, Dumais, Ahern, Bernheim, & Mailhot, 2009). However, research suggests that providing a definition for healthcare workers alone may not be enough to improve agreement among hospital staff on incident classification and reporting (Haines et al., 2009). Additional staff training and monitoring methods are necessary to foster this improvement. Meanwhile, the case scenarios developed in this study will support staff training by providing examples of situations in mental health inpatient settings where RCPs occur (Stephanie L Bennetts et al., 2024).

The focus of this research phase was identifying contexts and developing case scenarios of RCPs based on perspectives from different mental health stakeholders. Further research is needed to examine how these contexts and case scenarios illustrate disagreements on classification and reporting practices. Hence, this research will assist in identifying factors that generate the highest level of uncertainty among panel members, as well as inform the development of targeted policies, training programs, and guidelines for health care practitioners [29]. The case scenarios and protocols developed in this phase will also be used in a future international survey to explore variations in how stakeholders classify and report RCP incidents (Kathiresan & Patro, 2013).

Given that current data on the rates of restrictive care practice use may be affected by inconsistent definitions and reporting errors, further prospective studies are recommended on this research topic. Such data will enable reliable and valid comparisons across different regions to assess the impact of strategies to minimize RCPs and understand their region-specific implementation. To address potential discrepancies in reporting methods, researchers should consult multiple data sources on RCPs, including medical records and direct observation or interviews with patients, family members, or staff about incidents (Ambrosi et al., 2021).

7. Limitations

The first limitation of this study is that service user and family carer participants were recruited exclusively from Australia due to legal and ethical issues, rather than from an international sample. This limitation may restrict the generalizability of the findings, as the experiences and perspectives of service users may vary significantly across different cultural and healthcare contexts. Furthermore, the challenge of recruiting service users to panels discussing this complex and controversial topic could also be distressing to discuss, resulted in a participant pool that was smaller than that of professional experts. This could ultimately limit the diversity of perspectives represented by service users in the study. A similar study (Kehoe et al., 2024) also acknowledged these challenges and emphasized the need to improve service user engagement in mental health research for trustworthiness and applicable findings (Zechmeister-Koss et al., 2023). Future research could explore these aspects by broadening the recruitment of service users to include international participants (Shippee et al., 2015). Additionally, investigating strategies to improve service user engagement in research presents a promising avenue for future studies (Ezaydi, Sheldon, Kenny, Buck, & Weich, 2023).

Another limitation is that the international researcher participants were initially selected from a sampling frame derived from papers included in a previous systematic review. This method restricted the pool of potential participants, meaning that not all eligible individuals could be invited to participate in the study. Consequently, participation was limited to those who responded within the specified timeframe, potentially introducing bias based on the availability and willingness of those researchers. Future researchers are encouraged to utilize broader databases and academic networks to ensure that a more diverse and representative sample of international researchers is invited (Pinfold et al., 2019).

A third limitation is that all communication during the recruitment process was conducted solely in English, potentially excluding participants who prefer other languages. Additionally, all panel discussions were conducted entirely in English, potentially limiting diverse input and engagement and excluding perspectives from non-English-speaking participants in mental health research. Conducting panel discussions in multiple languages or providing translation services during discussions could also enhance engagement and input from diverse participants, ensuring that all participants can communicate effectively in their preferred language (Pinto da Costa, 2021).

Researchers implemented various strategies to address these limitations. Alternative options for participation, such as email communication were offered for those unable to attend the meetings. This option enabled participants to share their thoughts and ideas at their convenience, fostering a more inclusive environment. Additionally, panel members were encouraged to provide feedback during the panel discussions through Zoom chat or via email after the meetings. This approach created a space for participants who might have felt uncomfortable sharing their ideas publicly during the discussions, ensuring that their perspectives were still heard. It also allowed for the incorporation of any additional insights that may have come to mind after the meetings (Grindell, Coates, Croot, & O’Cathain, 2022). Furthermore, the researchers implemented flexible meeting schedules, allowing participants to select times that best suited their availability for panel discussions. This flexibility was crucial in accommodating the diverse time zones and personal commitments of international participants, ultimately enhancing attendance and encouraging participation from a wider array of perspectives.

The insights gathered from the panel discussions were integrated with findings from the systematic review, ensuring a comprehensive approach to capturing a broader range of perspectives. This triangulation of data sources not only strengthened the validity of the findings but also facilitated the development of more informed recommendations for practice and policy (Bans-Akutey & Tiimub, 2021).

8. Conclusions

This co-design project engaged various groups of mental health stakeholders to gather insights and identify contexts that may impact the classification and reporting of restrictive care practices in adult mental health inpatient settings. By bringing together perspectives from clinicians, researchers, and mental health service users, the project underscored the importance of collaboratively incorporating a diverse range of viewpoints. The case scenarios and insights derived from this initiative provide a robust foundation for future research endeavours to explore variations in how these scenarios might be classified and reported across different settings. However, recruiting adequate numbers of service user participants in mental health research continues to pose challenges. We recommend that future studies focus on exploring and designing strategies to enhance service user and family carer participation in mental health research, ensuring that research findings are relevant and applicable across a broader mental health care system.

9. Relevance for clinical practice

This study examined the involvement of contextual factors in the classification and reporting of RCPs. The identified contexts and co-developed scenarios will be used in future research and training sessions to illustrate the many perspectives on RCPs. This is intended to support clearer guidelines, improve staff communication, and help professionals make standardized decisions about RCPs (World Health Organization, 2019). The co-designed scenarios can highlight differences and similarities in how restrictive practices are interpreted across regions, cultures, and care settings. Ultimately, this will enhance care and safety for adult mental health service users by promoting accurate identification and application of restrictive practices (Stephanie Louise Bennetts et al., 2024; Hext et al., 2018; Huckshorn, 2006).

10. References

- Al-Maraira, O. A., & Hayajneh, F. A. (2019). Use of restraint and seclusion in psychiatric settings: A literature review. *Journal of psychosocial nursing and mental health services*, 57(4), 32-39.
- Ambrosi, E., Debiasi, M., Longhini, J., Giori, L., Saiani, L., Mezzalana, E., & Canzan, F. (2021). Variation of the occurrence of physical restraint use in the long-term care: a scoping review. *International journal of environmental research and public health*, 18(22), 11918.
- Australian Mental Health Commission. (2019). The Use Of Restrictive Practices In Approved Centres: Seclusion, Mechanical Restraint and Physical Restraint: Activities Report 2017 & 2018.
- Bans-Akutey, A., & Tiimub, B. M. (2021). Triangulation in research. *Academia Letters*, 2, 1-6.
- Belayneh, Z., Abebaw, D., Amare, T., Haile, K., & Abebe, Z. (2019). Perception regarding the causes of schizophrenia and associated factors among Feresbet district residents: a community based study. *BMC Public Health*, 19, 1-7.
- Belayneh, Z., Chavulak, J., Lee, D. C. A., Petrakis, M., & Haines, T. P. (2024). Prevalence and variability of restrictive care practice use (physical restraint, seclusion and chemical restraint) in adult mental health inpatient settings: A systematic review and meta-analysis. *Journal of Clinical Nursing*.
- Bennetts, S. L., Pepin, G., Moylan, S., Carolin, R., Forrester-Bowling, T., McLure, J., . . . Lucas, J. J. (2024). Co-designing restrictive practice elimination: A systems thinking approach with mental health service users and practitioners in rural/regional Australia. *International journal of mental health nursing*.
- Bennetts, S. L., Pepin, G., Moylan, S., Carolin, R., & Lucas, J. (2024). Elimination of restrictive practices from acute adult mental health care services: A qualitative evidence synthesis of the lived experience literature. *SSM-Mental Health*, 100305.
- Bird, M., McGillion, M., Chambers, E., Dix, J., Fajardo, C., Gilmour, M., . . . Ouellette, C. (2021). A generative co-design framework for healthcare innovation: development and application of an end-user engagement framework. *Research Involvement and Engagement*, 7, 1-12.
- Bowers, L., Alexander, J., Simpson, A., Ryan, C., & Carr-Walker, P. (2004). Cultures of psychiatry and the professional socialization process: the case of containment methods for disturbed patients. *Nurse Education Today*, 24(6), 435-442.
- Chieze, M., Hurst, S., Kaiser, S., & Sentissi, O. (2019). Effects of seclusion and restraint in adult psychiatry: a systematic review. *Frontiers in psychiatry*, 10, 446388.

- Crone, C., Fochtmann, L. J., Attia, E., Boland, R., Escobar, J., Fornari, V., . . . Manzo, L. (2023). The American Psychiatric Association practice guideline for the treatment of patients with eating disorders. *American Journal of Psychiatry*, 180(2), 167-171.
- De Benedictis, L., Dumais, A., Sieu, N., Mailhot, M.-P., Létourneau, G., Tran, M.-A. M., . . . Côté, G. (2011). Staff perceptions and organizational factors as predictors of seclusion and restraint on psychiatric wards. *Psychiatric services*, 62(5), 484-491.
- De Cuyper, K., Vanlinthout, E., Vanhoof, J., van Achterberg, T., Opgenhaffen, T., Nijs, S., . . . Van Audenhove, C. (2023). Best practice recommendations on the application of seclusion and restraint in mental health services: An evidence, human rights and consensus-based approach. *Journal of Psychiatric and Mental Health Nursing*, 30(3), 580-593.
- De Monte, V., Veitch, A., Dark, F., Meurk, C., Wyder, M., Wheeler, M., . . . Siskind, D. (2023). Measuring recovery-oriented rehabilitation language in clinical documentation to enhance recovery-oriented practice. *BJPsych open*, 9(2), e36.
- Ezaydi, N., Sheldon, E., Kenny, A., Buck, E. T., & Weich, S. (2023). Service user involvement in mental health service commissioning, development and delivery: A systematic review of service level outcomes. *Health expectations*, 26(4), 1453-1466.
- Galletly, C., Castle, D., Dark, F., Humberstone, V., Jablensky, A., Killackey, E., . . . Tran, N. (2016). Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the management of schizophrenia and related disorders. *Australian & New Zealand Journal of Psychiatry*, 50(5), 410-472.
- Griffith, J. J., Meyer, D., Maguire, T., Ogloff, J. R., & Daffern, M. (2021). A clinical decision support system to prevent aggression and reduce restrictive practices in a forensic mental health service. *Psychiatric services*, 72(8), 885-890.
- Grindell, C., Coates, E., Croot, L., & O’Cathain, A. (2022). The use of co-production, co-design and co-creation to mobilise knowledge in the management of health conditions: a systematic review. *BMC health services research*, 22(1), 877.
- Haines, T. P., Massey, B., Varghese, P., Fleming, J., & Gray, L. (2009). Inconsistency in classification and reporting of in-hospital falls. *Journal of the American Geriatrics Society*, 57(3), 517-523.
- Hawke, L. D., Sheikhan, N. Y., Bastidas-Bilbao, H., & Rodak, T. (2024). Experience-based co-design of mental health services and interventions: A scoping review. *SSM-Mental Health*, 100309.
- Hext, G., Clark, L. L., & Xyrichis, A. (2018). Reducing restrictive practice in adult services: not only an issue for mental health professionals. *British Journal of Nursing*, 27(9), 479-485.
- Hofstad, T., Rugkåsa, J., Ose, S. O., Nytingnes, O., & Husum, T. L. (2021). Measuring the level of compulsory hospitalisation in mental health care: The performance of different measures across areas and over time. *International Journal of Methods in Psychiatric Research*, 30(3), e1881.
- Hofstad, T., Rugkåsa, J., Ose, S. O., Nytingnes, O., Kjus, S. H. H., & Husum, T. L. (2021). Service characteristics and geographical variation in compulsory hospitalisation: An exploratory random effects within-between analysis of Norwegian municipalities, 2015–2018. *Frontiers in psychiatry*, 12, 737698.
- Huckshorn, K. A. (2006). Re-designing state mental health policy to prevent the use of seclusion and restraint. *Administration and Policy in Mental Health and Mental Health Services Research*, 33(4), 482-491.
- Hupé, C., Larue, C., & Contandriopoulos, D. (2024). Defining chemical restraint: A preliminary step towards measurement and quality assessment. *Aggression and violent behavior*, 101926.
- Husum, T. L., Thorvarsdottir, V., Aasland, O., & Pedersen, R. (2020). ‘It comes with the territory’-Staff experience with violation and humiliation in mental health care-A mixed method study. *International Journal of Law and Psychiatry*, 71, 101610.
- Istanboulilian, L., Rose, L., Yunusova, Y., & Dale, C. (2023). Adapting co-design methodology to a virtual environment: co-designing a communication intervention for adult patients in critical care. *Research Involvement and Engagement*, 9(1), 103.

- Janssen, W., van de Sande, R., Noorthoorn, E., Nijman, H., Bowers, L., Mulder, C., . . . Steinert, T. (2011). Methodological issues in monitoring the use of coercive measures. *International Journal of Law and Psychiatry*, 34(6), 429-438.
- Jones, R., & Kingdon, D. (2005). Council of Europe recommendation on human rights and psychiatry: a major opportunity for mental health services. *European Psychiatry*, 20(7), 461-464.
- Kathiresan, J., & Patro, B. K. (2013). Case vignette: a promising complement to clinical case presentations in teaching. *Education for health*, 26(1), 21-24.
- Kehoe, M., Whitehead, R., De Boer, K., Meyer, D., Hopkins, L., & Nedeljkovic, M. (2024). A qualitative evaluation of a co-design process involving young people at risk of suicide. *Health Expectations*, 27(1), e13986.
- Larue, C., Dumais, A., Ahern, E., Bernheim, E., & Mailhot, M. P. (2009). Factors influencing decisions on seclusion and restraint. *Journal of Psychiatric and Mental Health Nursing*, 16(5), 440-446.
- Lawrence, D., Bagshaw, R., Stubbings, D., & Watt, A. (2022). Restrictive practices in adult secure mental health services: A scoping review. *International Journal of Forensic Mental Health*, 21(1), 68-88.
- Lewis-Morton, R., Harding, S., Lloyd, A., Macleod, A., Burton, S., & James, L. (2017). Co-producing formulation within a secure setting: a co-authorship with a service user and the clinical team. *Mental Health and Social Inclusion*, 21(4), 230-239.
- Mahon, S., O'Neill, L., & Boland, R. (2024). "Whose safeguarding is it anyway?" service user engagement in safeguarding processes. *The Journal of Adult Protection*, 26(2), 72-83.
- Muluneh, Z. B., Chavulak, J., Lee, D.-C. A., Petrakis, M., & Haines, T. P. (2024). Variations in definitions used for describing restrictive care practices (seclusion and restraint) in adult mental health inpatient units: a systematic review and content analysis. *Social Psychiatry and Psychiatric Epidemiology*, 1-24.
- O'Brien, N., Heaven, B., Teal, G., Evans, E. H., Cleland, C., Moffatt, S., . . . Moynihan, P. (2016). Integrating evidence from systematic reviews, qualitative research, and expert knowledge using co-design techniques to develop a web-based intervention for people in the retirement transition. *Journal of medical Internet research*, 18(8), e210.
- Paparini, S., Green, J., Papoutsis, C., Murdoch, J., Petticrew, M., Greenhalgh, T., . . . Shaw, S. (2020). Case study research for better evaluations of complex interventions: rationale and challenges. *BMC medicine*, 18, 1-6.
- Pinfold, V., Cotney, J., Hamilton, S., Weeks, C., Corker, E., Evans-Lacko, S., . . . Thornicroft, G. (2019). Improving recruitment to healthcare research studies: clinician judgements explored for opting mental health service users out of the time to change viewpoint survey. *Journal of Mental Health*, 28(1), 42-48.
- Pinto da Costa, M. (2021). Conducting cross-cultural, multi-lingual and multi-country focus groups: guidance for researchers. *International Journal of Qualitative Methods*, 20, 16094069211049929.
- Russ, A. L., & Saleem, J. J. (2018). Ten factors to consider when developing usability scenarios and tasks for health information technology. *Journal of biomedical informatics*, 78, 123-133.
- Ruud, T., Haugom, E. W., Pincus, H. A., & Hynnekleiv, T. (2021). Measuring seclusion in psychiatric intensive care: development and measurement properties of the clinical seclusion checklist. *Frontiers in psychiatry*, 12, 768500.
- Savage, M. K., Lepping, P., Newton-Howes, G., Arnold, R., Staggs, V. S., Kisely, S., . . . Noorthoorn, E. O. (2024). Comparison of coercive practices in worldwide mental healthcare: overcoming difficulties resulting from variations in monitoring strategies. *BJPsych open*, 10(1), e26.
- Shippee, N. D., Domecq Garcés, J. P., Prutsky Lopez, G. J., Wang, Z., Elraiyah, T. A., Nabhan, M., . . . Firwana, B. (2015). Patient and service user engagement in research: a systematic review and synthesized framework. *Health expectations*, 18(5), 1151-1166.
- Staggs, V. S. (2020). Variability in psychiatric facility seclusion and restraint rates as reported on hospital compare site. *Psychiatric Services*, 71(9), 893-898.

- van Dorp, M., Nijhof, K. S., Mulder, E. A., & Popma, A. (2021). Defining seclusion: A qualitative multiphase study based on the perspectives of youth and professionals in secure residential youth care in the Netherlands. *Residential Treatment for Children & Youth*, 38(4), 404-423.
- Veseth, M., Binder, P.-E., Borg, M., & Davidson, L. (2017). Collaborating to stay open and aware: service user involvement in mental health research as an aid in reflexivity. *Nordic Psychology*, 69(4), 256-263.
- World Health Organization. (2019). Strategies to end seclusion and restraint: WHO QualityRights Specialized training: course guide.
- Ye, J., Wang, C., Xiao, A., Xia, Z., Yu, L., Lin, J., . . . Zhang, Y. (2019). Physical restraint in mental health nursing: a concept analysis. *International journal of nursing sciences*, 6(3), 343-348.
- Zamenopoulos, T., & Alexiou, K. (2018). *Co-design as collaborative research*: Bristol University/AHRC Connected Communities Programme.
- Zechmeister-Koss, I., Aufhammer, S., Bachler, H., Bauer, A., Bechter, P., Buchheim, A., . . . Fuchs, M. (2023). Practices to support co-design processes: A case-study of co-designing a program for children with parents with a mental health problem in the Austrian region of Tyrol. *International Journal of Mental Health Nursing*, 32(1), 223-235.