Safe clinical practice for patients hospitalised in mental healthcare during a suicidal crisis

by

Siv Hilde Berg

Thesis submitted in fulfilment of
the requirements for the degree of
PHILOSOPHIAE DOCTOR
(PhD)

University
of Stavanger

Faculty of Health Sciences
2020

Research environment

This thesis was undertaken to fulfil the requirements for the Ph.D. in Health and Medicine degree at the Faculty of Health Sciences, University of Stavanger, Norway. The research was funded by The Western Norway Regional Health Authority, grant number 911846. I was affiliated with Stavanger University Hospital.

This thesis is part of the work of the Centre for Resilience in Healthcare (SHARE) at the University of Stavanger. SHARE consists of researchers who apply healthcare science and safety science to study work practices in various clinical fields. This study was conducted in a clinical mental health setting using multidisciplinary perspectives from safety science.

The research team consisted of Siv Hilde Berg (SHB), consultant clinical psychologist with a background in safety science; Karina Aase (KAA) (main supervisor), a professor in patient safety at SHARE (University of Stavanger) with a background in safety science and health services research; Kristine Rørtveit (KR) (co-supervisor), PhD, clinical specialist in mental health nursing and a senior research counsellor (Stavanger University Hospital); Fredrik A. Walby (FAW) (co-supervisor), PhD, consultant clinical psychologist, suicide researcher (University of Oslo); and Marie Anbjørnsen (MA), consultant clinical psychologist.

I participated in the Resilience in Healthcare Masterclass at King's College London, SHARE seminars on "Resilience in Healthcare theory development in healthcare and research methods: Challenges and reflexivity during fieldwork" and Fonsci NetWork workshop on resilience in Paris. In addition, I participated in regular workshops on qualitative methods at Stavanger University Hospital.

The findings from the case study were presented at Resilient Healthcare Net (RHCN) in Vancouver (2017) and Australia (2015), the International Society for Quality in Health Care (ISQUA) in London (2017), the Norwegian conference on suicide research and prevention in Kristiansand (2015) and Oslo (2017), and at the Nordic Conference on Research in Patient Safety and Quality in Healthcare (NSQH) in Stavanger (2014).

During this PhD project, I was a part of the Research Network for Patient Safety Research, funded by the Western Norway Regional Health Authority, and the research network on anxiety and mood disorder at Stavanger University Hospital.

During the PhD period, I worked simultaneously on clarifying the conceptual and methodological framework relevant to the PhD project. This resulted in three publications which are not included in the thesis:

Berg, S.H., Rørtveit, K., Walby, F.A. & Aase, K. (2017). Safe clinical practice for patients hospitalised in a suicidal crisis: a study protocol for a qualitative case study. *BMJ open*, 7.

Berg, S.H., Akerjordet, K., Ekstedt, M. & Aase, K. (2018). Methodological strategies in resilient health care studies: An integrative review. *Safety Science*, 110, 300-312.

Berg, S.H. & Aase, K. (2019). Resilient Characteristics as Described in Empirical Studies on Health Care. In: S. Wiig and B. Fahlbruch (eds.), Exploring Resilience, *Springer Briefs in Safety Management,* 79-87.

HELSE **STAVANGER**
Stavanger University Hospital

NSSF
National Centre for Suicide
Research and Prevention

SHARE Center for
Resilience in Healthcare
University of Stavanger

Acknowledgements

Thanks go to all my colleagues. During the years, I have been a part of the milieu at the Faculty of Health Sciences at the University of Stavanger. I am thankful for all the clinical environments lending me an office space at Stavanger University Hospital. Thank you all for all the lunch breaks, laughs, and reflective conversations. Being a part of both academic and clinical environments provided me with valuable and varied reflections on the thesis.

Stavanger, June 2020

Siv Hilde Berg

Summary

Background

Preventing suicides is a major issue for patient safety in mental health wards. Safety is assumed to be achieved for suicidal inpatients in clinical practice when procedures are well implemented, without any gaps between practice guidelines and work as done in clinical practice. The approach to implementing safety practices assumes linear causality in which the implementation of a safety measure will yield predictable outcomes in clinical practice. While this approach can provide successful outcomes in systems that are well understood, well tested and well-behaved, it has some limitations when applied to complex and dynamic practices in which the risk is not completely understood, i.e., involving patients hospitalised during a suicidal crisis. Suicidal patients are characterised by aetiological heterogeneity, and each patient needs to be understood and approached differently. Deviations from standards may be necessary to maintain safe clinical practice for patients due to their complexity.

However, knowledge of the complexity of safe clinical practice for patients hospitalised during a suicidal crisis is lacking. Patients and healthcare professionals are valuable sources of information about everyday clinical practice in this setting. Still, no studies have explored how suicidal patients experience safe clinical practice, and the knowledge of healthcare professionals' experiences with safe clinical practice is limited. There is a need to understand the idiosyncrasy of safety within this context and acknowledge its complexity.

The overall aim of this thesis was therefore to gain a deeper understanding of the complexity of safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis, as experienced by patients and healthcare professionals.

Objectives

- To synthesise and describe the qualitative literature regarding suicidal patients' experiences of safety during hospitalisation in mental healthcare.

- To explore suicidal patients' experiences of safe clinical practice during hospitalisation in mental healthcare.
- To explore HCPs' experiences with safe clinical practice for patients hospitalised during a suicidal crisis.
- To synthesise the characteristics of the complexity of safe clinical practice for patients hospitalised during a suicidal crisis.

Methods

A qualitative case study design utilised multiple methods and data sources, including a systematic review of qualitative literature, individual interviews with patients, and a multi-method approach comprising individual interviews and focus group interviews with healthcare professionals. The complexity of safe clinical practice for suicidal patients was defined as the case, and mental health wards were defined as its context.

Results

Safe clinical practice as experienced by suicidal patients appears to be related to more than the absence of suicide risk and the need for physical protection. Safe clinical practice for the suicidal patient is highly dependent on patients' perceptions of their connections with healthcare professionals, the fulfilment of their needs during care and their psychological safety (article I). Furthermore, suicidal patients are multifaceted, showing fluctuating suicidal behaviour, which highlights the importance of embracing personalised activities for safe clinical practice. Patients experience safe clinical practice during hospitalisation in mental health wards during a suicidal crisis, when they are being detected by mindful healthcare professionals, being protected by an adaptive practice and receiving tailor-made treatment (article II).

Healthcare professionals experience safe clinical practice for patients hospitalised during a suicidal crisis as dependent on using expertise to make sense of suicidal behaviour, individualising the therapeutic milieu and managing uncertainty (article III). These are examples of capacities that enable healthcare professionals to adapt to challenges and changes in clinical care, and they are vital to the complex dynamic work practices involved in safe clinical practice in this setting.

Through synthesising across suicidal patients' and healthcare professionals' experiences, the safe clinical practice involves a set of complex characteristics: collaborative detection, adaptive protection and individualised control which all depend on systems of trust. These characteristics demonstrate how non-linearity and uncertainty characterise the complexity in this context. Additionally, the complexity in safe clinical practice is characterised by establishing psychological and relational safety, which is only created through personalised and trusted relationships.

Conclusion

This thesis offers a deeper understanding of the complexity of safe clinical practices for patients hospitalised during a suicidal crisis by considering the experiences of patients and HCPs.

The inherent complexity of safe clinical practice for patients hospitalised during a suicidal crisis implies that there are unpredictable consequences of top-down safety interventions and that outcomes change over time and for each patient. Thus, safe clinical practice cannot be ensured just by following standards; it also depends on adaptations.

To improve safe clinical practices, efforts should be made to embrace rather than efface variability in clinical care. This includes supporting adaptive capacities that enable HCPs to cope with challenges and changes in clinical care. Strategies should be directed toward strengthening expertise development, feedback systems, and systems ensuring support and predictability.

Contents

List of Tables

List of Figures

Part I

1   Introduction

1.1   Background

This thesis focuses on the phenomenon of the complexity of safe clinical practice for patients hospitalised in mental healthcare during a suicidal crisis. Ensuring that patients are safe from suicide is one of the primary tasks of healthcare professionals (HCPs) in mental health wards [1]. Nevertheless, it is a challenging task.

1.1.1   Inpatient suicide prevention

Suicide continues to be among the leading causes of deaths worldwide [2, 3]. Over 800 000 people die by suicide each year, according to the World Health Organisation (WHO). Among young people 15-29 years of age, suicide is the second leading cause of death globally. In high-income countries, three times as many men as women die by suicide [3]. Suicide is a significant public health concern with widespread effect on individuals, communities and healthcare organisations. Suicide prevention is an important health political goal in society at large WHO calls for increased awareness and for making suicide prevention a higher priority on the global public health agenda. Early identification and effective management of mental disorders are among the prioritised interventions to prevent suicide [3].

Patients hospitalised in mental health wards are at high risk of suicide [4, 5]. Mental disorders are associated with greater risk for suicide, and is not uniquely associated with any single disorder [6]. Furthermore, most individuals who attempt suicide have a mental illness, making it the most important predictor of suicide [7]. Preventing suicide in hospital wards is a high priority area for patient safety in many countries, including the UK, Canada, USA and Norway, among others [8-11].

Preventing inpatient suicides is a complex and uncertain task. First, suicidal behaviour is multifaceted and differs across genders, age groups, geographic regions and socio-political settings, and it is variably associated with different risk factors, suggesting aetiological heterogeneity. Consequently, each patient

needs to be understood and approached differently [12]. Second, research on suicide prevention in wards is highly challenging due to ethical and methodological issues [13], the heterogeneity of suicidal behaviour and low base rates [14]. Third, predicting suicides at the level of the individual patient is challenging, and instruments used to categorise patients into high-risk groups do not enable HCPs to predict which patients will die by suicide in wards [4, 15, 16]. Thus, clinical decision-making regarding suicide risk involves a high degree of uncertainty [17, 18]. The complexity and uncertainty of managing suicidal behaviour and preventing suicides further challenges patient safety efforts directed toward this field.

1.1.2 Understanding patient safety in mental healthcare

Our understanding of the safety of patients hospitalised during a suicidal crisis is limited. In 2009, Brickell et al. [19] stated that despite unique patient safety issues in the mental health context, in particular safety issues related to seclusion, restraint use, self-harming behaviour and suicide, scientific literature and sound evidence to guide health system policies for safe delivery of care in mental health is lacking. Still, a decade later, in a systematic review of the literature, Thibaut et al. [20] found few peer-reviewed empirical studies on patient safety and suicidal behaviour.

When knowledge of patient safety in mental health settings is limited, patient safety efforts draw on perspectives and tools from the patient safety discipline in general [19]. However, mental healthcare poses unique challenges for patient safety, in particular, due to the risk of harm to self [20]. Studies report that different safety practices are enacted in mental healthcare simultaneously. The personalised-psychological safety and therapeutic safety are practised during personal contact with patients, and the technical safety and disciplinary safety attempt to reduce risk through barriers, such as physical infrastructure and surveillance systems [21, 22]. The existing literature implies that the ontology of patient safety in mental healthcare may embrace more than just avoidance of harm through applying barriers.

Different fundamental assumptions regarding what we perceive as causes for errors affect the measures we take to improve safety [23, 24]. A common understanding of patient safety, in general, assumes that hazards can be assessed and controlled through different barriers and control systems [25], such as physical infrastructure and the documentation of suicide risk [21, 22, 26]. This implies measures directed toward the avoidance, prevention and amelioration of adverse outcomes or injuries stemming from the process of healthcare [27]. Safety is assumed to be achieved when procedures are well implemented in practice without deviations from the standard. The approach assumes a linear causality in which the implementation of a safety measure will give predictable outcomes in clinical practice [28]. While this approach can provide successful outcomes in systems that are well understood, well tested and well-behaved, it has some limitations when applied to complex and dynamic practices in which the risk is not completely understood [29]. Clinical practice for patients hospitalised during a suicidal crisis is not completely understood.

Mental health wards are perfect examples of *complex adaptive systems* that consist of active agents (e.g., patients, healthcare professionals from multi-professional groups) that are interconnected, influence each other and their behaviours coevolve [30]. *Resilient healthcare* draws on multiple theories from safety science, which acknowledge that healthcare is increasingly recognised as a complex adaptive system. Resilience is perceived as a set of actions or processes that allows the system to adapt to expected and unexpected conditions [29, 31]. Its rationale lies in the fundamental assumption that healthcare systems are non-linear, their conditions vary and deviations from the standard are necessary to maintain high-quality care [29]. Thus, adaptations are perceived as a source of safety to deal with challenges and changes in everyday practices [29, 32-34]. HCPs constantly make trade-offs between competing goals, adapt to complete their work and apply sensemaking skills to increase their situational awareness of ill-structured situations [35]. These strategies demonstrate *adaptive capacities* in healthcare, which are vital to deal with challenges and changes in clinical care [33]. In this thesis, patient safety is understood through the characteristics of resilient healthcare.

Hollnagel, Braithwaite and Wears [28] emphasised that to understand complex practices in healthcare, information must be obtained from multiple sources,

such as HCPs, patients, next of kin and managers. HCPs have been the primary information source of knowledge on their adaptation in clinical care [36]. Patients are acknowledged as a source of knowledge on healthcare, with unique insights and tacit knowledge that can fill knowledge gaps [37].

1.1.3 Suicidal patients' experiences of safe clinical practice

Patient experience is one of the central pillars of quality in healthcare, alongside clinical effectiveness and patient safety [38]. Patients have complementary perspectives to those of the HCPs regarding their values and needs [39]. The information they provide about adverse events has been found to be valid across multiple studies [40].

The term "patient experiences" is used broadly in the literature, and studies have often considered patient's needs, expectations, experiences of care and interaction with HCPs. The literature reflects that patient experiences are not produced by the patient alone; they are shaped within a context [41-43]. One approach to gain a deeper understanding of differences between individuals and the way they experience the world is to describe the suicidal patients' life-world [44]. Their life-word has often been seen as a function of patient's internal and external factors [41, 42, 45] and patient experiences represents a valuable source of knowledge regarding safety. Nevertheless, the literature on patents' experiences with safety in mental healthcare is limited [1, 19], and no studies have explored suicidal patients' experiences with safe clinical practice.

However, the literature has provided insight into some of the conditions that affect patients' psychological safety in mental health wards. Stenhouse [42] found that patients hospitalised in acute mental health wards talk about safety in terms of psychological and physical safety. They expect to be safe from themselves, others, and from the outside world while they are hospitalised in acute care. Patients' experiences of feeling safe during hospitalisation in mental health wards have been tied to being protected, in terms of feeling safe from self and others, using the ward as an escape, refuge and isolation [42, 46-51]. Patients feel unsafe while witnessing or experiencing violence in the ward [52-55]. Feeling safe or unsafe have been tied to experiencing autonomy or lack of

autonomy, such as involuntary admission and non-consensual treatment [53, 56, 57]. Furthermore, HCPs' ability to establish trust and to listen has been found to affect patients' perceptions of safety [53, 58].

Numerous reviews have synthesised the qualitative literature on patient experiences with single measures related to safety in mental health wards in general, e.g., locked doors [59], involuntary hospitalisation [57, 60, 61], cohesive measures [62], isolation [51], seclusion and being physically restrained [50, 63-65]. However, no reviews have synthesised suicidal patients' experiences with safety during hospitalisation in mental healthcare.

Suicidal patients' experiences with diverse safety measures have been studied only to a limited degree. Although asking patients at high risk for suicide about suicidal ideations is not associated with increased suicidal ideation [66], little is known about how suicidal patients experience suicide risk assessment. Patient experiences of being under constant observation have been studied only to a limited degree [67, 68], and no studies have documented suicidal patients' experiences of using a safety plan. Although HCPs' experiences and use of lethal means restriction have been explored [69, 70], no studies have documented suicidal patients' experiences of lethal means restriction or being deprived from their personal belongings in hospital wards.

1.1.4 HCPs' experiences of safe clinical practice for suicidal inpatients

Safe clinical practice from the HCPs' perspective is twofold. Although it is well documented that working with suicidal inpatients depends on having engaging and responsive relationships with the patients [71-75], HCPs also need to take care of themselves, to care for the patients [73].

In a Norwegian mental healthcare setting, Hagen et al. [73] found that HCPs' need to be close with suicidal patients' had to be balanced with distance to provide good care for both patients and themselves. HCPs who care for suicidal patients carry an emotional burden and experience fear of being held accountable for suicide [73, 76-78]. HCP may distance themselves to protect themselves from emotional burden [79]. Attempts to deal with the fear of blame can cause a drift away from the personalised and individualised care [21, 22, 26]. In an Australian mental

healthcare setting, Plumb [21] found that HCPs attempted to tame a sense of personal anxiety through the use of safety measures, e.g., standardised forms and physical barriers.

Suicide risk assessment has been debated to move the focus away from the individual patient and cause a disconnect with suicidal patients [26, 80, 81]. A study of HCPs in a Norwegian clinical setting found that they experience conflicting goals when focusing on connection and suicide risk assessment, the consequence of which is limited direct care for suicidal patients [81]. Furthermore, HCPs' clinical decision-making regarding suicide risk is characterised by trade-offs between multiple goals [82] and the use of intuition [83]. Constant observations have been experienced as an interchange between exerting control and building the therapeutic relationship emphasising a dynamic practice [84]. While the limited existing evidence imply complex work practices are involved in ensuring safe clinical practice, no studies have yet explored how HCPs experience the challenges and adapt to them in everyday clinical practice for suicidal inpatients.

1.2   Aim, objectives and research questions

To increase our knowledge of safety of patients hospitalised during a suicidal crisis, there is a need to understand the idiosyncrasy of safety in this context and to acknowledge its complexity [28]. To date, the knowledge of how safe clinical practice is experienced by suicidal patients in this setting and how HCPs experience challenges and adapt to them in everyday clinical practice is lacking.

The overall aim of this thesis is, therefore, to gain a deeper understanding of the complexity of safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis, as experienced by patients and HCPs. More specifically, the thesis objectives are to:

1. Synthesise and describe the qualitative literature regarding suicidal patients' experiences of safety during hospitalisation in mental healthcare.
2. Explore suicidal patients' experiences of safe clinical practice during hospitalisation in mental healthcare.

3. Explore HCPs' experiences with safe clinical practice for patients hospitalised during a suicidal crisis.
4. Synthesise characteristics of the complexity of safe clinical practice for patients hospitalised during a suicidal crisis.

Objectives 1-3 were addressed in three separate sub-studies with the following specific research questions:

a) How can we describe suicidal patients' experiences regarding safety during psychiatric in-patient care? (Sub-study I)
b) How do suicidal patients experience safe clinical practice during hospitalisation in mental health wards? (Sub-study II)
c) How can we describe the adaptive capacities that HCPs use to ensure safe clinical practice for patients hospitalised during a suicidal crisis? (sub-study III)

Objective 4 is addressed in this thesis synopsis and synthesis of findings (Chapter 5 and 6).

1.3   Articles included in the thesis

Three articles are included in the thesis:

I.   Berg, S.H., Rørtveit, K. & Aase, K. (2017) Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies. *BMC Health Services Research*, 17

II.   Berg, S.H., Rørtveit, K., Walby, F.A. & Aase, K. (2020) Safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis: a qualitative study of patient experiences. *Submitted to BMJ open.*

III.   Berg, S.H., Rørtveit, K., Walby, F.A. & Aase, K. (2020) Adaptive capacities for safe clinical practice for patients hospitalised during a suicidal crisis: a qualitative study. *BMC Psychiatry. 20 (1): 316*

2   Contextual background

This chapter briefly outlines background knowledge on suicidal behaviour, the main approaches to suicide prevention in hospital wards and the Norwegian suicide context.

2.1   Suicidal behaviour

In this thesis, *suicidal behaviour* includes a suicide attempt and/or active suicide ideation [12]. Non-suicidal self-injury with no intent to die has not been addressed in the thesis. By using the term *suicidal crisis*, I refer to severe suicidal behaviour with an acute, high intensity affect the state, which requires hospitalisation in mental healthcare (either in open or locked wards).

The link between suicide and mental health is well established and highlights the importance of mental healthcare to address mental disorders [6]. Aside from past suicide attempts, psychopathology is the most important factor in suicide and is strongly associated with other forms of suicidal behaviour [6, 7]. Unipolar depression and bipolar affective disorders have the greatest impact on suicide risk [85-87] and account for half of the suicide deaths [88]. Suicide risk among individuals with depression is associated with feelings of hopelessness [88]. Individuals with schizophrenia and psychotic disorders are also at heightened risk of suicide [89-92]. Alcohol and drug-related disorders might exacerbate underlying risk and increase risk of impulsive suicidal behaviours [6]. Comorbidity is the rule rather than the exception [2], and suicidal behaviour is characterised by etiologic heterogeneity [13]. This thesis emphasises suicidal behaviour across diverse mental illnesses to better understand the variability of safe clinical practice for patients in a suicidal crisis.

2.2   Clinical practice for suicidal inpatients

Clinical practice for suicidal patients faces numerous challenges. Detecting patients at high suicide risk in mental health wards is excessively challenging. In a systematic review of prediction models for suicide attempts and deaths, Bradley et al. [93] concluded that the models offer limited practical utility in predicting suicide mortality. Their accuracy in predicting a future event is near

zero, which means using these models would produce high false positive and negative rates if implemented in isolation. Likewise, the predictive value of categorisation of inpatient suicide risk is low. Consequently, most patients categorised at high risk do not die from suicide while being hospitalised, while some patients categorised at low risk will die by suicide in hospital [4].

A distinction is sometimes made between distal risk factors and proximal risk factors for suicide. Warning signs are proximal risk factors related to current functioning, with a proximal (minutes to hours) rather than a distal relationship to suicidal behaviour. Examples of warning signs of suicide are hopelessness, anger, feeling trapped and dramatic mood changes [94]. Although warning signs can be used to detect acute phases, a limited number of studies have examined such proximal risk factors [95].

For nearly half of the individuals who have attempted suicide, the process from the emergence of the first suicidal thoughts to the accomplishment of suicide attempt was 10 minutes or less. The other half had longer suicidal processes [96]. The literature implies that the risk of suicides is fluctuating, demanding constant alertness during inpatient care.

Although most patients verbalise their suicidal ideations, suicide risk assessment is also challenging because some individuals do not disclose their suicidal ideations to HCPs. The literature indicate a connection between the severity of mental illness and the lack of verbal communication of suicidal ideation [97, 98]. Studies that compared patients with depressive disorder with controls found that the lack of willingness to report suicidal thoughts significantly differentiated the serious attempters from individuals with mild suicidal ideations and attempts [98]. Fredriksen et al. [99] found that patients hospitalised with psychotic depression could not identify and communicate psychotic symptoms and suicidal behaviour during their psychotic episode. Shame and trust issues have been described to inhibit patients to verbalise their suicidal ideations during suicide risk assessment [100-102]. A study of 26 inpatients found that patients who made a suicide attempt after reporting no suicidal thoughts during a healthcare visit where either not experiencing suicidal thoughts at the time of the consultation or did not report them due to fear of stigma, clinicians' overreaction or loss of autonomy [101]. Lack of verbal reporting has also been related to the communication approach taken by

the HCPs. Hagen et al. [103] found that some patients wanted HCPs to go deeper into the situation and their thoughts to detect suicidality. Patients who don't verbalise their suicidal ideations have experienced extreme difficulty in communicating their distress at the moment of crisis, and lack of trust that other persons would be of any help, emphasising the importance of a supportive environment [102].

Despite challenges, suicides are preventable by multiple interventions. Bernert et al. [18] reviewed multidisciplinary clinical practice guidelines on suicide prevention across ten formalied clinical practice guidelines and the prevalence of different measures across guidelines. They found that the guidelines recommended assessing evidence-based suicide risk factors, suicidal intent and recommended treatment as well as restricting access to lethal means and post-intervention practice recommendations.

The evidence does not support the use of risk scales in suicide risk assessment [104, 105]. The British National Institute for Health and Care Excellence (NICE) guidelines advises avoiding using tools and scales to predict suicide. The NICE guidelines recommend HCPs to identify and agree with patients regarding their specific risks [106]. Although Large et al. [16], have stated that risk categorisation of individual patients has no role to play in preventing suicide of psychiatric inpatients, despite low predictability, it is not advised to omit suicide risk assessments [17, 107, 108]. According to Jacobs et al. [108], the goal of suicide risk assessment is not to predict suicide but to understand it and allow for a more informed intervention. Collaborative assessment and management of suicidality (CAMS) is an evidence-based suicide specific approach proposed by Jobes [109]. Using CAMS, the clinician endeavours to understand the patients' suffering from an emphatic, non-judgmental perspective, attempting to understand this suffering through the perspectives of the suicidal patient [109]. Recommended principles to guide the clinical process have been directed toward: the therapeutic relationship, communication and collaboration, documentation and cultural awareness [110]. The European Psychiatric Association emphasises that suicide risk assessments should always be comprehensive; include medical, psychological and social perspectives; and always be performed in an emphatic, not mechanistic way [17].

It is considered unethical to assign suicidal patients to a control non-treatment condition to determine whether constant observation (close observation/nurse observation) has a preventive effect [111]. As such, no study has examined whether being under observation reduces the number of suicide attempt, the patients' suicide risk or suicidal ideations [76]. Several studies have identified how being under constant observation is experienced as non-therapeutic, related to, e.g., lack of acknowledgement, lack of privacy and lack of empathy [67, 68, 112-114]. Although constant observations are commonly understood as a safety measure rather than a therapeutic intervention, Cutcliffe and Barker [112] argued that they are important for caring for suicidal patients because they facilitate engagement and inspire hope.

Safety planning aims to reduce suicidal behaviour by identifying coping skills and strategies. Safety planning is associated with reduced suicidal behaviour and increased treatment engagement among suicidal patients following discharge [112, 115]. Its efficacy depends on a collaborative approach between the HCPs and the patient [116].

Follow up contact within seven days after discharge has been found to reduce suicides significantly within three months of discharge [117]. Appropriate follow-ups reduce suicidal risk and include scheduled reappointments, phone contact and/or active involvement of family members [17].

Cutcliffe et al. [118, 119] studied suicidal patients' experiences with discharge and found an increased vulnerability in terms of feeling lost, uncertain, disorientated, isolated and anxious about leaving the place of safety, emphasising why preparedness at discharge is essential.

Since mental illness is a major risk factor for suicidal behaviour, clinical approaches to suicidal behaviour, i.e., pharmacotherapy (e.g., antidepressants for adults with a mood disorder, clozapine for psychotic, lithium with a mood disorder) and psychotherapy (e.g., cognitive behavioural therapy, dialectical behavioural therapy), contribute substantially to the prevention of suicide [14, 120-122]. Patients with suicidal behaviour seem to prefer a participating approach as opposed to an observing approach when being treated by physicians [123]. In studies on being cared for by mental health nurses, suicidal inpatients have emphasised confirmation [124], openness, trust, meeting on

equal terms, being met by someone who addresses the matter [125], experiencing connectedness, meeting someone who cares [126], individualised treatment/care [103] and therapeutic engagement [72] as vital for surviving the suicidal crisis.

There is strong evidence for restricting access to lethal means in the general society (e.g., toxic analgesics, fire arms, pesticides, barriers at sites for jumping) [14] to prevent suicides. Likewise, removal of ligature points in the hospital wards decreases the overall inpatient suicide rates [117, 127].

A 15-year observation study of more than 300 000 admissions to German mental health wards found that locked doors might not prevent suicide and absconding. Compared to treatment in locked wards, treatment in open wards was associated with a decreased probability of suicide attempts [128]. Nevertheless, causal inferences cannot be drawn based on observational studies, and little is known about which patients benefit from being behind locked doors, when, and why. Locked doors appear to affect their psychological feeling of safety due to being a place for escape and refuge [129, 130], preventing them from harming themselves [59]. They attempt to regulate stimulation from the overwhelming outside world during psychotic episodes [131]. Disadvantages of locked doors have been related to feeling trapped [59] or feeling admitted to prison [51]. Currently, there is a lack of literature on how open and locked doors influences safe clinical practice for suicidal patients. This thesis therefore studies safe clinical practice across open and locked doors to better understand the possible variability of these practices.

2.3   The Norwegian suicide context

Suicide rates have remained relatively stable in the last ten years in Norway, yielding approximately 12 suicides per 100 000 inhabitants in 2017 [132], which is neither high or low compared to the global suicide rates (11,4 per 100 000 inhabitants in 2012) [3]. Approximately 600 individuals die from suicide in Norway each year [132], and approximately 3500-7500 suicide attempts occur yearly [133].

Suicidal behaviour accounted for 54 % of the total admission and 62 % of the readmissions to an acute unit for mental health in a Norwegian hospital [134].

13

Walby et al. [135] found that 67 % of the individuals who had been in contact with specialised mental healthcare had been hospitalised at least once during the year preceding their death by suicide. On average, 25 suicides occur during hospitalisation each year, accounting for 13 % of the total suicides of patients treated in specialised mental healthcare. Additionally, 27% of the suicides occurred after discharge. The study emphasised that the period during and shortly after inpatient care is central to suicide prevention [135].

Preventing suicides during inpatient care is a high priority goal for patient safety in Norway. The national guidelines for the prevention of suicides in mental healthcare systems [136] outlines practices that managers and HCPs in specialised mental healthcare should follow. The guidelines recommend measures based on the quality of evidence and include all categories of measures described by Bernert et al. [18]. In addition, they include constant/intermittent observation and recommendations regarding admission of patients with chronic suicidality. Nevertheless, the guidelines have been a topic for debate, as some HCPs experience clinical practice as being too heavily focused on documenting and assessing suicide risk [137-139].

In 2014-2018, a patient safety program, including inpatient suicide prevention, was implemented in mental health wards in Norway [9]. The program was based on the national patient safety campaign "In safe hands," which targeted inpatient suicide prevention [9, 140]. The patient safety program used an improvement model [141] to reduce the variability in practice. The model was used to reduce the gap between best practice and work as done in clinical practice [9]. A checklist for suicide risk assessment was implemented as a part of these patient safety strategies in nearly all mental health wards in Norway. The checklist was an instrument for ensuring that a selection of measures was implemented and documented, including specialist assessment within 24 hours; protective measures, such as observation and security of rooms; suicide risk assessment at admission, discharge, and leave; establishment of a treatment plan and safety plan; involvement of next of kin in the discharge before leaving and in the follow-up agreement [142].

3 Theoretical background

The theoretical background of this thesis is based on fundamental assumptions and constructs drawn from resilient healthcare literature [28, 31, 33, 143]. These theoretical constructs are used to understand the complexity of safe clinical practice for patients hospitalised in mental healthcare during a suicidal crisis. All sub-studies were informed by a theoretical pre-understanding rooted in resilient healthcare. Viewing safe clinical practice from a broader perspective beyond technical and procedural safety was a fundamental assumption in sub-study I [25]. The construct of adaptations informed sub-study II [25, 30] while the construct of adaptive capacities informed sub-study III [29, 32-34]. A set of constructs drawn from empirical studies in the applied resilient healthcare literature informed the synthesis of findings across the three sub-studies of the thesis.

3.1 Resilient healthcare

Resilience has become a key concept in safety research and studies of coping with system complexity [144-146]. Many definitions of resilience have been proposed [146]. However, two main features have been highlighted in the literature. First, researchers conducting resilience studies typically justify their research by referring to the complexity that makes the systems inherently risky [147]. Second, adaptations are perceived as a source of safety and a strategy to deal with the inherent complexity of the system [25, 148]. Resilience is then perceived as a capacity that allows a system to adapt to expected and unexpected conditions [29, 31].

The resilient healthcare perspective draws on multiple theories from safety science, which acknowledge that healthcare is increasingly recognised as a complex adaptive system [29, 31]. This thesis adopted the definition of Wiig et al. [33], defining resilience in healthcare as:

...the capacity to adapt to challenges and changes at different system levels to maintain high-quality care (Wiig et al., 2020, p. 6).

The definition highlights that adaptive capacity is the central tenet of resilience in healthcare. It further emphasises the way resilience might be a capacity at different system levels. This thesis has been limited to the micro-level of the healthcare system (i.e., clinical care).

3.1.1 Fundamental assumptions

Some fundamental assumptions underlie resilience in healthcare and inform the theoretical pre-understanding of safe clinical practice in this thesis. Mental health wards are understood as *complex adaptive systems* that consist of active agents (e.g., patients, healthcare professionals from multi-professional groups) that are interconnected, influence each other and their behaviours coevolve. A complex adaptive system has many interactions and interdependencies [30, 32, 149]. Plsek and Greenhalgh [149] defines a complex adaptive system as:

"*a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's action changes the context or the other agent.* (Plsek and Greenhalgh, 2001, p 625).

The rationale lies in the fundamental assumption that healthcare systems are *non-linear;* their conditions vary, and deviations from the standard can be necessary to maintain high-quality care [29]. When practices are characterised by non-linear processes, the result of an action is not predictable. Individuals interact and operate on the local information they have, use general principles and are sensitive toward the context [32, 150, 151]. Under such complex conditions, the *adaptive capacity* is considered vital to handling challenges and changes in clinical care [33, 34, 148]. Adaptation is perceived as a source of safety [148], although it is acknowledged that adaptability may also have negative consequences [35, 148, 152, 153]. Anticipation, sensemaking, trade-offs and adaptations/adjustment are examples of adaptive capacities used by HCPs and healthcare to contribute to resilience [35]. In mental healthcare, individualisation of care have been suggested as an adaptive capacity [145].

The focus of resilience in healthcare is on understanding the complexity in the system and its deviations from policies and procedures [153]. Consequently, the focus is moved away from centralised and top-down driven approaches to

safety, toward understanding the flexible, adaptive nature of activities in everyday clinical practice and to develop means to support these [143, 154]. Safety management is approached through increasing the adaptive capacity of the system, e.g., professionals ability to anticipate disturbances and challenges before they occur [153] or the system's ability to support feedback and learn from practice [155].

Additionally, a fundamental assumption in resilience is that safety should not be defined solely as the absence of adverse events [25, 153]. To date, it has been assumed that safety can be approached by identifying adverse events and setting targets to reduce these. Common approaches to reduce adverse events have been to reduce non-compliance with procedures and variability in practice [143]. Resilience healthcare embraces a broader view on safety through considering why things go well, and why and how things are safe [25].

3.1.2 Applied resilience constructs

Multiple theories and models have been proposed in resilient healthcare literature [154, 156-161]. Yet, a unified conceptual framework is missing, and in its current state, resilience consists of an umbrella of constructs and does not come down to a single testable theory [146].

To better understand methodological strategies in empirical resilience research, we [36] systematically reviewed studies of resilient healthcare. We found that resilience has mainly been studied through HCPs' perception and behaviours at the micro-level of the system (i.e., clinical care), focusing on, e.g., experiences, decision processes, sensemaking or adjustments [36]. Despite the existence of several frameworks for resilience at the organisational level, e.g., "the four resilience potentials" [155], we found lack data at this level [36].

By synthesising empirical peer-reviewed studies of resilient healthcare, we found that anticipation, sensemaking, trade-offs and adaptations/adjustment are prominent theoretical constructs [35]. These constructs are interrelated and overlapping, e.g., anticipation is one component of the sensemaking process of expert decision-makers [162, 163]. The applied constructs inform possible operationalisation of resilience. They are an example of constructs that have been studied empirically at the micro-level, i.e., focusing on individual

healthcare professionals, healthcare teams or management [35]. The synthesis of findings in this thesis is informed by the three constructs of "sensemaking," "trade-offs" and "adaptation" described in detail in the following.

Sensemaking

Sensemaking is the process through which individuals work to understand novel, unexpected and confusing events [164]. According to Klein et al. [165] sensemaking is the process of creating situational awareness. Situational awareness refers to the outcome of this process.

Over the past three decades, researchers have studied decision-making in 'real world' situations, conceptualised as sensemaking [166]. Sensemaking usually takes place when people face an unfamiliar problem and start creating knowledge structures to facilitate understanding. Several influential theoretical contributions have been made to sensemaking at the individual, team and organisational levels [166], e.g., Klein's [165] cognitive perspective on individual sensemaking, Malakis and Kontogiannis' [167] sensemaking at the team level and Weick's [168] organisational perspective on sensemaking. In this thesis, sensemaking is discussed at the individual and team level.

Kleins' cognitive perspective on individual sensemaking describes how individuals make sense of their experiences with an ambiguous situation in particular situations of high complexity or uncertainty in order to make decisions [165, 169]. According to Klein [170], sensemaking can be improved by having richer repertoires of scenarios. This creates better mental models, which can improve the comprehension of critical situations.

Endsley [170] conceptualise situational awareness as an ongoing awareness of one's environment, especially events that one must understand. At the lowest level, it involves turning data into information. At the next level, it involves comprehension of the situation and deciphering the meaning of the information. The highest level of situational awareness is the anticipation of events via mental simulation [170].

According to Malakis and Kontogiannis [167], teams employ similar cognitive processes to sensemaking as individuals, but with different strategies. Collaborative sensemaking is related to team adaptation, common ground,

shared team models and shared situational awareness [167, 171]. Shared situational awareness is facilitated by having shared mental models and requires team members to understand what information others need and how to distribute this information [172]. Multidisciplinary training involving HCPs who regularly interact as a team is important to establish shared visions and values [173, 174].

Sensemaking has been perceived as a resilient characteristic [175-178]. According to Klein [179], sensemaking involves using resilient strategies to adapt to complex and dynamic situations (e.g. , having rich repertoires of patterns, sophisticated mental models of how ting work). When HCPs understand that an event is changing from normal to abnormal or to a crisis, adjustments can be made to prevent it's development proactively [35]. Sensemaking is then important for anticipatory thinking, responding and monitoring [156, 180]. Anticipatory thinking is a mark of expertise in most domains, and studying sensemaking in complex situations increases knowledge about expert performance [162]. Experts possess automaticity of processes, learned skills, mental models and schemas of prototypical situations, helping them make sense of comprehensive and complex information through a high level of situational awareness [179]. Novices may fail at several levels of the exercised situational awareness; detecting critical information in the situation, comprehending the situation and anticipating the future development of the situation [163, 181].

According to Klein [179] expert decision makers in natural settings rely heavily on intuition. Instead of perceiving intuition as a source of bias and error, Klein [179] propose that intuition can be strengthened by providing broader experience that helps people build better tacit knowledge, richer mental models and thus improve their decision making. Likewise, Benner [182] claim that the expert HCPS has an intuitive grasp of the situation. The expert HCP no longer rely on rules to understand the situation and take appropriate action. HCPs' expertise develops gradually from novice to expert from developing relying on rules, to detect meaningful cues in the situation and finally relying on long-term goals [182].

Although sensemaking has been studied in the medical context [183-186], no studies have been conducted in the field of suicidal inpatients. The literature

indicates that intuition is involved in suicide risk assessment [73, 83, 187]; however, this has been an underexplored domain in suicide research.

Trade-offs

Tensions between goals are inevitable in a complex adaptive system, and HCPs cope with goal conflicts by making dynamic trade-offs [188]. According to Wears et al. [189], trade-offs have been perceived as an essential characteristic of resilience that allows HCPs to adapt to tensions between diverse goals and values through sacrificing lower for higher-level goals. In clinical care, trade-offs are often made at the staff level and the patient level (clinical goals, risks or benefits).

Trade-offs are relevant to clinical care for suicidal patients, as the HCPs confront complex ethical, legal and psychological questions while managing an urgent circumstance [190]. A study conducted with community-based mental health workers in the UK revealed a complex decision-making process comprising uncertainty and trade-offs regarding patients' clinical needs, patient desires, legal and procedural obligations and resource considerations [82]. The findings indicate that trade-offs are used as a strategy to cope with complex decision-making in the clinical care of suicidal patients.

Adaptations

In resilient healthcare literature, adaptations are perceived as a practice enacted to cope with complexity and variations in the work environment and to match the local work conditions [29, 148]. Hollnagel [25] stated that while the approximate adjustments are the reasons why everyday work is safe and effective, it is also the reason why things sometimes go wrong. According to Hollnagel [25], the central issue is to understand why humans adjust and how their work conditions vary. The challenge of adapting to complexity is the unpredictability of its consequences [148]. Studies found that while the adaptations made can make sense locally, the outcomes are not necessarily successful for the patient in the long term or other parts of the systems [35].

According to Ellis et al. [30], adaptations are central to mental health. Adaptations ensure that care is individualised and that care responds adaptively to ensure that patients experience good health. Ellis et al. [30] furthermore

emphasised the importance of having a shared vision to ensure adaptations are made to match patients' preferences. Nevertheless, little is known about adaptations made in safe clinical practice for patients hospitalised during a suicidal crisis. A study finds an interchange between exerting control and building the therapeutic relationship in constant observation [84]. This might imply that HCPs adapt to suicidal patients' variability in the context.

4 Methodology

This chapter discusses the methodological approach applied in the thesis. It presents the philosophical underpinnings of the thesis, the chosen research design, data collection methods, sampling and participants, data analysis and ethical considerations. Finally, the quality of the research is discussed.

4.1 Philosophical underpinnings

This thesis is based on phenomenological and hermeneutic philosophy. While *phenomenology* is a philosophical approach to the study the world of experiences [191], *hermeneutics* is the philosophy of understanding gained through interpretation [192]. The thesis is based on the phenomenological-hermeneutical approach, as described by Dahlberg et al. [191]. They do not perceive phenomenology and hermeneutics as separate entities but emphasise a common ground for different philosophers, such as Husserl, Gadamer, Merleau-Ponty and Heidegger.

Husserl [193] proposed that we could not talk about experiences without talking about meaning at the same time and that meaningful experiences belong to the lifeworld and the everyday context in which we live our life. Husserl's phenomenological approach to research is to describe how humans experience the world, what the world is and what it means for humans. Merleau-Ponty [194] introduced the concept of perception, suggesting that the world we investigate has two faces: we judge the world based on our experiences, but at the same time, the world is present even if we are not aware of it at the moment. Heidegger [195] and Gadamer [196] emphasised that hermeneutic is the essence of human understanding in that our understanding of the world is derived from the interpretation of it. The authors pre-understanding was always used in searching for an interpretation, as described in the hermeneutic circle [196]. As such, our pre-structures and pre-understanding as researchers are of importance. Dahlberg et al. [191] argued that the *life-world* perspectives are central to both phenomenology and hermeneutics. Through the phenomenological-hermeneutic approach, Dahlberg et al. seek to know how the implicit and tacit become explicit and

can be heard, and how the assumed becomes problematised and reflected upon. These meanings are often implicit, tacit and taken for granted.

Studying experiences of practice

This thesis, therefore, draws on central ideas from both phenomenology and hermeneutics to form explicit knowledge and describe the meaning of the phenomenon of the complexity of safe clinical practice for suicidal patients within the context of mental health wards [191]. The phenomenon of interest is not a study of individual experiences (i.e., suicidality) per se; it is about how the phenomenon (i.e., the complexity of safe clinical practice) manifests itself in experiences [197]. The word practice refers commonly to an action, rather than thoughts or ideas and is normally used to describe what happens in real life as opposed to what you think will happen in a particular situation [198]. In this thesis, practice is understood through the phenomenological-hermeneutical life-world approach. Through the participants' experiences, I endeavoured to understand how things happened in clinical care situations, rather than in normative practice; how things are supposed to happen in clinical care [191].

Patients have knowledge of their life-worlds, the context of which is being hospitalised in a mental health ward during a suicidal crisis. Patients have experiences of their needs, how the healthcare system approaches their needs and how they perceive and make sense of safe clinical practice. Additionally, HCPs have knowledge about their lifeworld in which their context involves caring for and treatment of suicidal inpatients. They have experiences from their encounters with patients and from adjusting to and making sense of safe clinical practice.

Collecting these experiences depends on interpretations and perceptions of the researcher [191]. The phenomenological-hermeneutical approach embraces the need to both clarify pre-understanding inspired by phenomenological traditions as well as approach data with sensitive to openness and dynamically move between focusing on data and interpretations, which is inspired by hermeneutical traditions [191].

Clarifying my pre-understanding

Clarifying my pre-understanding is of importance from the philosophical and methodological perspective of this thesis. As there exists no scientific tabula rasa, there is no "uncontaminated" place to start the research project [191]. Making sense of what is being said or written involves interpretation, and one is not necessarily aware of one's preconceptions in advance. Bridling is one way to deal with pre-understanding, according to Dahlberg et al. [191]. Bridling is directed toward restraining one's pre-understanding. It is an attempt to acknowledge that the researcher is influenced by preconceptions, experiences and expertise before encountering the research participants. This realisation allows the researcher to focus closely on the participants' stories and uncover their experience.

My pre-understanding was highly influenced by my experiences of working with suicidal patients. I started working at the current university hospital in 2006 as an assistant therapist in locked wards, protecting suicidal patients during observation. My clinical interest in suicide prevention started in 2008 when I worked as a therapist with the acute ambulatory team and had daily encounters with individuals in a suicidal crisis. The ambulatory teams have specialist competence in suicide prevention in hospitals, which led me to participate in the hospital's resource group for suicide prevention. I was involved in developing educational material to implement the national guidelines for suicide prevention at the hospital, and I started to educate the staff in suicide prevention. As a psychologist, I did clinical work at open hospital wards for adult mental health, acute and ambulatory teams and out-patient clinics. My clinical pre-understanding has made me acknowledge that inpatient suicide prevention is challenging, dependent on collaboration among HCPs and on the therapeutic relationship.

I have an academic background in organisational psychology, clinical psychology and safety science, involving topics such as naturalistic decision-making, accident investigation, socio-technical system theory, psychosocial support systems and different approaches to psychotherapy. All these topics have informed my pre-understanding.

A study protocol [199] (see Appendix 1) was published to acknowledge my pre-understanding and clarify pre-concepts at the start of the PhD project [191]. In the early development of the project, I was interested in the fact that concepts and interventions were applied from the patient safety discipline in general to mental health without understanding the uniqueness of patient safety in mental health from the patient's perspective. I assumed patients emphasised other topics important to safety, such as the patient-HCPs interaction [19]. This pre-understanding was of importance when studying the patients' perspectives of safety in the existing literature in sub-study I.

With a background in safety science, I also understood healthcare as a complex system. I was interested in how the multiple demands from macro-level affected the safety behaviour in the sharp end of the system and generated conflicting goals between safety measures and the clinical work [200]. Informed by resilience concepts [201], I also assumed that HCPs needed to adjust their work and that their approaches may deviate from standard procedures [25]. I presented the PhD project at the hospital and national conferences. I reflected upon how to best explore complexity in mental health. Together with KAA, we studied concepts that have been operationalised in empirical studies of resilience in healthcare [202]. Based on this insight, I chose to study patient experiences to understand complexity and variability (sub-study II) and HCPs experiences to understand adaptations and adaptive capacities (sub-study III).

The PhD project has also been affected by my co-researchers' pre-understandings. KAA has an academic background in safety science and patient safety research and is trained as a safety engineer. She has approached the sub-studies with an awareness that safe clinical practice reflects expressions of different stakeholder perspectives (patient and HCPs) and resilient characteristics. KR has an academic background in hermeneutic philosophy and a clinical background as a mental health nurse. She has approached the sub-studies with a focus on the subjective participants' experiences and life-worlds. FAW has an academic background in suicide research and a clinical background as a consultant clinical psychologist in specialised mental healthcare. He has approached the sub-studies with an understanding of the nuances and complexity of clinical practice.

Sensitive openness

Pre-understanding also involves approaching data with sensitive openness during the interviews and analysis. According to Gadamer [196], openness is a way of being; a desire to listen, see and understand something in a new way. It demands sensitivity to the unpredicted and unexpected and the flexibility to explore the world in a new way. It is about leaving aside expectations and assumptions, allowing the meaning and phenomenon to emerge. This demands attentiveness, engagement and openness as the participants speak before going back to analysis, re-listening to the story, trying to make sense of pre-conceptions that influence what is said. For example, when being interested in safe clinical practice, the patients should not be afraid to talk about their experiences with unsafe practice [191]. This involves an inductive approach and curiosity about the experienced reality to understand the phenomenon of interest [191].

When we are open to the meaning, we see the particularity, that is, what makes each participant's life-world unique. This is of particular relevance when understanding the complexity of safe clinical practice, especially internal dialectic and its dimensions. However, this sensitivity is not in opposition to generality. Generalisations take the form of a description of the structure of meanings and the essences, the main interpretation and comprehensive understanding [191]. As such, the analysis should be balanced between structuring the essences and being attentive to particulars.

The hermeneutic circle

The PhD project was informed by the hermeneutic circle, which is a central idea in hermeneutic theory concerned with the dynamic relationship between the parts and the whole [196]. The hermeneutic circle considers seeing both parts and wholes for each sub-study as well as seeing the whole when synthesising the results across each sub-study. Although the process of analysis in phenomenological hermeneutic approaches can be described in linear stages, the process of interpretation during analysis is rather dynamic and non-linear, moving back and forth through a range of different means to being close and having a distance to the data [203]. In the thesis, the sub-studies were parts

of a whole and were integrated into synthesis to develop a new understanding [196].

4.2   Research design

A qualitative case study design was used, including a systematic review, individual interviews, and focus group interviews, to collect data on the complexity of safe clinical practice for patients hospitalised in mental healthcare during a suicidal crisis. Typically, a case study focuses on a particularly complex phenomenon within a real-life context and utilises various data collection methods and multiple sources of evidence to provide an in-depth understanding of the context and process [204]. The case was defined as the complexity of safe clinical practice for suicidal patients, and mental health wards were defined as its context. Thus, the focus of the study was to understand practice and processes, as opposed to understanding the particular organisation [204].

Case studies can adopt single or multiple designs, both of which can be holistic or embedded (multiple units of analysis) [204]. To best understand the complexity of safe clinical practice, I chose a single case study with multiple units of analysis. The embedded units of analysis consisted of patients' experiences and HCPs' experiences. A single case design enables the case to be understood in-depth, and two embedded units of analysis allow the case to be informed from several directions [204].

The case study consisted of three sub-studies to study the two embedded units of analysis: patients' experiences (sub-study I and II) and HCPs' experiences (sub-study III), as shown in Table 1.

Table 1 Overview of the three sub-studies.

Embedded unit of analysis	Patients' experiences		Healthcare professionals' experiences	
Sub-study	Sub-study I	Sub-study II	Sub-study III	
Data collection methods	Systematic review	Individual interviews	Focus group interviews	Individual interviews
Participants/ material	20 peer review articles	18 patients	25 HCPs	18 HCPs
Timing for data collection	2014 and updated 2016	May-Des 2016	May 2016	May-Des 2016
Analysis methods	Thematic analysis	Content analysis	Content analysis and Sequential triangulation	
Articles	Article I	Article II	Article III	

Each unit of analysis was studied with an inductive approach, moving from data to a theoretical understanding [205]. Patients' experiences were first addressed in sub-study I, which described and synthesised the qualitative literature on suicidal inpatients' experiences of safety and outlined themes related to safe clinical practice (article I). Sub-study I informed sub-study II, describing experiences of safe clinical practice for patients hospitalised during a suicidal crisis using an empirical approach (article II).

HCPs' experiences were first explored in focus groups. The interview guide used in the focus groups was informed by empirical studies of HCPs experiences of working with suicidal patients. The results from the focus group interviews informed the data collection of HCPs experiences in individual interviews. Both datasets were triangulated in sub-study III, which described capacities to adapt to challenges and changes in clinical care for patients hospitalised in mental health wards during a suicidal crisis (article III).

When choosing methods in the thesis, the overall aim was to gain a deeper understanding of the complexity of safe clinical practice for patients hospitalised during a suicidal crisis. As little is known about the topic, we considered it important to approach the data with an inductive approach and with sensitive openness [191]. I chose literature review [206, 207], focus group interviews [208], and individual interviews [191] to gain a deeper understanding of the safe clinical practice. A multi-method approach was used to triangulate data from the focus groups and individual interviews [209].

4.3   Methods

4.3.1   Literature review (sub-study I)

We conducted a literature review of the qualitative literature to achieve a greater understanding of our chosen topic and attain a level of conceptual and theoretical development in line with Campbell et al. [210]. Synthesis of qualitative research involves combining or integrating parts into a whole. The results of the synthesis are in conceptual terms greater than the sum of the parts [210]. However, synthesising qualitative data is a more complex and contested territory compared to synthesising quantitative studies, and the methods are less developed [206].

Thematic synthesis [206] is one method of qualitative research synthesis. Thematic synthesis was developed in particular for conducting a systematic review of qualitative studies and addressing questions about people's perspectives and experiences in a structured way [206]. Thomas and Hardens' [206] thematic synthesis, in addition to thematic analysis by Braun and Clark [211], was chosen to systematically review the qualitative studies of patient experiences (sub-study I). The approaches helped collect and synthesise the data in a systematic manner reflecting the original content to gain new insights into patients' experiences of safety in psychiatric inpatient care.

4.3.2   Individual interviews (sub-studies II and III)

Individual in-depth and semi-structured interviews were used as a method in sub-study II and III to explore patients' and HCPs' experiences of safe clinical

practice. In-depth individual interviews are, in particular, suited to seek deep information and understanding, reveal the meaning of the participants' actions and understanding our common sense assumptions and practices [212]. The method facilitates the collection of microanalytic data on cognition, strategies, feelings and experiences [213]. A phenomenological-hermeneutic approach was applied during the interviews [191]. This implied being sensitive to openness during the interviews, following up on the participants' answers to the guided questions [191].

4.3.3 Focus groups (sub-study III)

Focus group interviews were used as a method in sub-study III to examine HCPs' experiences of safe clinical practice. Focus group interviews have been widely used in pedagogy, activism and interpretative inquiry [214]. We chose focus groups as an appropriate method to explore the phenomenon of complexity in safe clinical practice for patients in a suicidal crisis. Focus group interviews can stimulate discussion, open up new perspectives and identify topics of interest. New insight can be achieved when the participants exchange experiences and complement each other [208, 215]. A phenomenological-hermeneutic approach was applied during the focus group interviews [191]. Consequently, the focus was on the thematic content generated by the group [216].

4.3.4 Multi-method approach (sub-study III)

Methodological triangulation refers to the use of multiple methods of data collection about the same phenomenon [217]. In qualitative research, triangulation is used to choose different methods with different strengths and foci so that they can complement each other [209]. This methodological strategy is particularly important when studying a complex and poorly understood phenomenon, such as complexity in safe clinical practice for patients in a suicidal crisis [36, 218]. Triangulation enhances credibility (internal validity) of studies through multiple approaches to understand the phenomenon and avoid misinterpretation [176, 219].

For that reason, methodological triangulation was applied to study HCPs' experiences of safe clinical practice (sub-study III). Sub-study III applied

sequential triangulation, as described by Morse [220, 221], combining focus group interviews with individual interviews. Focus groups and individual interviews have been found to provide different perspectives on values and issues and to complement each other, facilitating an in-depth exploration of a phenomenon [213, 222].

When designing multi-method studies with sequential triangulation, separate data sets are collected in sequence, with the first informing the nature of the second [220, 221].

In sub-study III data from the focus groups was collected first, as this method is suited to explore and identify relevant categories and perspectives. This informed the development of an interview guide. Thereby, the individual interviews were used to supplement the themes that emerged in the focus group study in-depth [220]. Complementary views were generated by providing data at different levels of analysis. The focus groups provided data about what mattered for safe clinical practice, and the individual interviews generated microanalytic data about each participants feelings, decision-making, experiences and adaptations [213]. The integration of data provided a "comprehensive whole", and a fuller picture and understanding than each study could provide alone [221], as shown in figure 1 (inspired by Gjesdal et al. [223]).

| Objective: To explore health care professional's experiences with safe clinical practice for patients hospitalised during a suicidal crisis |

Data set 1: focus group interviews

Qualitative content analysis stage 1-6

Interview guide

Data set 2: individual interviews

Qualitative content analysis stage 1-6

Triangulation of data set 1 and 2.

Using templates to organise the material simultaneously

A comprehensive whole

Integrating the findings from both data sets

Figure 1 Design of data triangulation in sub-study III

4.4 Data collection sub-study I

A systematic review of the literature was undertaken to systematically collect and synthesise qualitative peer-reviewed literature on suicidal patients' experiences of safety during psychiatric in-patient care (article I).

Data collection and extraction followed a research protocol that was created in advance (dated 13.05.2014). The data collection followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [224] to ensure a systematic and transparent approach. The PRISMA guidelines provide recommendations on the transparency of the search databases, the search terms used, and the eligibility criteria used for inclusion and exclusion [224].

Searches were conducted in five electronic databases: MEDLINE, Academic Search Premier, CINAHL, SocINDEX with Full-Text, and PsycINFO Ovid. The search strategy was designed to increase the sensitivity of finding relevant articles. Limitations were set to peer review and the English language. No limitations on publication date were set. I also hand-searched reference lists and conducted author searches [225]. The mesh terms were not sensitive to include relevant studies, and I identified search terms from qualitative studies of patient experiences in mental health and qualitative studies of suicidal patient experiences.

Search terms used were: "patient* satisfaction*" or patient* preference*" or "in-patient* experience*" or "patient* experience*" or patient* perception* or "patient* view*" or "patient*perspective*" or "patient* opinion*" or "user* experience*" or consumer* experience* or "consumer participation," and "suicide" or "suicidal." Subsequently, I combined all these terms with "feeling safe" or "feeling unsafe" to find additional hits.

The searches identified 1126 items, 1097 from the databases and 29 from the hand-searches. Duplicates were removed, and 984 records were screened by titles and abstracts. Data from 80 articles were extracted to a template containing information regarding title, author/year/journal, aim, method, sample description, and experiences of safety. Full-text articles were read independently by two researchers (SHB, KR) who assessed the articles using the eligibility criteria listed in Table 2. The reasons for inclusion/exclusion were described in the template. The third researcher (KAA) validated the assessment. Twenty studies were considered eligible and included in the qualitative synthesis.

Table 2 Inclusion and exclusion criteria in sub-study I

Inclusion	• Qualitative peer-reviewed studies in English with empirical data on patients' experiences regarding safety. • Studies examining a sample of suicidal inpatients who were interviewed during their hospitalisations or after discharge. "Suicidal in-patients" included patients hospitalised after a recent suicide attempt, described as suicidal during hospitalisation or with serious suicidal thoughts or ideations. • Experiences with care in psychiatric hospital wards, including psychiatric emergency wards and psychiatric long-term in-patient care.
Exclusion	• Self-harming behaviour • Patients with experiences of outpatient clinics, community mental healthcare, home care, forensic psychiatric services, emergency care and medical care

No 'gold standard' exists for assessing the quality of qualitative studies. We chose Malterud's [226] "standards to assess quality for qualitative inquiries," as they are directed toward the challenges of reflexivity, transferability and interpretation. No studies were excluded based on quality assessment.

4.5 Data collection sub-study II and III

Data collected in sub-study II and III included patients' and HCPs' experiences of safe clinical practice.

4.5.1 Clinical setting and sampling strategy

Data collection was carried out in a Norwegian university hospital. The university hospital provides specialised mental health services for patients with mental illness. The hospital treats approximately 10,000 patients per year.

The PhD project used a purposeful sampling strategy to recruit suicidal patients and HCPs working in open or locked wards in specialised mental healthcare for adults. A total of 53 individuals participated.

Participants were recruited from nine different sites. The locked wards specialise in affective disorders (n=2) or acute care (n=2). Patients in these

wards require a high level of protection due to suicidal behaviour, psychotic or manic episodes. The patients hospitalised in these wards are typically treated for unipolar major depression, bipolar disorder, psychosis or emotionally unstable personality disorder.

The open wards specialise in rehabilitation (n=3) or short-time stabilisation during a crisis (n=2). Rehabilitation wards treat patients with diverse mental health issues. The function and symptom levels of patients in these wards are highly variable. Patients in need of rest and support are hospitalised in the short time stabilisation beds belonging to the ambulatory team unit.

4.5.2   Sample characteristics

Patients

Patients were purposefully sampled to differ in terms of age, gender, diagnosis, function level, number of hospitalisations and level of protection (locked/open ward). The sampling strategy aimed to recruit patients with serious suicidal behaviour and/or active suicide ideation who were admitted to open or locked wards in specialised mental health settings for adults. The eligibility criteria are listed in Table 3.

Table 3 Inclusion and exclusion criteria for the patient interviews

Inclusion criteria:	Be hospitalised in an open or locked ward for adults in specialised mental healthcare.
	Have access to a therapist in specialised mental healthcare during the interview.
	Have been regarded as seriously suicidal by a psychologist or psychiatrist during hospitalisation, but at the time of the interview, considered sufficiently stable to engage in the interview.
	Self-identify as 'being in a suicidal crisis.'
	Voluntarily consent to participation.
Exclusion criteria:	Presenting self-harming behaviour without a desire to die.
	Being unable to provide consent, which includes presenting severe psychotic symptoms, severe cognitive deficits or ongoing symptoms of being in a state of crisis with high suicide risk.

The sample consisted of seven men and eleven women (n=18) aged 18-57 years (mean age 40 years). All had active suicidal ideations during inpatient care, and nine of the participants had recently attempted suicide before their admission. All the participants had affective disorder as either their main diagnosis or as a comorbid diagnosis. Four participants had experienced a psychotic episode during admission. The participants presented with several comorbid diagnoses, including mental and behavioural disorders due to alcohol use, depression, posttraumatic stress disorder and attention-deficit/hyperactivity disorder. The sample included individuals who were hospitalised for the first time (n=4), individuals with 2-22 hospitalisations (n=11) and individuals with more than 50 hospitalisations (n= 3). Four of the participants were compulsorily admitted at the time of the interview. All but one of the participants were of Western origin (see Appendix 2 for more detailed characteristics of the participants).

Healthcare professionals

The sample consisted of 35 participants, 18 HCPs participated in the individual interviews and 25 HCPs participated in the focus group interviews. Eight of the HCPs participated in both focus groups and individual interviews. The sample consisted of participants from both locked wards (n=14) and open wards (n=21), as well as from the three groups of professionals working in the wards: nurses (n=22), medical doctors (n=7) and psychologists (n=6). The sample consisted of seven men and 28 women and included both novices and experienced participants from all professional groups.

A total of five focus group interviews were conducted. According to Malterud [208], focus groups work better when they are homogeneous, involving participants who have well-developed routines for talking with each other. This refers to having a shared common ground [215]. When organising focus groups, I aimed to achieve homogeneity. I also wanted to enable constructive associations from similar work settings while avoiding conflicting dynamic and competition [208]. It is recommended to organise groups of participants from the same level in the organisation [227]. As such, in this study, participants with similar professional roles were grouped (two groups of nurses and two groups of psychologists and MDs). In addition, participants working in similar ward settings were grouped into four groups. Two groups worked in

open wards and two groups in locked wards. The groups were also organised to ensure variability in terms of experiences and opinions of the phenomenon of safe clinical practice. Consequently, I sampled participants of both genders in each group who were both experienced and novices [208]. Four groups were needed to ensure variability and homogeneity, and in addition, the pilot interview was included, as shown in Table 4.

Table 4 Organisation of focus groups with healthcare professionals

Group No.	Participants	Setting
1. (pilot)	5 nurses	1 open ward
2.	2 psychologists, 4 MDs	3 locked wards
3.	3 psychologists, 2 MDs	2 open wards
4.	4 nurses	3 locked wards
5.	5 nurses	3 open wards

4.5.3 Recruitment

I introduced the study to HCPs at the included wards. They were given information about the study's purpose, which was to understand the safe clinical practice, not to evaluate whether they were performing correctly. Information posters were put up in the hallway visible for the patients at the respective wards (see Appendix 3). I visited the wards daily or weekly for nine months and repeated information about the study to recruit participants. In addition, I had seven gatekeepers, consisting of ward managers and psychologists working in the wards, helping me recruit participants. Gatekeepers benefit from having an already established trust with the participants [208].

All nine wards embraced the study, but as expected, some challenges emerged when recruiting participants. For the patient interviews, the main challenge was to find patients suited for the inclusion criteria, as most patients in the wards were excluded due to not being stabilised and capable of giving

informed consent. The main challenge for the HCPs was finding the time to participate in the interviews between their daily clinical tasks.

4.5.4 Interview guides

Three semi-structured interview guides were developed, reviewed by the advisory panel and pilot tested.

Guide 1: Individual interviews with patients

The interview guide was designed to study safe clinical practice, focusing on topics related to feeling safe, experiences of safe clinical practice, experiences with safety measures, and interactions with HCPs (see Appendix 4). The interview guide was informed by insight gained from the systematic review (sub-study I): a) patients talk about safety in terms of "feeling safe," b) the importance of connection, protection and control to inpatient experiences of safe clinical practice, and c) lack of knowledge about how patients experience safety measures, i.e., suicide risk assessments, being protected from lethal means, safety plan and observation.

The interview guide was revised based on the pilot interview. The original guide included the question, "What do you need to feel in control during hospitalisation?" This was removed from the guide as the participant found it difficult to answer the question immediately. At the end of the pilot-interview, the participant answered, *"I know what I need to feel in control…I am terrified of being discharged before I get better."* As a follow up in the revised guide, I asked open-ended questions about feeling safe, "What makes you feel safe after discharge? What has been important for feeling safe during the suicidal crisis?

As an opening question, I asked about their experiences with being hospitalised. Furthermore, I inquired about what made them feel safe during hospitalisation. Subsequently, I asked about how they experienced connection (being met in a good manner), protection (being under observation, locked doors, the role of the observer) and control (getting help, treatment, discharge preparedness) during hospitalisation. Lastly, I asked patients about their experiences with diverse safety measures. I followed up with questions on how each safety practice made them safe.

Guide 2: Focus group interviews with healthcare professionals

The interview guide was designed to study safe clinical practice focusing on experiences with safety measures (including the patient safety campaign), HCPs' strategies to ensure safe clinical practice and contingencies at ward level for safe clinical practice (see Appendix 5). I made minor adjustments to the interview guide after each interview to ensure that the questions remain open-ended but still focused. The opening question, "How do you experience to work with suicidal patients?" provided the richest responses from the participants. When the participants offered clinical examples of challenges in care, I followed up by asking about how they coped with the challenges and what was of importance at the ward level to ensure safe clinical practice.

Guide 3: Individual interviews with healthcare professionals

As an opening question, I asked, "What characterises patients hospitalised with suicidal behaviour at this ward?" This question allowed them to talk about the type of patient issues they encountered in their context and their role as a healthcare professional. I follow up by asking about how they coped with challenges with suicidal patients in their work. The question elicited diverse topics, which I followed up. Thereby, I asked specific questions that were designed to elaborate on the topics from the five themes generated by abstracting the focus group interviews: a) making sense of suicidal behaviour, b) creating a shared understanding, c) handling emotional burden, d) providing treatment and protection and e) learning from practice (see Appendix 6).

4.5.5 Advisory panel

An advisory panel was established to provide member feedback and member reflections [228]. The advisory panel contributed with feedback on the recruitment strategy, the information poster, the consent form, the interview guides, and manuscript drafts. The members included Dag Lieungh (patient experience consultant), Målfrid J. Frahm Jensen (patient experience consultant), Gudrun Austad (inpatient and community suicide prevention; mental health nurse), Kristin Jørstad Fredriksen (consultant psychiatrist), Camilla Hanneli Batalden (consultant clinical psychologist), Liv Sand

(consultant clinical psychologist) and Sigve Dagsland (consultant clinical psychologist).

4.5.6 Conducting the interviews

Individual interviews

The individual interviews with patients and HCPs were performed by me (SHB). The interviews were audio-recorded and transcribed. They lasted for approximately 60 minutes (HCPs interviews) and 70 minutes (patient interviews) and followed an in-depth [212] semi-structured approach. Openness to meaning and essences was of importance when conducting the interviews [191], without leading the participants outside the research theme.

In the patient interviews, I endeavoured to be sensitive to patients' vulnerability and power issues. I needed to keep a balance between openness, exploring the participants' feelings, confirming and showing respect, and structuring the conversation. Being open about sensitive and difficult topics without receiving validation (confirmation) can elicit feelings of shame [229]. I needed to support the participants without attempting to change their feelings or narratives. I approached this balance by using validation at the lowest level, as described by Linehan [230]. This involves listening and observing and paying attention to the participant (level one) and restating what the participants had said to confirm I understood their massage (level two) [230]. At the end of the interview, higher levels of validation were given, showing support [230].

Using a semi-structured interview guide allowed me to go with the flow and follow where the participant wanted to lead the conversation and formulate follow-up questions spontaneously. This flexibility helped safeguard the patients' integrity [212] and validate that I understood their message [230] and that I was open to meaning and essences [191]. However, knowing when to structure the interview was also of importance for reducing stress imposed by being interviewed. I did not require that the participants share sensitive material, in particular, why they got into a suicidal crisis. However, many of the participants talked about traumatic life experiences. An ethical issue that arose during in-depth interviews concerned the depth to which I should probe

the participants' answers [212]. The rationale of the phenomenological hermeneutical interview is to gain an understanding of the research theme, not to get inside another person. As such, I did not probe into traumatic experiences that I considered outside the research theme or that stirred up painful and traumatic memories. The interview with Sam is an example of the moment when I stopped probing. I understood I was guiding him outside the investigation area into a difficult memory.

I: What are you afraid could happen if you share your inner thoughts when they (HCPs) ask? (about suicide ideations)
S: I think it is embarrassing. Is embarrassing somehow…That's the wrong word. Suicide is shameful. It is better that things are shameful than…(I guess he means "dead").
I: I understand. It is shameful (validation level 2).
S: It is like you have given up. And for me, it can be things I have done, which was also a bit strange when standing on a chair with a loop around your neck. It seemed like it had the opposite effect. It became… You woke up a little when you have not done it. It became..I don't know how to…
I: Can you describe what you mean about waking up? (probing)
S: You start to.. I am not that good with words, but it's like you start to grab hold on life again.
I: That's a good description.
S: It is hard to formulate tings
(We had a small break with small talks and continued to the next question: how healthcare professionals understood that he was in a suicidal crisis)

After the interview, the patient participants were asked how they experienced being interviewed. They described positive experiences through feeling empowered and being able to express themselves without fear, which could affect their treatment. Some described this was the first time they had talked about being suicidal with someone else and had a positive experience doing so.

During the HCPs' interviews, I needed to be aware of the fallacy of making assumptions and missing potentially relevant information [231]. I wanted to make their tacit knowledge explicit [191]. I endeavoured to get the participants to elaborate on topics, even though they assumed it was common knowledge. Some topics were difficult for the participants to elaborate on, particularly the

topic "learning." This reflects that learning might largely involve tacit knowledge which remains implicit when trying to recall behaviour and that the questions "how do you learn from good patient care" is too abstract to answer, given that it represents a topic that is rarely expressed verbally [232].

Focus group interviews

The focus group interviews with HCPs lasted for 90 minutes and were led by a moderator and a co-moderator. The participants were encouraged to comment on each other without permission from the moderator, and the moderator followed up on topics of interest and statements that needed to be clarified. The co-moderator took notes and followed up with questions at the end of the interview. The focus group interviews were audio-recorded and transcribed [208].

To establish a safe climate for sharing experiences, as a moderator, I aimed for a balance between focusing on the content and focusing on the process [208]. After each group, the moderator and co-moderator discussed the climate. They reviewed what was being said and evaluated the notes taken during the interview. To enhance trust and a good climate for collaboration and sharing in the groups, the moderator's role was divided between me and KR, assuming that having a moderator with a similar professional role could enhance trust. The co-moderator's role was divided between MA and me. KR moderated the two groups consisting of nurses, and I moderated the two groups consisting of psychologists and medical doctors (and the pilot group with nurses). All groups provided rich discussions, with both positive and negative experiences, which might reflect a trusting climate in the groups.

4.6   Data analysis

The phenomenological hermeneutical analysis was performed along two dimensions, consisting of high and low levels of abstraction and high and low levels of interpretation [205]. During the analysis of all three sub-studies, I started with being open and as true to the phenomenon of safe clinical practice as possible. At the early phase of analysis, I limited my interpretation, analysing the manifest content and then moving toward higher levels of abstraction and interpretations.

Sub-study I, which was a review started with pre-interpreted papers. Thus, the analysis started at a higher interpretation level compared to sub-studies II and III, which started close to the manifest content of interview data. Sub-study I had high levels of abstraction but kept the interpretation degree at a lower level compared to sub-studies II and III. In the last stages of analysis, constructs from resilient healthcare were used to give new dimensions to the formation of themes in sub-studies II and III, the whole being sensitive to the phenomenon of safe clinical practice and its meaning.

4.6.1 Thematic analysis

Thomas and Hardens' [206] thematic synthesis draws on established methods and techniques from thematic analysis to bring together and integrate findings of multiple qualitative studies [211]. The articles included in sub-study I were analysed using thematic synthesis, as proposed by Thomas and Harden [206], and thematic analysis, as proposed by Braun and Clark [211]. Thematic analysis was chosen due to its inductive and systematic approach towards a higher level of analysis [206].

Thomas and Harden [206] distinguished between the descriptive stage of analysis and the analytical stage of analysis. At the *descriptive stage*, it was of interest to organise the material close to its original findings. I extracted data from the included articles' result sections, organised them in a sheet and marked the meaning units line by line. All meaning units reflected the original text. They were transferred to a document and organised into codes[1]. A table was used to organise codes into descriptive themes. The process yielded 83 codes. Table 5 shows three of the codes with an example of extracted data organised under the descriptive theme "meeting someone who cares."

---

[1] There is an error in article I on page 4. Instead of "meaning units", this should have been formulated as "codes".

Table 5 Example of theme condensation in sub-study I.

Meaning units	Codes	Descriptive theme	Analytical theme
They scream for help, feel contained, restricted and isolated, and long to be connected. Enduring this strife, longing for goodness and consolation, they almost give up. Finally, after feeling so suppressed, they weep and wail with a care provider with whom they feel equal and who can participate, releasing the despair [233].	Feeling lonely and separated from the external world	Meeting someone who cares	Connection
The participants in this study reported how experiencing this sense that they actually did matter, that another human being was concerned about and interested in them, had a profound effect on them. Such feelings and experiences had a direct countering action on their perspectives and on the constricted thoughts of their suicidal ideation…. [75].	Realising that they actually matter reduces suicidal ideations		
Patients expressed they were just being stored away on the ward. Nurses had little personal contact with patients [124].	Feeling isolated and alone in the ward		

At the *analytical stage*, thematic mapping, as proposed by Braun and Clark [211], was used to separate codes and identify relationships between patients' needs, expectations, experiences, reported outcomes and the use of the term safety [211]. These analytical interpretations informed the description of the three analytical themes, e.g., the "connection" theme (Table 5) illustrated how connections with HCPs were vital for patient recovery (reported outcomes) and feelings of safety (use of the terms safety). This stage goes beyond the original content of the original studies and is the defining characteristic of the qualitative synthesis [210]. I organised the coding and theme development and discussed the material continually with KR and KAA. All three authors contributed to the analytical development of themes.

4.6.2   Qualitative content analysis

The data in sub-studies II and III were analysed with a phenomenological hermeneutic approach [191] using Graneheim and Lundman's qualitative content analysis [203, 205]. I applied inductive coding, moving systematically from the manifest content towards a higher level of abstraction and interpretation [205], as well as moving back and forth between the content and interpretation to elicit meaning [191].

The abstraction of data followed the same steps in sub-studies II and III:

1) The transcribed interviews were saved in three separated data-maps with the following domains: (1) patient interviews, (2) focus groups with HCPs, (3) individual interviews with HCPs. During transcription, I achieved a distance from the participants and focused my attention on what was being said. Doing this enabled me to reflect on my performance, proving feedback to improve my interviewing skills [212].

2) I read each interview transcript several times. Notes were taken during the first reading, attempting to gain an impression of what the participants expressed. In addition, some of the transcripts were read by KR and KAA, who created summaries that were shared and discussed with the authors to create the first impression of the material. Six anonymised transcripts from the patient interviews were discussed with a clinical supervisor in psychology who evaluated my approach to supporting the participants and my approach to opening/closing of the conversation. This is a central part of the hermeneutic circle; attempting to grasp the whole before working systematically with its parts. The process helped me be attentive to other parts of the text and open to meaning and essences [191].

3) I marked and condensed meaning units related to safe clinical practice across the entire dataset [205].

4) I generated codes close to the manifest content [205]. To maintain a focus towards the individual experiences and variability, the meaning units of each interview were condensed and coded separately before creating more general codes across the dataset. This step was followed for the patient interviews and the focus group interviews to enable each

interview to be seen as a whole before generating codes across the data. This facilitated sensitive openness toward nuances for each participant [191]. KR coded four HCPs' interviews independently to increase openness toward other interpretations of the data.

5) Colours were used to mark codes belonging to the same content area. The codes were sorted into separate sheets, mind maps and tables, which helped generate categories across the data set. The categories represented a thread through the codes.

6) The content areas were combined and abstracted into sub-themes and main themes. All authors reviewed the data files consisting of themes, categories, codes and condensed meaning units. The advisory panel gave feedback on drafts of the findings.

Table 6 shows an example of abstraction of data following steps 3-6 in sub-study II (patient experiences), displaying two of the categories belonging to the sub-theme "Sensibility towards deteriorations" along with codes and condensed meaning units.

Table 6 Example of abstraction of data in sub-study II.

Condensed meaning unit	Codes	Category	Sub theme	Theme
They read me before I have read the signals myself. They are professional and can see when the patient is unstable; I tried to commit suicide but was inhibited because they see and hear everything. I don't even get that far (Claus).	They read my body language and understand I am suicidal	Being present and vigilant	Sensibility towards deterioration	Being detected by mindful HCPs
The personnel put me in contact with the social worker the same day I lost my job. It took five minutes. I struggled then to see my future. It helped me see that I was not going to struggle economically and that I would get support and would manage to cope with it one my own (Nathan)	Finding a new path and plan	Changing my suicidal mind		

Sequential triangulation

In sub-study III, the datasets for the focus groups and the individual interviews were analysed independently as described in steps 1-6; first the focus groups, and then the individual interviews. Thereby, sequential triangulation was applied [220, 221] to develop common themes and main themes. The findings from both datasets, themes, subthemes and categories were put into templates. The integration constantly moved between parts and the whole: keeping track of the meaning units and the details as well as looking for main themes across the two datasets to provide a comprehensive whole.

Table 7 shows a part of a template that was used to integrate the findings from the focus groups and individual interviews. The template displays the sub-theme "trade-offs between under and over-protection," along with the categories and some examples of condensed meaning units.

Table 7 Extraction of template integrating data from focus groups and interviews

Integrated theme	Individualising the therapeutic milieu
Integrated sub-theme	Making trade-offs between under and over protection
Focus group interviews	The safe level of protection - We are considering the pros and cons. They need to be in control themselves and take responsibility for their lives. We sometimes need to ease up the protection and accept the risk with chronic suicidality (Group 2, psychologists and MDs). - With emotionally unstable patients. It feels wrong, no matter what I do (Group 3, psychologist and MDs). - Chronic suicidal patients regress in the ward. We need to get them out soon (Group 4, nurses). - If we take too much responsibility, they get worse. We have open doors, and we have to constantly test if the patient can take responsibility for their own life (group 5, nurses).
Individual interviews	Individualising the protection level - It's difficult to ease up the protection because the patients are different. I work differently with each individual. Some need to be held back, and we must gradually ease up the protection level, others need to be active, and we have to involve them in daily activities (psychologist). Fearing over-protection - I am afraid to overprotect and create chronic suicidality. We need to acknowledge the uncertainty and avoid giving high levels of protection (medical doctor). Fearing under-protection - Even if it can seem like a personality disorder, we need to treat it like axis 1 disorder, assume it's a state that will pass and contain all their pain. At the same time, it is problematic if we assume patients use suicidality as a mean to gain something else, and we do not treat the patient seriously (medical doctor). - The acute suicidal patient needs to be protected from everything and everybody, and we use constant observation and medications. We don't ease up the protection for the acutely suicidal patient over time, and they need to be in another state of mind and express their hope (nurse).

4.6.3 Synthesis of findings across sub-studies

In the synthesis of findings from sub-study I, II and III, I used abductive interpretation and moved from the inductive to the deductive stage [205]. The inductive stage consists of sorting themes and subthemes from the articles into common categories. The deductive stage implies using theoretical constructs to give meaning to the findings. Constructs drawn from resilient healthcare

(sensemaking, adaptation and trade-offs) were used to interpret the findings in light of the "complexity of safe clinical practice." The abductive interpretation provided new insights into constructs that are important for safe clinical practice, which are included in the discussion of thesis findings.

4.7 Ethical considerations

Research involving suicidal people follows a process of sensitive engagement and careful consideration and remediation of risk [13]. Ethical issues were considered throughout the research process, following the World Medical Associations' (WMA) Declaration of Helsinki [234].

Approval from the Regional Committees for Medical and Health Research Ethics Norway

In medical research, the research protocol must be approved by a research ethics committee before the study begins to ensure that the study follows ethical principles of honesty, integrity, fairness, concern and respect for others, among others [234]. This PhD-project was approved by the Western Regional Ethics Committee of Norway (REC 2016/34). Permission was granted by the current university hospital before the start of the studies (see Appendix 7).

Choosing a method with minimal harm

Medical research involving human subjects may only be conducted if the importance of the objective outweighs the risks and burdens to the research participants, and measures to minimise the risks must be implemented. Interviewing patients hospitalised during a suicidal crisis could provide knowledge and insight into a group of individuals who are currently underrepresented in medical research. According to WMA, vulnerable groups should be allowed to participate in research if the research is responsive to the health needs or priorities of this group, and they receive specifically considered protection. As patients at risk of suicide present a vulnerable group, multiple considerations were taken into account when designing the current study in a manner that minimised harm to the participants [234].

Asking a population at risk about suicidal ideations is not associated with increases in suicidal ideation, as such conversation with suicidal patients does not by itself induce harm [66]. However, it is a sensitive topic, which might be distressing. For that reason, I aimed to ensure that participants felt safe and secure during the interview and that they did not experience added distress [13]. The interview method has so far produced limited, but valuable knowledge about suicidal patients' experiences with inpatient care [235]. Although focus group interviews were considered appropriate for interviewing the HCPs, the topic was considered too sensitive for focus group interviews with patients [236]. Participant observation was rejected because it was not feasible to receive formal informed consent from every participant in the mental health wards in which the research would take place [237]. As such, the individual interview method was considered to minimize harm to the patients, in which me, as a researcher, could aim for establishing a safe climate for each participant [234].

Safety plan to minimise risk

All vulnerable groups and individuals should receive special protection [234]. A safety plan was established that outlined procedures for the interviewer, the patient and the clinician in case participants in the study required increased support or mental healthcare (see Appendix 8). Measures were taken to ensure that patients were interviewed while they were in the care of specialised HCPs, enabling those in need of additional support to be referred to the therapist in their hospital ward or outpatient unit. The hospital had full responsibility for managing the suicide risk according to ordinary established procedures. The interviews were performed a few days before discharge. The timing of the interviews was determined in collaboration with participants and their therapists to ensure that the participants were sufficiently stable to engage in the interview without acute suicidal ideations. No patients needed additional support after the interviews. However, one participant told me he was worried that he would have no support system or follow-up after discharge. I obtained permission from the participant to inform his clinician about this issue.

Voluntary and informed consent to participate

All participants, both patients and HCPs, provided voluntary informed consent to participate in the study (see Appendix 9). Only patients whom their clinicians deemed capable of giving informed consent to participate were included in the study. Patients who were unable to provide consent were excluded, which included patients presenting severe psychotic symptoms, severe cognitive deficits or ongoing symptoms with high suicide risk. To ensure that the participants understood the informed consent, they were given information, in both oral and written form, about the study aim, the methods employed, the right to refuse to participate and to withdraw consent, in line with the WMA principles [234]. Information was given to patient-participants twice: a few days in advance by the HCP who recruited them and again before the interviews.

Privacy

The precaution was taken to protect the privacy of the participants and the confidentiality of their personal information [234]. The audio recordings of the interviews were transcribed and unidentified. The consent forms were kept stored in a locked cabinet. Identifiable information (real names and the audio records) were stored digitally in a password locked area separately from the transcripts. The same procedures were followed for both patients and HCPs who participated in the project. To ensure privacy, I transcribed the patient interviews myself. The focus group interviews with HCPs were transcribed by MA and me. A transcription service transcribed individual interviews with HCPs. A non-disclosure contract was signed with the transcription service. The audio records did not contain the names of the participants.

The patients were informed that their clinician (and in some cases, also some nurses at the ward) knew about their participation for safety reasons. Still, they were assured that the information they provided would not be passed on to their clinician or any other HCPs in the ward. They were guaranteed anonymity in the publications. Multiple wards were chosen to reduce the possibility that people with local knowledge about the study settings would recognise the participants. Additionally, HCPs were guaranteed anonymity in the publication (see Appendix 10).

Qualifications

According to WMA, research must only be conducted by individuals with the appropriate ethical and scientific education, training and qualifications [234]. Being a psychologist with experience and training in talking with patients during a suicidal crisis was considered an important ethical qualification in this research. In addition, this study was carefully supervised by KAA, KR and FAW, who have appropriate scientific education for conducting healthcare research. Ethical dilemmas raised during data collection were discussed and solved in collaboration with KR and KAA. Additionally, I followed 24 hours of supervision with a psychologist specialising in adult mental healthcare. Different topics related to the psychologist's role during the patient interviews were discussed, e.g., ensuring a trusting climate, support and validation.

Adjustments to the recruitment procedures

Adjustments needed to be done during data collection to ensure ethical principles. All changes in recruitment procedures were approved by the Regional Ethics Committee of Norway (REC). One of the participants wanted to be included in the study and expressed feeling unsafe in the ward. I considered it important to give this patient a voice. Approval was given by the REC to interview the participant after discharge while being in treatment at the out-patient clinic where she felt safe. Although all patients were assessed to be stabilised, capable of giving informed consent, a 60-minute interview was not suitable for all. Four participants had a severe mental illness. Three of these interviews were kept short to minimise stress imposed by participating in the interview. In addition, one patient struggled with concentration and wanted more time to describe the experiences. These patients' voices are valuable, as little is known about safe clinical practice for individuals with severe mental illness, e.g., psychosis [235]. It is also a matter of dignity to design research so that each participant can contribute [234]. This was solved by getting approval from REC to conduct follow-up interviews with five of the participants. This helped them express themselves better and provide valuable information. The follow-up interview followed the same interview guide and safety procedures and were conducted within a week after the first interview.

4.8   Methodological considerations

The cornerstone for judging the overall quality of qualitative research hinges on three characteristics, *credibility*, *dependability* and *transferability* [218], as first described by Lincoln and Guba [238]. Malterud [226] argued that *reflexivity* is an equally important measure. Therefore, I use these four measures to discuss the strategies taken during the sub-studies to enhance research quality.

4.8.1 Credibility

Credibility refers to the confidence in the accuracy of the data and ensures that the research investigates what it intended to investigate [239].

In sub-study I, a team of researchers reduced the risk of data extraction bias, and a sensitive search strategy reduced the publication bias that can lead to relevant studies being missed [225].

Credibility was strengthened in sub-study II and III by including a sample, with sufficient information power [240], that covered significant variations and had relevant experiences with the phenomenon under study [205]. A sample size of 18 participants was considered adequate to ensure such information power when studying a heterogenic group of patients with suicidal behaviour [240]. A sample size of 18 and 25 HCPs was considered adequate to ensure variability across care settings (locked/open wards), diverse specialities (psychologist, nurses, medical doctors), gender, experience, expertise and mental health diagnosis. The sample size was also considered adequate due to the broad study aim, embracing multiple approaches to safe clinical practice [240].

During the HCPs interviews, adequate information power was achieved earlier than expected. During the patient interviews, each interview provided me with new detailed nuances. Nevertheless, I assumed that increasing the patient sample would not further increase the information power. Rather, it reflects that the phenomenon studied, that is, the complexity of safe clinical practice, is rich and varies from the patients' perspective.

Testing explanations empirically enhances credibility [218]. The developed analytical themes were regularly discussed by the research team and in meetings with a qualitative methods group at the hospital to ensure reflexive feedback and credibility of the themes [191]. I also collected input from the advisory panel and presented the results to research colleagues and HCPs on multiple occasions. In this sense, the findings referred back to the context in which they were collected, which enhances credibility through member reflections [228].

Triangulation of data sources (diverse professional groups), methods (focus groups and individual interviews) and the use of several researchers enhanced the credibility of sub-studies II and III [228]. The reality of clinical practice is different from how patients and professionals describe it in interviews [241]. Triangulation of participant observation and interviews could have further strengthened credibility. However, the method was rejected as I was an "insider" that is, a member of the organisation as well as a researcher. Insider participant observation is considered a challenging approach to qualitative studies. Being an insider threatens credibility in that an insider can overlook routine behaviour and assume knowing the participants' views because [242]. I, therefore, considered myself too biased to observe and too close to see the phenomenon in which I had been immersed during my years of clinical work. I could achieve better distance and reflexivity through the interview method, where I could use the time to reflect and systemise the data.

4.8.2 Dependability

Dependability in qualitative research is related to the stability of data over time and conditions [239]. Dependability is demonstrated in the thesis and sub-studies by providing clear, detailed descriptions of all procedures and methods and providing transparency through the published protocol [199]. This allows for appraisal without necessarily aiming to repeat the same results [239].

4.8.3 Transferability

Transferability refers to whether the findings can be transferred to other settings, context or groups [239].

The case study consists of qualitative sub-studies that produce culturally situated knowledge which cannot be generalised to all inpatient practice settings [228]. Transferability is achieved when the reader becomes familiar with the situation. Through providing the reader with rich descriptions in sub-studies I-III, the reader can decide whether the findings are transferable to their context, which can then provide new insight [228].

The qualitative synthesis in sub-study I provides aggregated knowledge which can be generalised beyond individual qualitative studies at a theoretical level and used to achieve a deeper conceptual insight [243]. Although qualitative synthesis cannot offer prescriptive rules for practice, it can inform professional judgement [210].

4.8.4 Reflexivity

The epistemological viewpoint taken in this thesis implies that the researcher is involved in all stages of the research through the hermeneutic interpretations [191]. This does not mean that because of involvement, the researcher is no longer objective and the results are distorted [231]. It means that reflexivity regarding the researcher's role is needed. Reflexivity helps researchers maintain a clearer idea of their role [226]. Reflexivity was strengthened during this thesis through the sharing of the researchers' backgrounds, pre-concepts and pre-understandings [226].

Furthermore, reflexivity was strengthened by allowing interpretations to be contested [244]. All sub-studies were conducted by multiple researchers with different ways of approaching the same subject. This allowed statements to be supplemented and contested and increased the understanding of the complex phenomenon studied. Several researchers were involved in reading transcripts and reviewing analytical themes. Sharing and discussing material improved reflexivity and attention to other details and nuances of the material [226].

Being aware of the role conflict and the relationship with the participants are of importance when studying and working with people you know [244]. Reflexivity is strengthened in this thesis through constant reflections on my role as a researcher [231]. As a researcher, I was affiliated with the current university hospital; however, as a previous practitioner at the hospital, I was in

a state of "in-between-ness." As a practitioner, I was actively engaged in the organisation and its individuals, but as a researcher, I needed to stand back and reflect on the evidence.

I could not escape from the fact that wherever I moved, I had staff members with whom I was familiar, and with some, I had close relationships. Having close relationships with the staff was advantageous, such as getting access to the respective wards. Being an insider also gave me access to be present during data collection, which gave me valuable information about the climate at each ward and movements in the organisation [242]. However, I did not want to be in a position where I had power or authority over the staff or the patients, which would have affected the data collection negatively [245]. Unequal relationships might affect the participants' behaviour, encouraging them to behave in a way they would normally not behave because of a fear of reprisals for the information they provide [244].

Consequently, I was not a member of the healthcare teams and did not serve as a HCPs in the respective wards. I made my role clear that I was a PhD student doing research and that I aimed to describe and understand the practice, not to evaluate their performance. I did not include participants with whom I had close relationships during the sub-study. For the same reason, I excluded patients I had treated as a therapist.

I conducted pilot interviews at the hospital ward, where I had recently been employed as a psychologist. I had no close relationships with the participants, but three of the participants in the focus group pilot interview had been my former colleagues. Interestingly, this particular pilot group provided more emotional loaded content compared to the other focus groups. This group difference can be explained by multiple factors, for example, a higher level of homogeneity as they were all recruited from one ward, a pre-established trust with me in the moderator role [208], or seeing their participation as an opportunity for venting or debriefing [244]. Because they shared their emotional experiences, I did not consider this as a credible threat but as an opportunity to access the field. As such, I included the pilot interview in the data material. Lastly, I expressed a clear standpoint not to distort the data [231]. I did not participate in the ongoing debate about changing the routines on suicide risk assessments at a local level or in the media at a national level.

5 Findings

This chapter presents the findings from sub-studies I-III and relates them to the objectives and the research questions of the thesis. It also synthesises the findings across the three sub-studies.

5.1 Suicidal patients' experiences of safety in the literature (sub-study I).

Berg, S.H., Rørtveit, K. & Aase, K. (2017) Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies. *BMC Health Services Research*, 17

The objective of sub-study I was to synthesise and describe the qualitative literature regarding suicidal patients′ experiences of safety during hospitalisation in mental healthcare. In the synthesised literature, three main themes described suicidal patients' experiences of safety.

The *connection* theme described the importance of patients' connection with HCPs in feeling safe. Patients' connections with HCPs enabled them to feel valued as human beings by "meeting someone who cares," understood by "receiving confirmation of feelings," and respected and trusted by "being acknowledged as a human being."

The *protection* theme described the importance of feeling safe from themselves and their invasive suicidal impulses through "being protected from death" and through "receiving support from the observers" during constant observation.

The *control* theme described the importance of restabilising the feeling of control to feel safe over their lives. This feeling of control was gained through "gaining insight," "coping with difficulties" and attaining discharge readiness."

Sub-study I addressed the research question, *"How can we describe suicidal patients' experiences regarding safety during psychiatric in-patient care?"* Connection, protection and control are basic psychological needs that were essential for suicidal patients' feeling of safety during inpatient care. However, feeling safe was not merely a subjective experience, as it was also highly related

to the patients' suicidal behaviour and the recovery from the suicidal crisis. None of the included studies in sub-study I were specifically designed to explore suicidal patients' experiences of safe clinical practice, and no studies of suicidal patients' experiences with multiple safety interventions, i.e., suicide risk assessments, safety plan and being protected from lethal means, were identified.

5.2 Suicidal patients' experiences of safe clinical practice (sub-study II)

Berg, S.H., Rørtveit, K., Walby, F.A. & Aase, K. (2020) Safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis: a qualitative study of patient experiences. *Submitted to BMJ Open.*

The objective of sub-study II was to explore suicidal patients' experiences of safe clinical practice during hospitalisation in mental healthcare. Three main themes described their experiences.

Being detected by mindful HCPs indicated that some patients struggle to communicate suicidal ideations and need HCPs who are sensitive to deterioration. These patients disclosed that HCPs who interpreted these patients' spoken words, read their body language and signs of instability and showed genuine interest in them as a person saved them from emerging suicide attempt during inpatient care. Safe clinical practice was experienced when they developed trusted and familiar relationships with HCPs who were able to connect with them and understand them during times of deterioration. When trusted HCPs were unavailable, other patients in wards detected patients' deteriorations. However, this made them feel unsafe.

Receiving tailor-made treatment described a rich variability in the experiences of successful treatment paths. Safe clinical practice was highly dependent on receiving treatment that efficiently relieved their emotional pressure. Addressing the underlying issues and mental health problems was vital for re-establishing a sense of control. Being discharged without addressing underlying issues made patients feel unsafe and at risk to themselves. Patients had positive experiences of being assessed for suicide risk when they were approached with

a collaborative dialogue in which HCPs validated their feelings to ensure that they felt understood.

Being protected by adaptive practice described patients' experiences of being protected from suicidal impulses. Their suicidal behaviour fluctuated, and the need for protection varied between the participants. Safe clinical practice was experienced as a balance between withdrawing from and mastering the outside world, internal and external control and closeness and distance during observation.

Sub-study II addressed the research question, "*How do suicidal patients experience safe clinical practice during hospitalisation in mental health wards?*" The study found that patients experienced safe clinical practice in mental health wards when they interacted with mindful HCPs, received tailored treatment and felt protected by an adaptive practice.

5.3   HCPs' adaptive capacities for safe clinical practice (sub-study III)

Berg, S.H., Rørtveit, K. Walby, F.A. & Aase, K (2020). Adaptive capacities for safe clinical practice for patients hospitalised during a suicidal crisis: a qualitative study. *BMC Psychiatry. 20 (1): 316*

The objective of sub-study III was to explore HCPs' experiences with safe clinical practice for patients hospitalised during a suicidal crisis. Three themes, conceptualised as adaptive capacities for safe clinical practice, described their experiences.

Using expertise to make sense of suicidal behaviour described how detecting suicidal behaviour is a complex decision-making process. HCPs were setting the risk assessment checklist and forms aside to prioritise trust and collaboration with patients. Clinical decision-making regarding suicide risk was made under high uncertainty by making a judgement based on more than patients' spoken words. HCPs were improving their understanding by seeking others' perspectives through a collaborative sensemaking process involving the healthcare team and the patient.

Individualising the therapeutic milieu described how HCPs addressed the diversity of patients with suicidal behaviour. Safe clinical practice was enacted by adjusting observations, making trade-offs between under- and over-protection and creating individual clinical pathways.

Managing uncertainty described HCPs' need to deal with personal uncertainty as a team by building mutual collegial trust and support and creating shared understanding to provide safe clinical practice for the suicidal patient.

This sub-study addressed the research question, *"How can we describe the adaptive capacities that HCPs use to ensure safe clinical practice for patients hospitalised during a suicidal crisis?"* The study revealed that HCPs viewed the safe clinical practice as consisting of complex practices with diverse patient needs with which they had to deal daily under high uncertainty. Using expertise to make sense of suicidal behaviour, individualising the therapeutic milieu and dealing with uncertainty were capacities that they used to adapt to challenges and changes in safe clinical practice. Sub-study III found that ward systems ensuring collegial trust and support were needed to support shared understanding and collaborative sensemaking.

5.4   Synthesising the findings across sub-studies

Through synthesising the perspectives of patients and HCPs, the findings revealed four themes that led to a new understanding of the complexity involved in safe clinical practice. The objective was to synthesise the characteristics of the complexity of safe clinical practice for patients hospitalised during a suicidal crisis.

The four common themes that emerged included collaborative detection, adaptive protection, individualised control and systems of trust. The synthesis was informed by theoretical constructs as applied in resilient healthcare literature. Table 8 gives an overview of the synthesis with common themes and respective sub-study findings.

Table 8 Synthesis of findings across sub-study I, II and III with common themes.

Common themes	Sub-study I	Sub-study II	Sub-study III
Collaborative detection	(no findings)	Being detected by mindful HCPs Struggle to communicate suicidal ideations Sensitivity toward deterioration Collaborative dialogue	Using expertise to make sense of suicidal behaviour Setting aside the forms and checklists to prioritise trust Making judgement based on more than patients' spoken words Improving understanding by seeking others' perspectives Creating a shared understanding
Adaptive protection	Protection Being protected from death Receiving support from the observers	Being protected by adaptive practice Closeness and distance during observation Withdrawing from and mastering the outside world	Making trade-offs between under- and over-protection Adjusting observation
Individualised control	Control Gaining insight Coping with difficulties and symptoms Attaining discharge readiness	Receiving tailor-made treatment Relieved emotional pressure Internal and external control	Individualising the therapeutic milieu Creating individual clinical pathways
Systems of trust	Connection Meeting someone who cares Receiving a confirmation of feelings Being acknowledged as a human being	Understood in trusted and familiar relationships Relieved emotional pressure Collaborative dialogue Internal and external control	Setting aside the forms and checklists to prioritise trust Building mutual collegial trust and support

Collaborative detection

Collaborative detection involves both verbal and non-verbal interaction between the patient and HCPs in the detection of suicidal deteriorations. Collaborative detection also involves collaboration between HCPs to make sense of suicidal deteriorations.

Both patients and HCPs emphasised the collaborative dialogue during the suicide risk assessment and when talking about suicide as important for safe clinical practice (II, III). In the collaborative dialogue, HCPs confirmed patients' feelings and asked about suicidal ideations as part of a natural dialogue (II). This was mirrored by experienced HCPs who put aside the forms and to prioritised trust (III). HCPs believed that building trust and giving emotional support was important to facilitate honest communication of suicidal thoughts (III), as patients struggled to communicate suicidal ideations (II). Some HCPs reflected on their thoughts about the patients' suicide risk together with the patients to improve their understanding of the individuals' suicide risk (III).

Not all patients were able to participate in the collaborative dialogue on suicidal ideations; instead, mindful HCPs sensitive to their deteriorations detected such ideations (II). HCPs used their expertise to make sense of suicidal behaviour (III). Through having a sense of connection with the patient, experienced HCPs used their gut-feeling to interpret non-verbal behaviour, the patients' spoken words and changes in mental status. They were making judgements beyond the spoken words (III). Gut feeling was considered as a source of information, along with multiple other sources (III). Furthermore, HCPs also improved their understanding by seeking other colleagues' perspectives. This was emphasised when deciding on a safe level of protection during acute phases in which shared understanding between the HCPs at the ward was deemed essential (III).

Both sub-study II and III found that detection was not merely confined to a formal suicide risk assessment conducted in consultations with the psychologists or medical doctors. Nurses were mindful and showed sensitivity to patients' deteriorating mental states, which allowed them to detect acute

suicidal behaviour in the wards through knowing the patient and developing trusting bonds between HCPs and the patient.

Sub-study I did not reveal any current literature describing patient experiences related to collaborative detection.

Adaptive protection

Adaptive protection describes the dynamic relationship between HCPs and patients during suicidal impulses in terms of adaptations and trade-offs. The safe level of protection is then a matter of what works for whom, when and how.

Sub-study I revealed the importance of being protected from death and receiving support from the HCPs during constant observation. These findings were further nuanced in sub-studies II and III, which found that the suicidal patients' need for support during constant observation varied depending on their ability to establish relational contact. Furthermore, being protected from stressors in the outside world through withdrawing to a hospital ward was constantly balanced by their need to master the stressors (II). Patients addressed the importance of having a balance between closeness and distance during observation (II). This was mirrored by the HCPs who constantly adjusted their observation (III).

In addition, sub-study III revealed that finding a safe level of protection was a difficult task. HCP made trade-offs between under and over-protection (II, III).

Individualised control

Individualised control describes the adaptation of treatment and safety procedures that are made to meet individual patients' needs.

Sub-study I found that regaining a sense of control made suicidal patients feel safe from themselves and their lives through gaining insight, coping with underlying difficulties and symptoms, and being prepared for discharge (I). The findings were further nuanced in sub-study II and III in which HCP "created individual clinical pathways" (III) or "tailor-made treatment" (II) to address each patient's underlying causes and stressors. Through this approach, patients experienced relieved emotional pressure (II). Furthermore, suicidal patients

needed to feel that they have either internal or external control, which varied among patients and changed during the hospitalisation (II).

However, while HCPs individualised the therapeutic milieu, this was not always the case for safety measures (II, III). Suicide risk assessment was not always experienced as individualised by the patients, thus losing its function to be therapeutically beneficial and evoked feelings of shame and hopelessness (II). The safety plan was often hastily created without patient engagement, thus becoming inadequate as a safety tool used by the patients (III).

Systems of trust

Systems of trust describe the function of trust as a precondition for safe clinical practice for both patients and HCPs.

Trust is a precondition for collaborative detection as trust is essential to share and contain vulnerability. Sub-study II found that the participants sought trusted and familiar relationships in the healthcare system because such relationships gave them predictability in terms of how their suicidal behaviour would be understood and treated. HCPs prioritised trust during suicide risk assessment, as honest communication of suicide ideations was dependent on patients' trust in them (III). Furthermore, HCPs experienced mutual collegial trust and support were necessary to manage uncertainty in clinical practice (III). HCPs adapted and made informal networks in response to the lack of formal support systems. Likewise, patients also depended on informal support, as some were saved from suicide attempts by fellow patients who detected her behaviour when trusted HCPs were unavailable (II).

Furthermore, trust is a precondition for adaptive protection and individualised control, as patients trust HCPs to act in accordance with their interest. Sub-study I found that the connection patients experience in encounters with HCPs affects their feelings of safety and their suicidal behaviour. Suicidal patients expect to meet someone who cares, confirms their feelings and acknowledges them as human beings. In sub-studies II and III, the connection did not emerge as a separate theme; it was rather integrated as a part of all topics related to safe clinical practice. Trust is relevant to findings involving patients in vulnerable situations: being externally controlled, talking about suicide in a collaborative dialogue and relieving emotional pressure.

6   Discussion

Through looking at suicidal patients' and HCPs' experiences, the safe clinical practice involves a set of complex characteristics: collaborative detection, adaptive protection and individualised control, all of which depend on established systems of trust (Table 8). These complex characteristics demonstrate elements of a complex adaptive system [29, 30]. The synthesised findings from the three sub-studies are discussed below in light of existing evidence and relevant theoretical constructs drawn from the resilient healthcare literature (i.e., sensemaking, adaptations, and trade-offs).

6.1   Collaborative detection

Collaborative detection emphasises the interaction between the patient and HCPs, as well as among HCPs, in the detection of suicidal deteriorations. Safe clinical practice for patients hospitalised during a suicidal crisis is situated in an ill-structured, dynamic and changing environment which involves high complexity and uncertainty [170, 246, 247]. Making sense of suicidal behaviour requires complex processes involving sensemaking that are necessary to respond to high levels of uncertainty [165, 169]. Furthermore, making sense of suicidal behaviour involves trade-offs and adaptions to ensure the therapeutic relationships is preserved [30, 189].

Collaboration increases HCPs' situational awareness

The findings correspond with previous studies suggesting that caring for suicidal patients involves dealing with uncertainty [73, 76, 248] and expand the current knowledge by showing that making sense of suicidal behaviour involves comprehending information "beyond the spoken words," using intuition along with multiple sources of information [83, 187]. To anticipate suicides, adapt and respond to deteriorations in the wards, HCPs apply collaborative strategies to improve their situational awareness [165, 169]. Thus, the findings emphasise that making sense of suicidal behaviour in hospital wards is a collaborative effort that is not dependent merely on individual HCPs' sensemaking [167, 171]. Based on patients' and colleagues' feedback, HCPs gain a fuller meaning of the information they obtain and increase their shared

situational awareness [170, 172]. Feedback from others, and collaborative sensemaking is salient to create shared mental models and a sense of what is going on [167, 171, 249, 250].

This is the first study to address the sensemaking process during a suicide risk assessment. This perspective is of importance when considering approaches to improve situational awareness during the suicide risk assessment. It is, however, important to note that sensemaking is not about finding a correct model to predict suicidal patients' behaviour. Rather, it is about supporting strategies that create a more comprehensible understanding that enables action [251]. This thesis supports that these strategies should be directed towards collaborative approaches.

Anticipating suicidal threats

A set of conditions affected HCPs' "gut feeling", making them worry that the patient was at immediate risk of suicide. One example is the experienced nurse who explained how she had this "gut feeling" after leaving work, which made her call the ward and increase the support and attention to the patient. Later, the patient told her that she was suicidal at that moment. It might have saved the patient's life. The findings are in line with previous findings studies, documenting that HCPs translate non-verbal cues into a "gut feeling" during suicide risk assessments [73, 83], and use their intuition as a strategy in suicide assessment [73, 187, 252].

Furthermore, the findings reflect the importance of making sense of suicidal behaviour beyond the formal consultation setting. In a complex adaptive system, threats are not confined to time and place or one professional group; it goes beyond the formal consultation setting and is enacted anywhere in the ward milieu, and all HCPs need to be constantly alert to risk signals [156]. In line with previous studies this thesis finds that HCPs use experience and emotionally based competence to pick up cues to attempt to anticipate suicidal acts [73, 253], a process strengthened by establishing connection and trust with the patient [73, 112]. This thesis adds to the knowledge that HCPs are mindful and engage in trying to uncover the suicidal deteriorations of patients who struggle to verbalise their suicidal thoughts.

Nevertheless, little is known about the use of intuition to improve sensemaking in suicide risk assessment. Anticipatory thinking is according to Endsley [170] a hallmark of the highest level of situational awareness, as is considered one component of the sensemaking process of expert decision-makers [162, 163]. In accordance with Endsley [170], this thesis suggests that intuition is involved when experienced HCPs mentally imagine and project events into a possible future, which they use to anticipate immediate suicidal threats to be able to react in a proactive manner.

This implies that the "gut feeling" may be involved in developing a higher level of situational awareness during suicide risk assessment [163]. Furthermore, this thesis adds to the knowledge that intuition is not the sole source of information in an assessment; rather, it supplements multiple sources of context-specific and general information, which together improve situational awareness [163].

Factors affecting gut feeling or intuition varied across situations and patients. This is typical in a complex adaptive system. Due to the complex and dynamic nature of the risk, it is challenging to standardise or limit a set of cues to look for [156]. Consequently, to improve the anticipation of suicidal threats, the value of standardisation is limited. Instead, high levels of expertise and feedback/team activities enhance situational awareness of the HCPs to understand the cues of a suicidal threats [156, 179, 182].

Trade-offs to prioritise collaborative approaches to suicide risk assessment

This thesis supports that HCPs enact trade-offs to prioritise the therapeutic relationship during suicide risk assessment [189], demonstrating their use of adaptive capacities to avoid potentially disturbing the therapeutic relationship that could result from using a standardised form or checklist for risk assessment [29, 32-34].

Furthermore, they focus on both the individual risk factors and approaching the patients' feelings by understanding them as individuals [25, 189]. The approach taken corresponds to collaborative approaches to suicide risk assessment which have gained support [109, 254, 255]. For example, the intervention "Collaborative assessment and management of suicidality" (CAMS) that addresses both risks and the patient identified problems that lead to suicide is evolving evidence-based clinical approach [109, 254]. Patients have

emphasised the importance of trust and support to communicate their suicidal thoughts [100-102, 256]. The evidence for using scales or instruments in predicting suicidal behaviour is lacking [104, 105, 257]; nevertheless, this thesis supports that suicide risk assessment helps HCPs make sense of each patient's suicidal behaviour when conducted collaboratively.

Nonetheless, patients' experiences suggest that HCPs' approaches to suicide risk assessment vary. Some approaches to suicide risk assessment elicit negative patient experiences, and not all HCPs manage to integrate multiple goals in care. This may be related to patient factors, such as their ability to collaborate and verbalise their suicidal ideations due to severe mental illness [97, 98], shame and trust issues [100], or HCPs' expertise in establishing relationships and collaboration [17, 110]. Nevertheless, it may also be related to a lack of guidance on how to conduct a suicide risk assessment. At the time of data collection, clinical guidelines did not specify how the suicide risk assessment should be conducted collaboratively along with the gathering of risk information. Safe clinical practice depended on HCPs' own ability to adjust procedures and integrate multiple goals in care.

6.2 Adaptive protection

Adaptive protection emphasises that protection of suicidal behaviour is not a static but rather a non-linear, dynamic, and interacting practice, depending on adaptations to cope with variability in clinical practice, and trade-offs to cope with conflicting goals [29, 30, 189].

Sensitiveness towards the individual patient during the observation

Following the literature, this thesis highlights the importance of having experienced HCPs [258], fully therapeutically engaged with the patient [67, 112] who balance exerting control and building the therapeutic relationship during constant observation [84]. Likewise, the thesis highlights the importance of connection during observation while showing that the patients' ability to connect vary. Some patients are unable to communicate their needs, which demands HCPs to make sense of and tune into their way of feeling connected. HCPs do not observe the patients from a distance; they engage with them and adapt their approach, which is an example of adaptation to cope with variability

in practice [30]. The findings are in accordance with research that depicting prevention of suicides in constant observation as largely intertwined with connecting and regaining hope [74, 75, 112]. The finding supports that constant observation demands adaptive capacities from the individual HCPs and involves balancing between closeness and distance [29, 32-34]. Due to the non-linear characteristic of constant observation, this active-dynamic approach may be central to obtaining feedback from the patient and safe outcomes of observation [148, 155].

Trade-offs to cope with conflicting goals

In this thesis, trade-offs are enacted to cope with conflicting goals in safe clinical practice for patients during a suicidal crisis [189]. The findings add to the knowledge that trade-offs are not related merely to conflicting goals between external constraints and patient desires, as previously documented in community mental healthcare for suicidal patients [82]. Trade-offs are also related to clinical care at the patient level when making judgements about each patients' risk, benefits and clinical goals, as described by Wears et al. [189]. Goal conflicts create pressure [259], in this case, between preventing immediate harm and working toward long term health goals. Trying to solve goal conflicts through trade-offs is commonly reported to contribute to incidents [260] and increased cognitive demands on HCPs [261]. However, safe clinical practice for patients during a suicidal crisis cannot be ensured without trade-offs at the individual level, and it is not possible to eliminate uncertainty. Nevertheless, it is possible to reduce cognitive demands placed on HCPs through acknowledging the fact that deciding safe level of protection is a complex and difficult task, involving high uncertainty concerning when to sacrifice short-term goals (e.g., risk of suicidal behaviour) for long-term goals (e.g., empowering and increased sense of independence).

6.3 Individualised control

Individualised control emphasises that treatment is adapted to help the individual re-establish a sense of control, which can create a personal sense of safety for the suicidal patient. Suicidal behaviour is characterised by aetiological heterogeneity both in terms of presentation and treatment [12]. Adaptations ensure that care is individualised [30] by addressing underlying

issues and adapting treatment and protection toward varying needs for control. Individualised control ensure that suicidal patients experience good health in various phases of their suicidal crisis, and demonstrate how non-linearity characterises the complexity of the suicidal inpatient context [29, 30].

A personal sense of safety through addressing underlying issues

Individualised control highlights the fact that safe clinical practice for patients hospitalised during a suicidal crisis is related to re-establishing a sense of control. The psychological mechanism relates individualised control to safety through strengthening the patients' internal locus of control, as described by Rotter [262]. Internal locus of control strengthens the perception that one's environment, emotions and actions are under control [262]. Locus of control is relevant to safety, as it affects the perception of being responsible for one's safety and being able to prevent adverse events, as opposed to believing that their safety is outside their control [263, 264]. Furthermore, the locus of control is related to health behaviour. Studies have found a clear association between locus of control and suicidal behaviour [265, 266]. This thesis suggests that by adapting treatments toward the underlying issues of the suicidal crisis, whether this involves medications and physical protection to hamper psychotic symptoms or getting economic issues solved to build hope and relief from depression, HCPs may strengthen the individual patient's internal locus of control. Individualised control helps suicidal patients feel safe from self in the long term, making them feel that they can cope with their emotions and the difficulties in their environment without committing suicide.

A personal sense of safety through external control

Interestingly, a sense of safety is not always achieved through the patients' internal locus of control. In the acute phases of their suicidal crisis, some patients feel safe through having external control over their suicidal impulses. Physical protection relieves emotional pressure by knowing that they cannot harm themselves. The need for external control during acute phases of the suicidal crisis correspond was also mentioned in Fredriksen et al. [130] who found that patients with psychotic depression and suicidal behaviour reported finding refuge behind locked doors; thus, their suicide attempts had to be physically interrupted or prevented. However, this thesis implies that the need

for external control during a suicidal crisis is not merely confined to patients having a psychotic episode. Besides the study of Fredriksen et al. [130], studies of patients who benefit from being behind locked doors, and when and why that is the case, are lacking.

The finding supports a broader view of safety as something more than avoiding adverse events [25, 153], as also emphasised by other scholars. Plumb [21] argued that risk reduction should be seen as a by-product of therapeutic care, not the primary goal of care and Undrill [26] discussed that suicidal care is strongly related to the core tasks of mental healthcare, which is to address psychiatric risk through addressing the "manifestations of suffering." The findings also imply that therapeutic care is sometimes not possible without preventing suicides through physical protection. Our findings suggest that suicidal individuals' locus of control may vary between individuals and change during their hospitalisation, which are essential characteristics of the complexity of safe clinical practices for patients hospitalised during a suicidal crisis.

6.4   Systems of trust

Systems of trust emphasise that safe clinical practice is experienced when patients develop trust in the HCPs and the healthcare system, and HCPs have support to establish trusted relationships with the patients. Two characteristics make trust particularly necessary, vulnerability and uncertainty [267].

Systems of trust for the patients

When a patient trusts an HCP, the patient expects that the HCP will act in accordance with his or her interests [268]. This thesis found that feeling safe is experienced through the connection with HCPs; a phenomenon that is particularly related to interpersonal trust between patients and the HCPs who act in accordance with patients' interest. They are recovering from their suicidal crisis with the help of other persons [269]. When patients describe they feel safe in the personal relationship with the HCPs, it is particularly important to establish trust. Trust shows up in any interpersonal relationship, but also in non-interpersonal relationships, such as a social milieu [270]. In line with the findings of this thesis, a systematic review of trust in the patient-nurse

relationships revealed that patients expect the nurse to safeguard their interests and establish trust through providing predictability in treatment and empowerment, which allow them to feel safe, accepted and cared for [271].

Trust involves the acceptance of a vulnerable situation [268]. When suicidal patients reach out for help, it is a particularly vulnerable situation. They may have lost trust in themselves and depend on others. Suicidal patients give away some of their power to an HCP or a healthcare system and expect them to act in accordance with their interest and respond to their suffering and vulnerabilities. Consequently, the power imbalance between the suicidal patient and the healthcare provider is inevitable, even before the HCPs interacts with the patient.

The findings indicate that the organisation of the healthcare system in the context of mental health is a source of uncertainty for suicidal patients [267]. They are not always able to predict where they will be hospitalised or which HCP will be assigned to them when they go through the acute mental health ward. Patients who have experienced trust in the healthcare systems will naturally gravitate toward these places when seeking help in a suicidal crisis.

Furthermore, the findings indicate that in the face of uncertainty, some patients will be sensitive to cues of whether the HCPs or the healthcare system will act in their best interest [272]. When patients are admitted for the first time, they do not have any experiences with HCPs and are particularly sensitive to cues of trust. This is emphasised in the patients' experiences of different safety measures, such as barred windows, and walking through metal detections in sub-study II. In line with a systematic review of the literature patients experience disadvantages of locked doors because it reminds them of a prison and highlights the power of the HCPs, making them feel anxious and depressed [59]. This study adds to the knowledge that HCPs may alleviate these negative experiences for suicidal patients by explaining to them the rationale of such interventions. This helped them reduce uncertainty and build a sense of predictability that they were in a safe place, which is related to trusting that the healthcare system will act in their best interest [272].

This thesis study support the findings of Ganzini et al. [100] documenting that trust is essential when talking about suicide, and adds to the knowledge that

HCPs adjust to prioritise trust during risk assessment. As patients share their vulnerability, they are expecting the HCPs to contain their emotions and to show understanding and dignity. Without this emotional validation of feelings [229], patients are left with feelings of shame and may withdraw from seeking help.

Systems of trust for HCPs

Likewise, the finding suggests that HCPs experience uncertainty in clinical practice. They are also in a vulnerable situation [272], as they fear a patient dying from suicide in their work practice, and they fear being held responsible for it. The need for support when caring for suicidal patients was emphasised during the interviews. This thesis study furthermore revealed that although informal support is valuable, HCPs need to know they have support available, and thus they favour formal arenas for collegial trust and support to ensure they can keep working with suicidal patients. Such formal support ensures that HCPs meet regularly and share experiences. Doing so helps build trust gradually over time and allows shared experience to grow [273]. The findings correspond with studies documenting that nurses often call for more formal support [73, 274], supervision and training when caring for suicidal patients [76, 112]. However, their needs differ, while the experienced HCPs may feel supported through getting feedback that patients are on the right track, novices may need to be continually reassured that they have support available to contain their reactions.

This thesis found that adaptations in clinical practice are enacted in the form of emerging local interactions to create support systems. Safe clinical practice cannot rely solely on HCPs' capacity to adapt without formal support systems. As HCPs' ability to adapt vary, so do their level of vulnerability. Without reliable sources of trust, the system is brittle. HCPs' adaptive capacities may be stretched with work overload and threaten the adaptive capacity of the system [275-277]. Defensive practices may arise and disrupt the efforts to build trusting relationships with the patients, which could threaten safe clinical practice for patients [26].

Without formal support, HCPs may distance themselves from suicidal patients' emotions to protect themselves from emotional discomfort [71, 79, 278]. In line with Plumb's [21] study, this thesis found that without appropriate support that

could help HCPs embrace the uncertainty of working with suicidal patients, HCPs may attempt to efface uncertainty by turning to defensive practices based on fear to avoid blame and responsibility. These defensive practices may take time away from practising safe clinical practices, including establishing trust, which is crucial for suicidal patients' safety perceptions. Thus, safe clinical practice does not merely depend on strengthening the HCPs abilities to establish trusting relationships with the patients but also on having systems of trust, ensuring that HCPs have reliable support systems.

7 Conclusion

This thesis offers a deeper understanding of the complexity of safe clinical practices for patients hospitalised during a suicidal crisis by considering the experiences of patients and HCPs.

When describing suicidal patients' experiences, the safe clinical practice appears to be related to more than the absence of suicide risk and the need for physical protection. Safe clinical practice for the suicidal patient is highly dependent on patients' perceptions of their connections with HCPs, the fulfilment of their needs during care and their psychological safety. Furthermore, suicidal patients are multifaceted with fluctuating suicidal behaviour, which highlights the importance of embracing personalised activities for safe clinical practice. Patients experience safe clinical practice also when being detected by mindful HCPs, being protected by adaptive practice and receiving tailor-made treatment.

Based on HCPs' experiences, safe clinical practice depends on using expertise to make sense of suicidal behaviour, individualising the therapeutic milieu and managing uncertainty. These are examples of capacities that help HCPs adapt to challenges and changes in clinical care, and they are vital to the complex dynamic work practices involved in safe clinical practice for patients hospitalised during a suicidal crisis.

By looking across suicidal patients' and HCPs' experiences, the safe clinical practice involves a set of complex characteristics, such as collaborative detection, adaptive protection and individualised control, which all depend on having systems of trust. These complex characteristics demonstrate how non-linearity and uncertainty characterise the complexity of suicide prevention in mental health wards. Additionally, the complexity in safe clinical practice is characterised by establishing psychological and relational safety, which is only created through personalised and trusted relationships.

The inherent complexity of safe clinical practice for patients hospitalised during a suicidal crisis implies that there are unpredictable consequences of top-down safety interventions and that outcomes change over time and for each patient.

Thus, safe clinical practice cannot be ensured just by following standards; it also depends on adaptations.

To improve safe clinical practices, efforts should be made to embrace rather than efface variability in clinical care. This includes supporting adaptive capacities that enable HCPs to cope with challenges and changes in clinical care. Strategies should be directed toward strengthening expertise development, feedback systems, and systems ensuring support and predictability.

This PhD-thesis focuses on hospitalised patients who survived a suicidal crisis and safe clinical practices in mental health wards, as experienced by these patients and healthcare professionals. As such, the thesis' conclusions do not pertain to patients dying from suicide or patients who were not admitted to hospital wards during their suicidal crisis.

7.1 Implications for clinical practice

7.1.1 Strategies at the hospital management level

Strategies to improve clinical practice at the management level should be directed toward supporting adaptive capacities.

Training in suicide risk detection

Training directed toward suicide risk detection in hospital wards should focus on strengthening the expertise development of HCPs from novice to expert. Moving from relying on rules (checklists and forms) toward developing high situational awareness and integrating collaborative approaches along with risk assessment [182].

Although novice HCPs may benefit from having context-free rules specifying what to look for and what information to obtain, the novice HCPs should be guided in how to consider context sensitivity, patients' feelings and histories as well as individual risk factors. Moving towards a higher level of expertise, the novice HCPs also need to be guided in how to talk about suicide and how to collaborate and establish therapeutic alliances with diverse patients.

To develop expertise and higher levels of situational awareness, training needs to improve the comprehension and interpretation of the information obtained [170, 179]. HCPs need to be able to discuss their clinical judgement in everyday clinical practice with colleagues to increase their situational awareness [167, 171]. Training can benefit from using real-life examples of successful clinical decision making. Since obtaining feedback from the healthcare team is essential, training in suicide risk detection can benefit from multidisciplinary training involving HCPs who regularly interact as a team to establish a shared vision, values and mental models [173, 174].

Guideline development

Safe clinical practice for patients hospitalised during a suicidal crisis is characterised by uncertainty, dynamic interactions, and patient heterogeneity which demands high levels of sensitivity towards the context [32, 150, 151].

Clinical guidelines for suicide prevention in mental health wards should, therefore, to a lesser extent, simplify complexity. Clinical guidelines should be careful about reducing HCPs' ability to adapt to safe clinical practice, as these adaptations are sources of safety [33, 34, 148].

Nevertheless, guidance is needed for suicide prevention in hospital wards. Guidelines need to carefully balance general principles behind safety interventions with specific recommendations, as this might affect the context-sensitive adjustment to the individual patient. It is of importance to adjust practice toward the individual patient as well as include the main principles for suicide prevention in hospital wards.

Through making shared vision and principles behind safety interventions explicit, clinical guidelines for suicide prevention in mental health wards may support an integrated patient safety practice [145].

Feedback and support systems

In a complex adaptive system, it is impossible for the HCPs to fully anticipate the consequences of adjustments of procedures and trade-offs [148, 279]. Feedback systems are needed to acquire knowledge of how to adapt [155].

There is a need to create systems to provide feedback on safe clinical practice and to foster the confidence that colleagues will provide constructive support [148]. The ward needs various support systems, shared activities and spaces to reflect on scenarios from everyday clinical work.

Shared activities support the development repertoire of scenarios and shared mental models, and they may improve shared situational awareness and clinical judgements, regarding a safe level of protection [172]. These activities need to involve all professional groups engaged in clinical care. Examples of such activities are clinical group supervision, group debriefing after stressful incidents, case-specific reflections, daily patient reports, and training in shared therapeutic approaches.

Collect patient experiences

During this study, we have experienced that it was safe to ask suicidal patients about their perception of inpatient care under conditions where the patients can express themselves without fearing any consequences for their treatment. Suicidal patients provide valuable feedback on what makes them feel safe or unsafe, and they can identify conditions that may cause adverse events, which also corresponds to findings in other domains of healthcare [280]. Collecting patient feedback should be considered as an essential part of clinical practice.

7.1.2 Strategies for healthcare professionals

The relational component of patient safety is considered the most vital aspect of care from the suicidal patients' perspective, and HCPs can strengthen patients' feeling of safety through acknowledging them as human beings, confirm their feelings and ensure they meet someone who cares. Furthermore, feeling safe is also related to having a sense of control. HCPs may strengthen patients' feeling of safety through addressing underlying issues and mental illnesses during hospitalisation and adapting protection to meet each individual's needs.

More specifically, during suicide risk assessment, patients need to feel that they are understood as individuals and receive help to manage risk by relieving emotional pressure. Furthermore, protection is a matter of being sensitive to the

context. Safe clinical practice involves being watchful and sensitive to the patient's cues of deterioration.

During constant observation, it is important to tune into the patient's needs, engage with the patient and establish trusting bonds, approaching patients with dignity and hope along with constant physical presence. Protecting the patient from suicidal impulses should always go along with supporting the patient.

Patients may benefit from being supported and understanding the rationale behind locked doors, barred windows and elimination of lethal means. When suicidal patients give away their power to the HCPs or a healthcare system, they need to be assured that HCPs are acting in accordance with their interests.

7.2 Implications for further research

Including sensemaking in the conceptual development of resilience

Rea et al. [281] called for more empirical, real-life case studies, rather than studies verifying theoretical models, to move safety science forward [281]. This thesis is based on an empirical case study which has explored experiences of safe clinical practice using an inductive approach. Through the abductive approach, the synthesis of findings offered additional insights to inform the theory development.

Hollnagel [156] developed the four resilience potentials (anticipating, monitoring, responding, learning); however, as Anderson et al. [143] addressed, little research has examined how they relate to improving the quality and safety. While the four resilience potentials do not include sensemaking [156], this study implies that sensemaking should be considered a resilience potential in the conceptual development of resilience. This study demonstrated the use of sensemaking in dynamic work settings of a complex adaptive system in mental health. The study supports that, to know what to look for and how to respond, we must make sense of what is happening, in particular when working in ill-defined and unclear situations, as described by Klein [169].

This study was limited to studying sensemaking at the micro-level in the system. To improve the conceptual understanding of the role of sensemaking in resilience, future studies can focus on sensemaking at ward and hospital

management level and on the ways to support the sensemaking process at the micro-level in the system.

Understanding complexity in mental healthcare

To date, little is known about how to understand complexity in mental healthcare. In line with Ellis et al. [30], this thesis supports that adaptations, individualisations and the need for shared visions characterise complexity in mental healthcare, supporting the complex adaptive system perspective. Furthermore, this thesis adds that sensemaking and systems of trust are distinctive characteristics of complexity in safe clinical practice in mental healthcare. However, they may also relate to other healthcare settings.

Future research applying a resilient healthcare framework to study mental healthcare practices and processes may further explore

- HCPs' adjustment to patients' variable needs (observation study);
- the link between interpersonal trust, management, shared common ground and adaptive capacities; and
- the ways in which the mental healthcare organisation can facilitate sensemaking and successful adaptation during an acute crisis.

Using patient experiences as a source of knowledge about work-as-done

A distinction is often made between work-as-done and work-as-imagined in complex adaptive systems [154]. Nevertheless, little is known about patients as a source of knowledge of resilience in healthcare [36]. This thesis did not find a major contrast between what the patients' experienced as safe clinical practice and what HCPs aimed to achieve through their adaptations of safe work practice. However, patients provided new insight into how HCPs work practices affected them. As such, patients should be considered as a valid source of knowledge about work-as-done in healthcare.

Safety for suicidal patients

This study cannot provide evidence about the efficacy of interventions or safety measures. To study the efficacy of strengthening system performance in clinical practice for suicidal inpatients, future studies are needed to explore this topic

by focusing on expertise building strategies, expanding feedback and support systems and using patient experiences to improve safety.

More studies are needed on safe clinical practice at different system levels (e.g., management, primary care, outpatient care) as well as on the processes in safe clinical practice for suicidal inpatients, e.g., expert decision-making strategies, mental models used in suicide risk assessment and collaborative detection. Accordingly, these studies should explore differences between patients in their discussions of suicide and about adaptations during the conversation that could facilitate honest disclosure of suicide ideations and positive patient experiences. Increased insight about adaptations can be obtained by employing non-participant observation of HCP interactions and strategies.

8   References

1. Bowers, L., T. Banda, and H. Nijman, *Suicide inside: a systematic review of inpatient suicides.* J Nerv Ment Dis, 2010. **198**.
2. Nock, M.K., et al., *Mental disorders, comorbidity and suicidal behavior: results from the National Comorbidity Survey Replication.* Molecular psychiatry, 2010. **15**(8): p. 868-876.
3. World Health Organization, *Preventing Suicide: A global imperative*. 2014: Luxemburg
4. Large, M., et al., *Systematic review and meta-analysis of the clinical factors associated with the suicide of psychiatric in-patients.* Acta Psychiatr Scand, 2011. **124**(1): p. 18-29.
5. Appleby, L., *Suicide in psychiatric patients: Risk and prevention.* British Journal of Psychiatry, 1992. **161**: p. 749-758.
6. Hoertel, N., et al., *Mental disorders and risk of suicide attempt: a national prospective study.* Molecular psychiatry, 2015. **20**(6): p. 718-726.
7. Arsenault-Lapierre, G., C. Kim, and G. Turecki, *Psychiatric diagnoses in 3275 suicides: a meta-analysis.* BMC Psychiatry, 2004. **4**: p. 37.
8. Emanuel, L.L., et al. *Module 13a: Mental Health Care: Preventing Suicide and Self-Harm*. PSEP Patient Safety Education Program – Canada 2015 [cited 2015 18 Aug]; Available from: https://www.patientsafetyinstitute.ca/en/education/PatientSafetyEducationProgram/PatientSafetyEducationCurriculum/Documents/Module%2013a%20Preventing%20Suicide%20and%20Self-Harm.pdf.
9. Directorate of Health. *The Norwegian Patient Safety Programme: In Safe Hands*. 2011 [cited 2019 April]; Available from: https://www.pasientsikkerhetsprogrammet.no/om-oss/english/the-norwegian-patient-safety-programme-in-safe-hands.
10. The joint commision accreditation hospital. *National Patient Safety Goal on Suicide Prevention in Healthcare Settings*. 2014 [cited 2020 15 May]; Available from: https://www.jointcommission.org/resources/patient-safety-topics/suicide-prevention/.
11. The University of Manchester. *National Confidential Inquiry into Suicide and Safety in Mental Health*. [cited 2020 07 Jan]; Available from: https://www.research.manchester.ac.uk/portal/en/projects/national-

confidential-inquiry-into-suicide-and-safety-in-mental-health(788f9475-cadb-4697-bb82-817638044b7b).html.

12. Turecki, G. and D.A. Brent, *Suicide and suicidal behaviour.* The Lancet, 2016. **387**(10024): p. 1227-1239.

13. Lakeman, R. and M. Fitzgerald, *Ethical suicide research: a survey of researchers.* Int J Ment Health Nurs, 2009. **18**.

14. Zalsman, G., et al., *Suicide prevention strategies revisited: 10-year systematic review.* The Lancet Psychiatry, 2016. **3**(7): p. 646-659.

15. Large, M.M., et al., *Can we usefully stratify patients according to suicide risk?* BMJ, 2017. **359**: p. j4627.

16. Large, M., C. Ryan, and O. Nielssen, *The validity and utility of risk assessment for inpatient suicide.* Australasian Psychiatry, 2011. **19**(6): p. 507-12.

17. Wasserman, D., et al., *The European Psychiatric Association (EPA) guidance on suicide treatment and prevention.* European Psychiatry, 2012. **27**(2): p. 129-141.

18. Bernert, R., M. Hom, and L. Roberts, *A Review of Multidisciplinary Clinical Practice Guidelines in Suicide Prevention: Toward an Emerging Standard in Suicide Risk Assessment and Management, Training and Practice.* Academic Psychiatry, 2014. **38**(5): p. 585-592.

19. Brickell, T.A., et al., *Patient safety in mental health.* 2009, Canadian Patient Safety Institute and Ontario Hospital Association: Edmonton, Alberta.

20. Thibaut, B., et al., *Patient safety in inpatient mental health settings: a systematic review.* BMJ open, 2019. **9**(12).

21. Plumb, J., *Taming uncertainty? Performance, personalisation and practices of patient safety in an Australian mental health service (Doctoral dissertation). ,* in *Faculty of Medicine, Australian Institute of Health Innovation.* 2013, University of New South Wales: Australia

22. Curtis, S., et al., *Compassionate containment? Balancing technical safety and therapy in the design of psychiatric wards.* Social Science & Medicine, 2013. **97**: p. 201-209.

23. Hollnagel, E., *Barriers and accident prevention.* 2004, USA: Ashgate.

24. Lundberg, J., C. Rollenhagen, and E. Hollnagel, *What-you-look-for-is-what-you-find-The consequences of underlying accidents models in eight investigation manuals.* Safety science 2009. **47**: p. 1297-1311.

25. Hollnagel, E., *Safety-I and Safety-II: The Past and Future of Safety Management.* 2014, London: CRC Press

26.   Undrill, G., *The risks of risk assessment.* Advances in Psychiatric Treatment 2007. **13**(291-297).

27.   Vincent, C.A. and A. Coulter, *Patient safety: what about the patient?* . Qual Saf Health Care, 2002. **11**: p. 76-80.

28.   Hollnagel, E., J. Braithwaite, and R.L. Wears, *Preface: In the Need for Resilience in Health Care*, in *Resilient Health Care*, E. Hollnagel, J. Braithwaite, and R.L. Wears, Editors. 2013, Ashgate Studies in Resilience Engineering: England.

29.   Braithwaite, J., et al., *Health Care as a Complex Adaptive System*, in *Resilient Health Care* E. Hollnagel, J. Braithwaite, and R.L. Wears, Editors. 2013, Ashgate Studies in Resilience Engineering: England.

30.   Ellis, L.A., K. Churruca, and J. Braithwaite, *Mental health services conceptualised as complex adaptive systems: what can be learned?* International Journal of Mental Health Systems, 2017. **11**(1): p. 43.

31.   Wears, R.L., E. Hollnagel, and J. Braithwaite, *Preface*, in *Resilient health care volume 2: The resilience of everyday clinical work*, R.L. Wears, E. Hollnagel, and J. Braithwaite, Editors. 2015, Ashgate England.

32.   Holden, L.M., *Complex adaptive systems: concept analysis.* Journal of Advanced Nursing, 2005. **52**(6): p. 651-657.

33.   Wiig, S., et al., *Defining the boundaries and operational concepts of resilience in the resilience in healthcare research program.* BMC Health Services Research, 2020. **20**(1): p. 330.

34.   Anderson, J.E., et al., *Defining adaptive capacity in healthcare: A new framework for researching resilient performance.* Applied Ergonomics, 2020. **87**: p. 103111.

35.   Berg, S.H. and K. Aase, *Resilient Characteristics as Described in Empirical Studies on Health Care*, in *Exploring Resilience A Scientific Journey from Practice to Theory*. 2019, Springer Nature. p. 79-87.

36.   Berg, S.H., et al., *Methodological strategies in resilient health care studies: An integrative review.* Safety Science, 2018. **110**: p. 300-312.

37.   O'Hara, J.K., K. Aase, and J. Waring, *Scaffolding our systems? Patients and families 'reaching in'as a source of healthcare resilience*. 2019, BMJ Publishing Group Ltd. p. 3-6.

38.   Institute of Medicine Committe on Quality of Health Care in America, *Crossing the Quality Chasm: A New Health System for the 21st Century*. 2001, Washington DC: National Academy Press.

39.   Black, N. and C. Jenkinson, *Measuring patients' experiences and outcomes.* BMJ 2009. **339**: p. 339:b2495.

40. King, A., et al., *Time to listen: a review of methods to solicit patient reports of adverse events.* J Qual Saf Health Care, 2010. **19**.
41. Velpry, L., *The patient's view: Issues of theory and practice.* Culture, Medicine, and Psychiatry, 2008. **32**(2): p. 238-258.
42. Stenhouse, R.C., *Safe enough in here?: patients' expectations and experiences of feeling safe in an acute psychiatric inpatient ward.* J Clin Nurs, 2013. **22**: p. 21-22.
43. Thibeault, C.A., et al., *Understanding the milieu experiences of patients on an acute inpatient psychiatric unit.* Archives of psychiatric nursing, 2010. **24**(4): p. 216-226.
44. Hjelmeland, H. and B.L. Knizek, *Why we need qualitative research in suicidology.* Suicide Life Threat Behav, 2010. **40**(1): p. 74-80.
45. Delaney, K.R. and M.E. Johnson, *Inpatient psychiatric nursing: why safety must be the key deliverable.* Archives of Psychiatric Nursing, 2008. **22**(6): p. 386-388.
46. Jackson, S. and C. Stevenson, *What do people need psychiatric and mental health nurses for?* J Adv Nurs, 2000. **31**(2): p. 378-88.
47. Gilburt, H., D. Rose, and M. Slade, *The importance of relationships in mental health care: A qualitative study of service users' experiences of psychiatric hospital admission in the UK.* BMC Health Services Research, 2008. **8**(1): p. 92.
48. Muir-Cochrane, E., et al., *The inpatient psychiatric unit as both a safe and unsafe place: Implications for absconding.* International Journal of Mental Health Nursing, 2013. **22**(4): p. 304-312.
49. Hopkins, J.E., S.J. Loeb, and D.M. Fick, *Beyond satisfaction, what service users expect of inpatient mental health care: a literature review.* J Psychiatr Ment Health Nurs, 2009. **16**.
50. Van Der Merwe, M., et al., *Improving seclusion practice: implications of a review of staff and patient views.* Journal of Psychiatric & Mental Health Nursing, 2013. **20**(3): p. 203-215.
51. Lindgren, B.M., et al., *Patients' experiences of isolation in psychiatric inpatient care: Insights from a meta-ethnographic study.* International journal of mental health nursing, 2019. **28**(1): p. 7-21.
52. Jones, J., et al., *Psychiatric wards: places of safety?* J Psychiatr Ment Health Nurs, 2010. **17**(2): p. 124-30.
53. Wood, D. and N. Pistrang, *A safe place? Service users' experiences of an acute mental health ward.* J Community Appl Soc Psychol, 2004. **14**.
54. Quirk, A., P. Lelliott, and C. Seale, *Service users' strategies for managing risk in the volatile environment of an acute psychiatric ward.* Social Science & Medicine, 2004. **59**(12): p. 2573-2583.

55.   Quirk, A., P. Lelliott, and C. Seale, *Risk management by patients on psychiatric wards in London: An ethnographic study.* Health, Risk & Society, 2005. **7**(1): p. 85-91.

56.   Connell, J., A. O'Cathain, and J. Brazier, *Measuring quality of life in mental health: Are we asking the right questions?* Soc Sci Med, 2014. **120**: p. 12-20.

57.   Katsakou, C. and S. Priebe, *Patient's experiences of involuntary hospital admission and treatment: a review of qualitative studies.* Epidemiology and Psychiatric Sciences 2007. **16**: p. 172-178.

58.   Schröder, A., G. Ahlström, and B.W. Larsson, *Patients' perceptions of the concept of the quality of care in the psychiatric setting: a phenomenographic study.* Journal of clinical nursing, 2006. **15**(1): p. 93-102.

59.   Van Der Merwe, M., et al., *Locked doors in acute inpatient psychiatry: a literature review.* Journal of Psychiatric and Mental Health Nursing, 2009. **16**(3): p. 293-299.

60.   Kallert, T.W., M. Glöckner, and M. Schützwohl, *Involuntary vs. voluntary hospital admission.* European archives of psychiatry and clinical neuroscience, 2008. **258**(4): p. 195-209.

61.   Katsakou, C. and S. Priebe, *Outcomes of involuntary hospital admission–a review.* Acta Psychiatrica Scandinavica, 2006. **114**(4): p. 232-241.

62.   Aguilera-Serrano, C., et al., *Variables associated with the subjective experience of coercive measures in psychiatric inpatients: A systematic review.* The Canadian Journal of Psychiatry, 2018. **63**(2): p. 129-144.

63.   Strout, T.D., *Perspectives on the experience of being physically restrained: an integrative review of the qualitative literature.* Int J Ment Health Nurs, 2010. **19**(6): p. 416-427.

64.   Nelstrop, L., et al., *A systematic review of the safety and effectiveness of restraint and seclusion as interventions for the short-term management of violence in adult psychiatric inpatient settings and emergency departments.* Worldviews on Evidence-Based Nursing, 2006. **3**(1): p. 8-18.

65.   Sturrock, A., *Restraint in inpatient areas: the experience of service users.* Mental health service, 2010. **14**(3).

66.   Mathias, C.W., et al., *What's the Harm in Asking about Suicidal Ideation?* Suicide & life-threatening behavior, 2012. **42**(3): p. 341-351.

67. Cardell, R. and C.R. Pitula, *Suicidal inpatients' perceptions of therapeutic and nontherapeutic aspects of constant observation.* Psychiatric Services, 1999. **50**(8): p. 1066-1070.

68. Pitula, C.R. and R. Cardell, *Suicidal inpatients' experience of constant observation.* Psychiatric services 1996. **47**(6): p. 649-651.

69. Sale, E., et al., *Counseling on Access to Lethal Means (CALM): an evaluation of a suicide prevention means restriction training program for mental health providers.* Community mental health journal, 2018. **54**(3): p. 293-301.

70. Betz, M.E., et al., *Lethal means restriction for suicide prevention: beliefs and behaviors of emergency department providers.* Depression and anxiety, 2013. **30**(10): p. 1013-1020.

71. Wen-Chii, T., et al., *The inner door: toward an understanding of suicidal patients.* Journal of Clinical Nursing, 2010. **19**(9/10): p. 1396-1404.

72. Lees, D., N. Procter, and D. Fassett, *Therapeutic engagement between consumers in suicidal crisis and mental health nurses.* International Journal of Mental Health Nursing, 2014. **23**(4): p. 306-315.

73. Hagen, J., B.L. Knizek, and H. Hjelmeland, *Mental Health Nurses' Experiences of Caring for Suicidal Patients in Psychiatric Wards: An Emotional Endeavor.* Archives of Psychiatric Nursing, 2017. **31**(1): p. 31-37.

74. Cutcliffe, J.R., et al., *Reconnecting the person with humanity: how psychiatric nurses work with suicidal people.* Crisis, 2007. **28**(4): p. 207-10.

75. Cutcliffe, J.R., et al., *A modified grounded theory study of how psychiatric nurses work with suicidal people.* Int J Nurs Stud, 2006. **43**(7): p. 791-802.

76. Cutcliffe, J.R. and C. Stevenson, *Never the twain? Reconciling national suicide prevention strategies with the practice, educational, and policy needs of mental health nurses (Part two).* Mental health Nursing 2008. **17**(5): p. 351-362.

77. Mulder, R., *Problems with Suicide Risk Assessment.* Australian & New Zealand Journal of Psychiatry, 2011. **45**(8): p. 605-607.

78. Hoifodt, T. and A.-G. Talseth, *Dealing with suicidal patients - a challenging task: a qualitative study of young physicians' experiences.* BMC Medical Education, 2006. **6**(1): p. 44.

79. Carlen, P. and A. Bengtsson, *Suicidal patients as experienced by psychiatric nurses in inpatient care.* Int J Ment Health Nurs, 2007. **16**(4): p. 257-65.

80. Mulder, R., G. Newton-Howes, and J.W. Coid, *The futility of risk prediction in psychiatry.* The British Journal of Psychiatry, 2016. **209**(4): p. 271-272.

81. Hagen, J., H. Hjelmeland, and B.L. Knizek, *Connecting with suicidal patients in psychiatric wards: Therapist challenges.* Death Studies, 2017. **41**(6): p. 360-367.

82. Jun, G.T., et al. *Safety I and Safety II for Suicide Prevention – Lessons from How Things Go Wrong and How Things Go Right in Community-Based Mental Health Services.* in *Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018).* 2019. Cham: Springer International Publishing.

83. Waern, M., N. Kaiser, and E.S. Renberg, *Psychiatrists' experiences of suicide assessment.* BMC Psychiatry, 2016. **16**(1): p. 440.

84. Vraale, G.B. and E. Steen, *The dynamics between structure and flexibility in constant observation of psychiatric inpatients with suicidal ideation.* Journal of Psychiatric and Mental Health Nursing 2005. **12**(5): p. 513-518.

85. Leadholm, A.K., et al., *Risk factors for suicide among 34,671 patients with psychotic and non-psychotic severe depression.* Journal of Affective Disorders, 2014. **156**: p. 119-25.

86. Harris, E.C. and B. Barraclough, *Suicide as an outcome for mental disorders. A meta-analysis.* The British Journal of Psychiatry, 1997. **170**(3): p. 205-228.

87. Qin, P. and M. Nordentoft, *Suicide Risk in Relation to Psychiatric Hospitalization: Evidence Based on Longitudinal Registers.* Archives of General Psychiatry, 2005. **62**(4): p. 427-432.

88. Holma, K.M., et al., *Differences in incidence of suicide attempts between bipolar I and II disorders and major depressive disorder.* Bipolar Disorders, 2014. **16**(6): p. 652-661.

89. Zalpuri, I. and A.J. Rothschild, *Does psychosis increase the risk of suicide in patients with major depression? A systematic review.* J Affect Disord, 2016. **198**: p. 23-31.

90. Gournellis, R., et al., *Psychotic (delusional) depression and completed suicide: a systematic review and meta-analysis.* Annals of General Psychiatry, 2018. **17**(1): p. 39.

91. Caldieraro, M.A., et al., *Clinical correlates of acute bipolar depressive episode with psychosis.* Journal of affective disorders, 2017. **217**: p. 29-33.

92. Aaltonen, K.I., et al., *Risk factors for suicide in depression in Finland: first-hospitalized patients followed up to 24 years.* Acta Psychiatr Scand, 2018.

93. Belsher, B.E., et al., *Prediction Models for Suicide Attempts and Deaths: A Systematic Review and Simulation.* JAMA Psychiatry, 2019. **76**(6): p. 642-651.

94. Rudd, M.D., *Suicide warning signs in clinical practive.* Current Psychiatry Reports 2008. **10**: p. 87-90.

95. Franklin, J.C., et al., *Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research.* Psychol Bull, 2017. **143**(2): p. 187-232.

96. Deisenhammer, E.A., et al., *The duration of the suicidal process: how much time is left for intervention between consideration and accomplishment of a suicide attempt?* Journal of Clinical Psychiatry, 2009. **70**(1): p. 19.

97. Levi-Belz, Y., et al., *Psychosocial Factors Correlated with Undisclosed Suicide Attempts to Significant Others: Findings from the Adolescence SEYLE Study.* Suicide and Life-Threatening Behavior, 2019. **49**(3): p. 759-773.

98. Apter, A., et al., *Relationship between self-disclosure and serious suicidal behavior.* Comprehensive Psychiatry, 2001. **42**(1): p. 70-75.

99. Fredriksen, K.J., et al., *Psychotic depression and suicidal behavior.* Psychiatry, 2017. **80**(1): p. 17-29.

100. Ganzini, L., et al., *Trust is the Basis for Effective Suicide Risk Screening and Assessment in Veterans.* Journal of General Internal Medicine, 2013. **28**(9): p. 1215-1221.

101. Julie, E.R., et al., *Understanding Why Patients May Not Report Suicidal Ideation at a Health Care Visit Prior to a Suicide Attempt: A Qualitative Study.* Psychiatric Services, 2019. **70**(1): p. 40-45.

102. Ghio, L., et al., *Involving patients who attempt suicide in suicide prevention: a focus groups study.* Journal of Psychiatric and Mental Health Nursing, 2011. **18**(6): p. 510-518.

103. Hagen, J., B.L. Knizek, and H. Hjelmeland, *Former suicidal inpatients' experiences of treatment and care in psychiatric wards in Norway.* International journal of qualitative studies on health and well-being, 2018. **13**(1): p. 1461514.

104. Runeson, B., et al., *Instruments for the assessment of suicide risk: A systematic review evaluating the certainty of the evidence.* PloS one, 2017. **12**(7): p. e0180292.

105. Carter, G., et al., *Predicting suicidal behaviours using clinical instruments: systematic review and meta-analysis of positive predictive values for risk scales.* The British Journal of Psychiatry, 2017. **210**(6): p. 387-395.

106. Jones, R. and A. Avies-Jones, *An audit of the NICE self-harm guidelines at a local accident and emergency department in North Wales.* Accident & Emergency Nursing, 2007. **15**(4): p. 217-222.

107. Draper, B., *Isn't it a bit risky to dismiss suicide risk assessment?* Australian & New Zealand Journal of Psychiatry, 2012. **46**(4): p. 385-386.

108. Jacobs, D.G., M. Brewer, and M. Klein-Benheim, *Suicide assessment: an overview and recommended protocol*, in *The Harvard Medical School Guide to Suicide Assessment and Intervention*, D.G. Jacobs, Editor. 1999, Jossey-Bass Publishers: San Francisco, CA:.

109. Jobes, D.A., *The Collaborative Assessment and Management of Suicidality (CAMS): An Evolving Evidence-Based Clinical Approach to Suicidal Risk.* Suicide and Life-Threatening Behavior, 2012. **42**(6): p. 640-653.

110. Perlman, C.M., et al., *Suicide risk assessment guide: A Resource Guide for Canadian Health care Organizations.* 2011, Ontario Hospital Association and Canadian Patient Safety Institute Toronto, ON.

111. Mishara, B.L. and D.N. Weisstub, *Ethical and legal issues in suicide research.* International Journal of Law and Psychiatry, 2005. **28**(1): p. 23-41.

112. Cutcliffe, J.R. and P. Barker, *Considering the care of the suicidal client and the case for 'engagement and inspiring hope' or 'observations'.* Journal of Psychiatric & Mental Health Nursing, 2002. **9**(5): p. 611-621.

113. Jones, J., et al., *Psychiatric inpatients' experience of nursing observation.* Journal of psychosocial nursing and mental health services, 2000. **38**(12): p. 10-20.

114. O'Brien, L. and R. Cole, *Close-observation areas in acute psychiatric units: A literature review.* International Journal of Mental Health Nursing, 2003. **12**(3): p. 165-176.

115. Stanley, B., et al., *Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patients Treated in the Emergency Department.* JAMA Psychiatry, 2018. **75**(9): p. 894-900.

116. Stanley, B. and G.K. Brown, *Safety Planning Intervention: A Brief Intervention to Mitigate Suicide Risk.* Cognitive and Behavioral Practice, 2012. **19**(2): p. 256-264.

117. While, D., et al., *Implementation of mental health service recommendations in England and Wales and suicide rates, 1997–2006: a cross-sectional and before-and-after observational study.* The Lancet. **379**(9820): p. 1005-1012.

118.   Cutcliffe, J.R., et al., *Understanding the risks of recent discharge: the phenomenological experiences: trying to survive while living under the proverbial "Sword of Damocles".* Crisis, 2012b. **33**(5): p. 265-72.

119.   Cutcliffe, J.R., et al., *Understanding the risks of recent discharge: the phenomenological lived experiences--"existential angst at the prospect of discharge".* Crisis, 2012a. **33**(1): p. 21-9.

120.   Brown, G.K., et al., *Cognitive therapy for the prevention of suicide attempts: A randomized controlled trial.* JAMA, 2005. **294**(5): p. 563-570.

121.   Briggs, S., et al., *The effectiveness of psychoanalytic/psychodynamic psychotherapy for reducing suicide attempts and self-harm: systematic review and meta-analysis.* The British Journal of Psychiatry, 2019. **214**(6): p. 320-328.

122.   Linehan, M.M., et al., *Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder.* Arch Gen Psychiatry, 2006. **63**.

123.   Talseth, A.G., L. Jacobsson, and A. Norberg, *The meaning of suicidal psychiatric inpatients' experiences of being treated by physicians.* J Adv Nurs, 2001. **34**.

124.   Talseth, A.G., et al., *The meaning of suicidal psychiatric in-patients' experiences of being cared for by mental health nurses.* J Adv Nurs, 1999. **29**.

125.   Vatne, M. and D. Nåden, *Patients' experiences in the aftermath of suicidal crises.* J Nurs Ethics, 2014. **21**.

126.   Vatne, M. and D. Nåden, *Crucial resources to strengthen the desire to live: experiences of suicidal patients.* J Nurs Ethics, 2016. **23**.

127.   Kapur, N., et al., *Psychiatric in-patient care and suicide in England, 1997 to 2008: a longitudinal study.* Psychol Med, 2013. **43**(1): p. 61-71.

128.   Huber, C.G., et al., *Suicide risk and absconding in psychiatric hospitals with and without open door policies: a 15 year, observational study.* The Lancet Psychiatry, 2016. **3**(9): p. 842-849.

129.   Wood, L. and S. Alsawy, *Patient experiences of psychiatric inpatient care: a systematic review of qualitative evidence.* Journal of Psychiatric Intensive Care, 2016. **12**(1): p. 35-43.

130.   Fredriksen, K.J., et al., *Preventing Suicide among Psychiatric Inpatients with Psychotic Depression.* Psychiatric Quarterly, 2019: p. 1-14.

131. Tidefors, I. and E. Olin, *A need for "good eyes": Experiences told by patients diagnosed with psychosis.* International journal of qualitative studies on health and well-being, 2011. **6**(1): p. 5243.

132. Quin, P. *Suicides in Norway in 2017*. 2018; Available from: https://www.med.uio.no/klinmed/forskning/sentre/nssf/kunnskapsress urser/statistikk-selvmord/2017_statistikk-nettpresentasjoner-norsk_endelig.pdf.

133. Directorate of Health, *National strategy for preventing suicides and self harm 2014–2017*, in *IS-2182*. 2014.

134. Mellesdal, L., et al., *Suicide risk and acute psychiatric readmissions: a prospective cohort study.* Psychiatr Serv, 2010. **61**(1): p. 25-31.

135. Walby, F.A., M.Ø. Myhre, and A.T. Kildahl, *1910 deaths among patients: suicide in specialised mental healthcare and misuse services 2008-2015: A national registry study. .* 2018, University of Oslo National Centre for Suicide Research and Prevention.

136. Norwegian Directorate of Health, *National guidelines for prevention of suicide in mental health care systems*. 2008: Oslo

137. Hagen, J. and H. Hjelmeland, *Excessive belief in suicide riks assessment* Tidskrift for den norske legeforening, 2014: p. 349.

138. Walby, F. and E. Ness, *National guidelines for suicide prevention in specialised mental healthcare: experiences and challenges* Suicidologi, 2012. **17**(1): p. 19-21.

139. Gjelsvik, B., *Warning about suicide risk* Tidskrift for norsk psykologforening, 2014. **51**: p. 243-245.

140. Brudvik, M., E. Ness, and F. Walby, *Suicide prevention in acute psychiatric units: experiences from a national learning network* Suicidologi 2014. **2**.

141. Langley, G.J., et al., *The improvement guide: a practical approach to enhancing organizational performance*. 2009: John Wiley & Sons.

142. Campaign, T.N.P.s., *Prevention of suicide in acute pychiatric inpatient department/Units* in *Nasjonal pasientsikkerhetsprogram I trygge hender 24-7*. 2013: www.pasientsikkerhetsprogrammet.no.

143. Anderson, J., et al., *Beyond 'find and fix': Using resilience principles to improve quality and safety.* International Journal for Quality in Health Care, 2020.

144. Woods, D.D. and E. Hollnagel, *Prologue: resilience Engineering Concepts*, in *Resilience Engineering: Concepts and Precepts* E. Hollnagel, D.D. Woods, and N. Leveson, Editors. 2006, Ashgate England.

145. Ellis, L.A., et al., *Patterns of resilience: A scoping review and bibliometric analysis of resilient health care.* Safety Science, 2019. **118**: p. 241-257.
146. Righi, W., T.A. Saurin, and P. Wachs, *A systematic literature review of resilience engineering: research areas and a researh agena proposal.* Reliability Engineering and system safety, 2015. **141**: p. 142-152.
147. Bergström, J., R. van Winsen, and E. Henriqson, *On the rationale of resilience in the domain of safety: A literature review.* Reliability Engineering & System Safety, 2015. **141**: p. 131-141.
148. Foster, C.J., K.L. Plant, and N.A. Stanton, *Adaptation as a source of safety in complex socio-technical systems: A literature review and model development.* Safety Science, 2019. **118**: p. 617-631.
149. Plsek, P.E. and T. Greenhalgh, *The challenge of complexity in health care.* BMJ, 2001. **323**(7313): p. 625-628.
150. Cilliers, P. and D. Spurrett, *Complexity and post-modernism: Understanding complex systems.* South African Journal of Philosophy, 1999. **18**(2): p. 258-274.
151. Ellis, B., *Complex adaptive systems: a tool for interpreting responses and behaviours.* J Journal of Innovation in Health Informatics, 2011. **19**(2): p. 99-104.
152. Wears, R.L. and A.Z. Hettinger, *The tragedy of adaptability.* Ann Emerg Appl Ergon, 2014. **3**: p. 227-339.
153. Anderson, J., et al., *Implementing resilience engineering for healthcare quality improvement using the CARE model: a feasibility study protocol.* Pilot feasibility studies, 2016. **2**(1): p. 61.
154. Hollnagel, E., *Why is work-as-imagined different from work-as-done? *, in *The resilience of everyday clinical work*, R. Wears, E. Hollnagel, and J. Braithwaite, Editors. 2015, Ashgate England.
155. Hollnagel, E., et al., *Resilience engineering in practice: A guidebook*. Ashgate Pub Co, ed. E. Hollnagel, et al. 2011, England: Ashgate Studies in Resilience Engineering.
156. Hollnagel, E., J. Braithwaite, and R. Wears, *Epilogue: How to make health care resilient*, in *Resilient Health care* E. Hollnagel, J. Braithwaite, and R. Wears, Editors. 2013, Ashgate: England.
157. Woods, D.D., *Resilience and the ability to anticipate*, in *Resilience engineering in practice: a guidebook*, E. Hollnagel, et al., Editors. 2011, Ashgate studies in resilience engineering England.
158. Hollnagel, E., *Preface*, in *Ramaining sensitive to the possibility of failure. resilience engineering perspectives, volume 1. *, E. Hollnagel, C. Nemeth, P., and S. Dekker, Editors. 2008, Ashgate England.

159. Hollnagel, E., *Prologue: The scope of resilience engineering by Erik Hollnagel*, in *Resilience engineering in practice: a guidebook*, E. Hollnagel, et al., Editors. 2010, Ashgate England

160. Woods, D.D., *Essential characteristics of resilience:* , in *Resilience engineering: Concepts and Precepts* E. Hollnagel, D.D. Woods, and N. Leveson, Editors. 2006, Ashgate England.

161. Wreathall, J., *Properties of resilient organizations: an initial view* in *Resilience engineering: Concepts and precepts* E. Hollnagel, D.D. Woods, and N. Leveson, Editors. 2006, Ashgate England.

162. Mosier, K.L. and U.M. Fischer, *Informed by knowledge: expert performance in complex situations*. 2011: Psychology Press.

163. Endsley, M.R., *Expertise and Situation Awareness*, in *The Cambridge Handbook of Expertise and Expert Performance*, K.A. Ericsson, et al., Editors. 2006, Cambridge University Press: Cambridge. p. 633-652.

164. Maitlis, S. and M. Christianson, *Sensemaking in Organizations: Taking Stock and Moving Forward.* The Academy of Management Annals, 2014. **8**(1): p. 57-125.

165. Klein, G., B. Moon, and R.R. Hoffman, *Making sense of sensemaking 1: Alternative perspectives.* IEEE intelligent systems, 2006. **21**(4): p. 70-73.

166. Lipshitz, R., et al., *Taking stock of naturalistic decision making.* Journal of behavioral decision making, 2001. **14**(5): p. 331-352.

167. Malakis, S. and T. Kontogiannis, *Exploring team sensemaking in air traffic control (ATC): insights from a field study in low visibility operations.* Cognition, Technology & Work, 2014. **16**(2): p. 211-227.

168. Weick, K.E., *Sensemaking in organizations*. Vol. 3. 1995: Sage Publications, Inc.

169. Klein, G., *Naturalistic decision making.* Human Factors, 2008. **50**(456–460.).

170. Endsley, M.R., *Toward a Theory of Situation Awareness in Dynamic Systems.* Human Factors: The Journal of the Human Factors and Ergonomics Society, 1995. **37**(1): p. 32-64.

171. Siegel, A.W. and J.M. Schraagen, *Team reflection makes resilience-related knowledge explicit through collaborative sensemaking: observation study at a rail post.* Cognition, Technology & Work, 2017. **19**(1): p. 127-142.

172. Volpe, C.E., et al., *The impact of cross-training on team functioning: An empirical investigation.* Human factors, 1996. **38**(1): p. 87-100.

173. Mathieu, J.E., et al., *The influence of shared mental models on team process and performance.* J Appl Psychol, 2000. **85**(2): p. 273-83.

174. Gillespie, B.M., et al., *Building shared situational awareness in surgery through distributed dialog.* Journal of multidisciplinary healthcare, 2013. **6**: p. 109-118.

175. Hillmann, J., et al., *Educating Future Managers for Developing Resilient Organizations: The Role of Scenario Planning.* Journal of Management Education, 2018. **42**(4): p. 461-495.

176. Nemeth, C., et al., *Resilience is not control: healthcare, crisis management, and ICT.* Cognition, Technology & Work, 2011. **13**(3): p. 189-202.

177. van den Heuvel, C., L. Alison, and N. Power, *Coping with uncertainty: police strategies for resilient decision-making and action implementation.* Cognition, Technology & Work, 2014. **16**(1): p. 25-45.

178. Kilskar, S.S., B.-E. Danielsen, and S.O. Johnsen, *Sensemaking and resilience in safety-critical situations: a literature review.* Safety and Reliability–Safe Societies in a Changing World. Proceedings of ESREL 2018, June 17-21, 2018, Trondheim, Norway, 2018.

179. Klein, G., *A naturalistic decision making perspective on studying intuitive decision making.* Journal of Applied Research in Memory and Cognition, 2015. **4**(3): p. 164-168.

180. Rankin, A., et al., *Resilience in Everyday Operations: A Framework for Analyzing Adaptations in High-Risk Work.* Journal of Cognitive Engineering and Decision Making, 2013. **8**(1): p. 78-97.

181. Hoffman, R.R. and L.G. Militello, *Naturalistic Decision Making* in *Perspectives on Cognitive task analysis: historical origins and modern communities of pratice* R.R. Hoffman and L.G. Militello, Editors. 2009, Tailor & Francis Group, LLC: New York/East Sussex.

182. Benner, P., *From novice to expert.* Menlo Park, 1984.

183. Rosness, R., et al., *Prospective sensemaking in the operating theatre.* Cognition, Technology & Work, 2016. **18**(1): p. 53-69.

184. Battles, J.B., et al., *Sensemaking of patient safety risks and hazards.* Health services research, 2006. **41**(4p2): p. 1555-1575.

185. Albolino, S., R. Cook, and M. O'Connor, *Sensemaking, safety, and cooperative work in the intensive care unit.* Cognition, Technology & Work, 2007. **9**(3): p. 131-137.

186. Flieger, S.P., *Implementing the patient-centered medical home in complex adaptive systems: Becoming a relationship-centered patient-centered medical home.* Health care management review, 2017. **42**(2): p. 112.

187. Aflague, J.M. and G.G. Ferszt, *Suicide Assessment by Psychiatric Nurses: A Phenomenographic Study.* Issues in Mental Health Nursing, 2010. **31**(4): p. 248-256.

188. Sujan, M., P. Spurgeon, and M.W. Cooke, *The role of dynamic trade-offs in creating safety- A qualitative study of handover across care boundaries in emergency care.* Reliability Engineering & System Safety, 2015.

189. Wears, R.L., C.C. Schubert, and G. Hunte, S., *Individual-collective Trade-offs: implications for resilience* in *Resilient health care volume 2*, R.E. Wears, E. Hollnagel, and J. Braithwaite, Editors. 2015, Ashgate England/Usa.

190. Mishna, F., B.J. Antle, and C. Regehr, *Social Work with Clients Contemplating Suicide: Complexity and Ambiguity in the Clinical, Ethical, and Legal Considerations.* Clinical Social Work Journal, 2002. **30**(3): p. 265-280.

191. Dahlberg, K., H. Dahlberg, and M. Nystrøm, *Reflective Lifeworld Research*. Studentlitteratur. 2008, Sweden

192. Palmer, R.E., *Hermeneutics: interpretation theory in Schleiermacher, Dilthey, Heidegger and Gadamer. *. 1969, Evanston, IL: North Western University Press.

193. Husserl, E., *The crisis of European sciences and transcendental phenomenology: An introduction to phenomenological philosophy*. 1970: Northwestern University Press.

194. Merleau-Ponty, M., *Phenomenology of perception*. 2013: Routledge.

195. Heidegger, M., *Being and time*. 2010: Suny Press.

196. Gadamer, H.-G.J., *Truth and Method, revised*, ed. W. Joel and G.M. Donald. 1995, New York Continuum.

197. Dahlberg, H. and K. Dahlberg, *Open and Reflective Lifeworld Research: A Third Way.* Qualitative Inquiry, 2019: p. 1077800419836696.

198. Cambridge Dictionary. *Meaning of practice in English*. 2020 [cited 2020 14 may]; Available from: https://dictionary.cambridge.org/dictionary/english/practice.

199. Berg, S.H., et al., *Safe clinical practice for patients hospitalised in a suicidal crisis: a study protocol for a qualitative case study.* BMJ Open, 2017. **7**(1): p. 6.

200. Rasmussen, J., *Risk management in a dynamic society: a modelling problem.* Safety Science, 1997. **27**(2): p. 183-213.

201. Hollnagel, E., J. Braithwaite, and R.L. Wears, *Resilient health care England: Ashgate studies in resilience engineering*. 2013, United Kingdom: Ashgate Publishing.

202. Berg, S.H. and K. Aase, *Resilient Characteristics as Described in Empirical Studies on Health Care*, in *Exploring Resilience A Scientific Journey from Practice to Theory*. 2019, Springer Nature. p. 79-87.

203. Graneheim, U.H. and B. Lundman, *Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness.* Nurse Educ Today, 2004. **24**(2): p. 105-12.

204. Yin, R.K., *Case study research: design and methods. .* Vol. 5th edn. . 2014, Los Angeles, CA: Sage Publications.

205. Graneheim, U.H., B.M. Lindgren, and B. Lundman, *Methodological challenges in qualitative content analysis: A discussion paper.* Nurse Educ Today, 2017. **56**: p. 29-34.

206. Thomas, J. and A. Harden, *Methods for the thematic synthesis of qualitative research in systematic reviews.* BMC Medical Research Methodology, 2008. **8**: p. 1-10.

207. Whittemore, R. and K. Knafl, *The integrative review: updated methodology.* Journal of Advanced Nursing, 2005. **52**(5): p. 546-553.

208. Malterud, K., *Focus groups as a research method in medicine and health science* 2012, Oslo: Universitetsforlaget

209. Meijer, P.C., N. Verloop, and D. Beijaard, *Multi-method triangulation in a qualitative study on teachers' practical knowledge: An attempt to increase internal validity.* J Quality quantity, 2002. **36**(2): p. 145-167.

210. Campbell, R., et al., *Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care.* Social Science & Medicine, 2003. **56**(4): p. 671-684.

211. Braun, V. and V. Clarke, *Using thematic analysis in psychology.* J Qual Res Psychol, 2006. **3**.

212. Johnson, J.M. and T. Rowlands, *The interpersonal dynamics of in-depth interviewing*, in *The SAGE Handbook of Interview research: the complexity of the craft* J.F. Gubrium, et al., Editors. 2012, SAGE: USA.

213. Lambert, S.D. and C.G. Loiselle, *Combining individual interviews and focus groups to enhance data richness.* 2008. **62**(2): p. 228-237.

214. Kamberelis, G. and G. Dimitriadis, *Collecting and interpreting qualitative materials*, in *Lincoln, Y.S.*, N. Denzin, Editor. 2013, Sage Pub.: USA.

215. Macnaghten, P. and G. Myers, *Focus groups*, in *Qualitative research practice*, C. Seale, et al., Editors. 2007, SAGE Publications Ltd: Grat Britain.

216. Bradbury-Jones, C., S. Sambrook, and F. Irvine, *The phenomenological focus group: an oxymoron?* Journal of advanced nursing, 2009. **65**(3): p. 663-671.

217. Polit, D.F. and C.T. Beck, *Nursing research: Generating and assessing evidence for nursing practice*. 2008: Lippincott Williams & Wilkins.

218. Patton, M.Q., *Enhancing the quality and credibility of qualitative analysis.* Health services research, 1999. **34**(5): p. 1189-1208.

219. Mendonca, D., *Measures of resilient performance* in *Remaining sensitive to the possibility of failire: Resilient engineering perspectives, volume 1*, E. Hollnagel, C. Nemeth, P., and S. Dekker, Editors. 2008, Ashgate studies in Resilient Engineering England.

220. Morse, J.M., *Mixed method design: Principles and procedures*. 2009: Routledge.

221. Morse, J.M., *Principles of mixed methods and multimethod research design*, in *Handbook of mixed methods in social behavioral research*, A. Tashakkori and C. Teddle, Editors. 2003, Sage. p. 189-208.

222. Kaplowitz, M.D. and J.P. Hoehn, *Do focus groups and individual interviews reveal the same information for natural resource valuation?* J Ecological Economics, 2001. **36**(2): p. 237-247.

223. Gjesdal, K., E. Dysvik, and B. Furnes, *Mind the Gaps: A Qualitative Study Combining Patients' and Nurses' Reflections on Pain Care.* SAGE Open Nursing, 2019. **5**: p. 2377960819868865.

224. Liberati, A., et al., *The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration.* PLoS Med, 2009. **6**(7): p. e1000100.

225. Nightingale, A., *A guide to systematic literature reviews.* Surgery (Oxford), 2009. **27**(9): p. 381-384.

226. Malterud, K., *Qualitative research: standards, challenges, and guidelines.* Lancet, 2001. **358**.

227. Kjølstad, S. and T. Høverstad, *Fokusgrupper- presentasjon av en kvalitativ forskningsmetode.* Tidskrift for Den norske legeforening, 1991. **30**(111): p. 3194-6.

228. Tracy, S.J., *Qualitative quality: Eight "big-tent" criteria for excellent qualitative research.* Qualitative inquiry, 2010. **16**(10): p. 837-851.

229. Linehan, M.M., *Validation and psychotherapy.* Empathy reconsidered: New directions in psychotherapy, 1997. **353**: p. 392.

230. Linehan, M.M., *Cognitive behavioral treatment of borderline personality disorder*. 1993a, New York: Guilford Press

231. Rooney, P. *Researching from the inside - does it compromise validity? A discussion. Level 4*. Dublin Institute of Technology 2005 3]; Available from: http://arrow.dit.ie/ltcart/5/.

232. Barton, K.C., *Elicitation techniques: Getting people to talk about ideas they don't usually talk about.* Theory Research in Social Education, 2015. **43**(2): p. 179-205.

233. Talseth, A.G., F. Gilje, and A. Norberg, *Struggling to become ready for consolation: experiences of suicidal patients.* Nurs Ethics, 2003. **10**(6): p. 614-23.

234. World Medical Association, *WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects.* 2013.

235. Berg, S.H., K. Rørtveit, and K. Aase, *Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies.* BMC Health Services Research, 2017. **17**(1): p. 73.

236. Farquhar, C., *Are Focus Groups Suitable for 'Sensitive' Topics?* , in *Developing Focus Group Research*, R. Barbour and J. Kitzinger, Editors. 1999, SAGE Publications Ltd: London.

237. University of Toronto. *Guidelines for Ethical Conduct in Participant Observation* 2008 [cited 2019 07 Nov]; Available from: http://research.utoronto.ca/wp-content/uploads/2009/03/Participant-Observation-Guidelines.pdf.

238. Lincoln, Y. and E. Guba. 1985: Beverly Hills, California: Sage.

239. Patton, M.Q., *Qualitative research and evaluation methods . Thousand Oakes*. 2002, Sage.

240. Malterud, K., V.D. Siersma, and A.D. Guassora, *Sample Size in Qualitative Interview Studies:Guided by Information Power.* Qualitative Health Research, 2016. **26**(13): p. 1753-1760.

241. Silverman, D., *Qualitative research: Meanings or practices?* Information Systems Journal, 1998. **8**(1): p. 3-20.

242. Unluer, S., *Being an insider researcher while conducting case study research.* The Qualitative Report, 2012. **17**: p. 58.

243. Polit, D.F. and C.T. Beck, *Generalization in quantitative and qualitative research: Myths and strategies.* International Journal of Nursing Studies, 2010. **47**(11): p. 1451-1458.

244. McConnell-Henry, T., et al., *Researching with people you know: Issues in interviewing.* Contemporary Nurse: a Journal for the Australian Nursing Profession, 2009. **34**(1): p. 2.

245. Smyth, A. and R. Holian, *Credibility issues in research from within organisations*, in *Researching education from the inside*. 2008, Routledge. p. 41-56.

246. Endsley, M.R., *Measurement of Situation Awareness in Dynamic Systems.* Human Factors, 1995. **37**(1): p. 65-84.

247. Hoffman, R.R. and L.G. Militello, *Perspectives on cognitive task analysis: Historical origins and modern communities of practice*. 2008: Psychology Press.

248. Cutcliffe, J.R. and C. Stevenson, *Feeling our way in the dark: The psychiatric nursing care of suicidal people—A literature review.* International Journal of Nursing Studies, 2008. **45**(6): p. 942-953.

249. Tenney, Y.J. and R.W. Pew, *Situation awareness catches on: what? so what? now what?* Reviews of human factors and ergonomics, 2006. **2**(1): p. 1-34.

250. Nemeth, C.P., *Improving healthcare team communication: building on lessons from aviation and aerospace*. 2012: Ashgate Publishing, Ltd.

251. Ancona, D., *Framing and Acting in the Unknown.* S. Snook, N. Nohria, & R. Khurana, The Handbook for Teaching Leadership, 2012: p. 3-19.

252. Tofthagen, R., A.G. Talseth, and L. Fagerstrom, *Mental health nurses' experiences of caring for patients suffering from self-harm.* Nurs Res Pract, 2014. **2014**: p. 905741.

253. Larsson, P., et al., *Psychiatric nursing care of suicidal patients described by the sympathy–acceptance–understanding–competence model for confirming nursing.* Archives of psychiatric nursing, 2007. **21**(4): p. 222-232.

254. Jobes, D.A., et al., *A Randomized Controlled Trial of the Collaborative Assessment and Management of Suicidality versus Enhanced Care as Usual With Suicidal Soldiers.* Psychiatry, 2017. **80**(4): p. 339-356.

255. Hawgood, J. and D. De Leo, *Suicide prediction–a shift in paradigm is needed.* Crisis, 2016. **37**: p. 251-255.

256. Hom, M.A., et al., *"Are You Having Thoughts of Suicide?" Examining Experiences With Disclosing and Denying Suicidal Ideation.* Journal of Clinical Psychology, 2017. **73**(10): p. 1382-1392.

257. National Institute for Health & Excellence, *Self harm: Longer-term management: National ClinicalGuideline Number 133*. 2012, The British Psychological Society and The Royal College of Psychiatrists England.

258. Flynn, S., et al., *Suicide by mental health in-patients under observation.* Psychol Med, 2017. **47**(13): p. 2238-2245.

259. Lawton, R., *Not working to rule: understanding procedural violations at work.* Safety science, 1998. **28**(2): p. 77-95.

260. Hobbs, A. and A. Williamson, *Associations between Errors and Contributing Factors in Aircraft Maintenance.* Human Factors, 2003. **45**(2): p. 186-201.

261. Catchpole, K.R., et al., *Diagnosing barriers to safety and efficiency in robotic surgery.* Ergonomics, 2018. **61**(1): p. 26-39.

262. Rotter, J.B., *Generalized expectancies for internal versus external control of reinforcement.* Psychological monographs: General and applied, 1966. **80**(1): p. 1.

263. Snyder, L.A., et al., *Safety performance: The mediating role of safety control.* Work, 2011. **40**(1): p. 99-111.

264. Cigularov, K.P., P.Y. Chen, and L. Stallones, *Error communication in young farm workers: Its relationship to safety climate and safety locus of control.* Work & Stress, 2009. **23**(4): p. 297-312.

265. Pearce, C. and G. Martin, *Locus of control as an indicator of risk for suicidal behaviour among adolescents.* Acta Psychiatrica Scandinavica, 1993. **88**(6): p. 409-414.

266. Evans, W.P., S.C. Marsh, and P. Owens, *Environmental factors, locus of control, and adolescent suicide risk.* Child and Adolescent Social Work Journal, 2005. **22**(3-4): p. 301-319.

267. Mechanic, D. and S. Meyer, *Concepts of trust among patients with serious illness.* Social science & medicine, 2000. **51**(5): p. 657-668.

268. Hall, M.A., et al., *Trust in physicians and medical institutions: what is it, can it be measured, and does it matter?* Milbank Q, 2001. **79**(4): p. 613-39, v.

269. Chu, C., et al., *The interpersonal theory of suicide: A systematic review and meta-analysis of a decade of cross-national research.* 2017, American Psychological Association: US. p. 1313-1345.

270. Courtright, J.M., *Thinking through the phenomenon of trust: A philosophical investigation.* 2011, Loyola University Chicago.

271. Rørtveit, K., et al., *Patients' Experiences of Trust in the Patient-Nurse Relationship—A Systematic Review of Qualitative Studies.* Open Journal of Nursing, 2015. **5**(195-209).

272. Brown, P., et al., *Trust in Mental Health Services: A neglected concept.* Journal of Mental Health, 2009. **18**(5): p. 449-458.

273. Ödlund, A., *Pulling the same way? A multi-perspectivist study of crisis cooperation in government.* Journal of contingencies and crisis management, 2010. **18**(2): p. 96-107.

274. Takahashi, C., et al., *The impact of inpatient suicide on psychiatric nurses and their need for support.* BMC psychiatry, 2011. **11**(1): p. 38.

275. Patterson, M.D. and R.L. Wears, *Resilience and precarious success.* Reliability Engineering & System Safety, 2015(0).

276. Ekstedt, M. and S. Ödegård, *Exploring gaps in cancer care using a systems safety perspective.* Cognition, Technology & Work, 2015. **17**(1): p. 5-13.

277. Ross, A.J., et al., *Inpatient diabetes care: complexity, resilience and quality of care.* Cognition, Technology & Work, 2014. **16**(1): p. 91-102.

278. Gilje, F., A.G. Talseth, and A. Nordberg, *Psychiatric nurses' response to suicidal psychiatric inpatients: struggling with self and sufferer.* Journal of Psychiatric and Mental Health Nursing, 2005. **12**(5): p. 519-526.

279. Santos, A., et al., *Safety challenges of medical equipment in nurse anaesthetist training in Haiti.* Applied ergonomics, 2016. **53**: p. 110-121.

280. King, A., et al., *Time to listen: a review of methods to solicit patient reports of adverse events.* Quality and Safety in Health Care, 2010. **19**(2): p. 148-157.

281. Rae, A., et al., *A manifesto for Reality-based Safety Science.* Safety Science, 2020. **126**: p. 104654.

Part II

List of articles

Article I

Berg, S.H., Rørtveit, K. & Aase, K. (2017) Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies. *BMC Health Services Research*, 17

Article II

Berg, S.H., Rørtveit, K., Walby, F.A. & Aase, K. (2020) Safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis: a qualitative study of patient experiences. *Submitted to BMJ open.*

Article III

Berg, S.H., Rørtveit, K., Walby, F.A. & Aase, K. (2020) Adaptive capacities for safe clinical practice for patients hospitalised during a suicidal crisis: a qualitative study. *BMC Psychiatry. 20 (1): 316*

Article I

BMC Health Services Research

CrossMark

Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies

Siv Hilde Berg[1*], Kristine Rørtveit[1,2] and Karina Aase[2]

Abstract

Background: In-patient suicide prevention is a high priority in many countries, but its practice remains poorly understood. Patients in a suicidal crisis who receive psychiatric care can provide valuable insight into understanding and improving patient safety. The aim of this paper was therefore to summarize the qualitative literature regarding suicidal patients' in-patient care experiences. The following question guided the review: How can we describe suicidal patients' experiences regarding safety during psychiatric in-patient care?

Methods: Systematic searches were conducted in the MEDLINE, Academic Search Premier, CINAHL, SOCINDEX and PsycINFO databases, identifying 20 qualitative studies on suicidal patients and their psychiatric in-patient care experiences. These studies were systematically reviewed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, synthesized via thematic analysis and subjected to quality appraisals.

Results: Patients described safety as "feeling safe", and three components, i.e., connection, protection and control, were vital to their experiences of safety. Fulfilling these needs was essential to patients recovering from suicidal crises, feeling safe during encounters with health care professionals and feeling safe from suicidal impulses. Unmet needs for connection, protection and control left patients feeling unsafe and increased their suicidal behaviour.

Conclusion: Our review addresses the importance of adopting a wider perspective of patient safety than considering safety solely in technical and physical terms. Safety for the suicidal patient is highly dependent on patients' perceptions of their psychological safety and the fulfilment of their needs. The three patient-identified factors mentioned above – connection, protection and control – should be considered an integral part of patient safety practices and should form the basis of future efforts to understand the safety of suicidal patients during psychiatric in-patient care.

Keywords: Patient experiences, Patient perspective, Mental health, Psychiatric care, In-patient, Suicidal, Suicide, Patient safety

---

* Correspondence: siv.hilde.berg@sus.no
[1]Division of Psychiatry, Stavanger University Hospital, N-4068 Stavanger, Norway
Full list of author information is available at the end of the article

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 2 of 13

Background

Suicide is a particular concern in mental health settings because of its strong association with mental illness [1]. Although suicides rarely occur during in-patient care, these events are clinically important and are among the most concerning patient safety incidents in the mental health sector [2–4]. Suicide prevention is one of the primary tasks of health care professionals practicing in psychiatric wards [4]. In-patient suicide prevention is a high-priority in many countries [5–7]; however, its practice remains poorly understood.

The ethical and pragmatic problems posed by including suicidal patients in research have contributed to the currently limited research regarding the treatment of high-risk and hospitalized suicidal patients [8]. To understand safety in health care services, information must be obtained from multiple sources, including the patient's perspective. As such, patients can provide insight regarding care and can contribute important information when other sources of evidence are limited [9]. Patients can also provide unique information on adverse events in hospitals [10, 11] as well as useful descriptive feedback regarding safety, in particular sensitive safety-related topics [12]. Patient experiences are considered one of the three pillars of health care quality, along with clinical safety and effectiveness of outcomes [13].

Qualitative studies of patient experiences with psychiatric in-patient care have been reviewed within certain areas, such as involuntary hospitalizations [14], physical restraint [15], acute wards [16], seclusion practices [17], locked doors [18] and service user expectations [19]. However, no reviews to date have examined studies regarding suicidal in-patients. Therefore, this review aimed to summarize empirical qualitative studies by exploring suicidal patients' psychiatric in-patient care experiences to better understand their perspectives toward safety.

Review question

A literature review was conducted to answer the following review question: How can we describe suicidal patients' experiences regarding safety during psychiatric in-patient care?

Methods

The selected studies were systematically reviewed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [20]; the articles were then synthesized using thematic analysis [21] and assessed further via quality appraisal [22]. The objectives, inclusion criteria, analysis methods and search strategy were specified and documented in a protocol reviewed by the three authors prior to the database search. The authors are researchers with backgrounds in psychology (SHB), mental health nursing (KR) and safety science (SHB and KAA).

Inclusion and exclusion criteria

The eligibility criteria for inclusion in the review pertained to the following three characteristics: *Type of study*: Qualitative peer-reviewed studies in English with empirical data on patients' experiences regarding safety were eligible. *Participants*: Studies examining a sample of suicidal in-patients who were interviewed during their hospitalizations or after discharge were eligible. "Suicidal in-patients" included patients hospitalized after a recent suicide attempt, described as suicidal during hospitalization or with serious suicidal thoughts or ideations; self-harming behaviour was excluded. The final criteria related to *Setting*: Experiences regarding care in psychiatric hospital wards, including psychiatric emergency wards and psychiatric long-term in-patient care, were eligible. Studies in multiple hospital settings were included if information regarding psychiatric in-patient care experiences could be extracted. Patient experiences pertaining to outpatient clinics, community mental health care, home care, forensic psychiatric services, emergency care and medical care were excluded. Studies describing patient experiences with adverse side effects from pharmacological treatment were excluded. Studies with mixed patient samples and studies involving health care professionals' experiences were included if information regarding patient experiences could be extracted.

Search strategy and study selection

To increase sensitivity, limitations on publication date were not imposed during the database search. The selection of databases, search terms and search methodology were determined in collaboration with a university librarian. The databases included in the systematic search were MEDLINE and the Academic Search Premier, CINAHL, SocINDEX with Full-Text and PsycINFO Ovid databases. Systematic database searches were conducted between June and December 2014 and in July 2016.

Search terms were identified in relevant studies during the planning of the systematic review. The terms were selected from qualitative studies of patient experiences in mental health care and from qualitative studies of suicidal patients' experiences. All identified search terms were included to increase search sensitivity. The full electronic search strategy for PsycINFO is outlined in Additional file 1. We also screened reference lists and conducted author searches in EMBASE and Google Scholar.

We systematically searched all of the above databases using the following terms: patient* satisfaction*, patient* preference*, in-patient* experience*, patient* experience*, patient* perception*, patient* view*, patient*

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 3 of 13

perspective*, patient* opinion*, user* experience*, consumer* experience*, consumer participation, suicide, suicidal, feeling safe and feeling unsafe.

The study selection process was conducted according to the eligibility criteria displayed in the flow diagram in Fig. 1. First, all titles were screened, and the abstracts were read by one author (SHB). Ineligible studies were excluded. Full-text articles were obtained for the eligible studies. Two authors (SHB and KR) independently assessed the full-text articles for eligibility in a standardized manner. A third author (KAA) validated the assessments. The level of agreement was generally high; however, setting was often discussed, as the studies were conducted in mixed settings. Agreement was reached by re-reading the articles to determine whether information on patient experiences with psychiatric in-patient care could be extracted from the studies in question. All authors were in agreement regarding the final inclusion

and exclusion of all articles. A data extraction sheet was developed to guide study selection. Information from all full-text articles was added to the sheet. All studies were assessed based on the abovementioned eligibility criteria and colour-coded as red (no), orange (maybe) or green (yes).

Synthesis of results

Thematic analysis, as proposed by Thomas and Harden [21] and Braun and Clarke [23], was used to facilitate the synthesis of the results of the included studies. The thematic synthesis consisted of two stages. The first stage entailed coding the text "line by line", condensing the meaning units and developing descriptive themes. An inductive approach was used in which the descriptive themes remained close to the original findings of the studies [23]. The second stage developed relationships between the descriptive themes and patient safety to
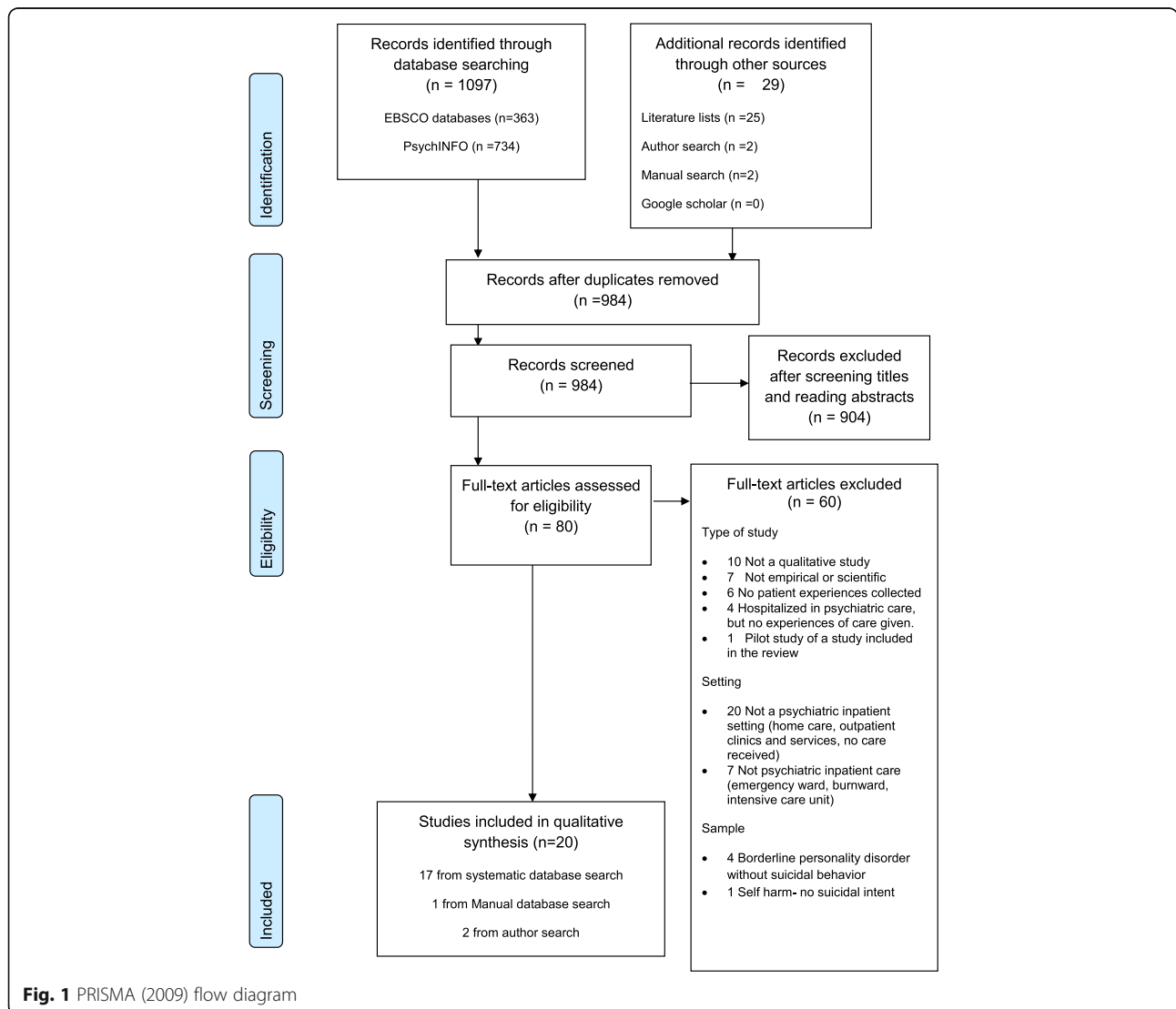
Fig. 1 PRISMA (2009) flow diagram

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 4 of 13

generate analytical themes [21]. Thematic mapping was used to identify relationships between meaning units, descriptive themes and analytical themes [21, 23]. Connections between patients' needs, expectations, experiences, reported outcomes (such as experiencing increased or decreased suicidal behaviour) and use of the term 'safety' were studied in the analytical stage. Coding and preliminary theme development were conducted by one author (SHB) and reviewed by all three authors. The analysis yielded 83 meaning units, nine descriptive themes and three analytical themes ("Connection", "Protection" and "Control"). Forty-nine of the 83 meaning units were found in the "Connection" theme, which was thus considered the most comprehensive theme. An example of theme condensation is presented in Table 1. A full overview of the meaning units and themes is provided in Additional file 2.

Two authors (SHB and KR) independently assessed the methodological quality of the included studies and rated the studies based on Malterud's [22] checklist for qualitative research. Malterud's guidelines for assessing qualitative studies and an example of a scored article are provided in Additional file 3. An overview of the quality assessment of the included papers is presented in Additional file 4.

Results

Study selection
The study selection process utilized the PRISMA guidelines [20] (Fig. 1) and identified a total of 1,097 records through database searches. Additional searches yielded 29 records. After removing duplicates, the remaining 984 records were screened. Title screening and abstract reading resulted in the exclusion of 904 records that did not meet the eligibility criteria. Eighty full-text articles were read, and relevant information was extracted and entered into the information sheet, assessed according to the inclusion criteria and coded (yes/maybe/no). Sixty

records were excluded for not meeting the inclusion criteria, and we ultimately included the remaining 20 studies in the systematic review (Table 2).

Study characteristics
The review consisted of 20 articles published between 1999 and 2016. The patients' ages ranged from 16 to 63 years. The most frequently occurring diagnoses in the sample were affective disorders, of which major depression was the most prevalent, followed by schizophrenia spectrum diagnoses and personality disorders. Patients reported different experiences and needs depending on their symptoms and level of functioning; however, these parameters could not be analysed because of the presence of mixed samples. All patients had experienced suicidal crises, and the majority had attempted suicide prior to hospitalization. The studies originated primarily from Western mental health care settings, with the exception of studies by Sun et al. [24, 25], which were conducted in Taiwan.

Themes representing patients' experiences regarding safety
The results of the 20 studies were synthesized and organized under analytical and descriptive themes (Table 3). The results of this synthesis are described in greater detail in the following text.

Connection
The "Connection" theme illustrates how connections with health care professionals were vital for patient recovery and feelings of safety. A lack of connection was also experienced by the patients and had potentially fatal consequences. The sample of suicidal patients included in this review reported multiple and diverse causes of their suicidal crises [26, 27], but all patients experienced feelings of overwhelming suffering and increased vulnerability [27–31]. Patients experienced increased emotional

Table 1 Example of theme condensation

Example of extracted data	Meaning units	Descriptive theme	Analytical theme
Lack of acknowledgment from observers; these perceptions sometimes overlapped with perceptions of a lack of empathy. Such behaviors included observers' reading books, appearing distracted or uninterested in the participant, and acting like the participant was a burden [40].	61. Lack of observer support manifests as lack of empathy and acknowledgement	Receiving support from the observers	Protection
Feelings of objectifications in formal observation without interpersonal engagement…It's a scary thing going somewhere where you feel like you're isolated and locked away. (Claire)…Being watched like that; it's freaky…a bit invasive…that separation, that 'us and them'. It's a bit tricky. (Kate) [26].	62. Feeling objectified and detached without observer support		
"They don't care. You get that feeling quite often. It just kind of supports that hopeless kind of feeling that life isn't worth living and nobody cares about anything." Such encounters did little to alleviate hopelessness, and six participants noted that they increased their anxiety or aggravated their dysphoria [40].	63. Feeling objectified increases stress and hopelessness		

Table 2 The list of included studies

Author/year/ origin	Aim	Sample	Setting	Data collection methods and analysis	Key points related to in-patient care
Vatne & Nåden, 2016 [38]. Norway	To develop a deeper understanding of suicidal patients in the aftermath of suicide attempts	Ten patients considered with serious suicidality after a suicide attempt. Non-psychotic. Interviewed after suicide attempt.	Two emergency psychiatric wards and one crisis resolution team.	Semi-structured interviews. Analysed using thematic analysis inspired by Braun and Clarke. Gadamerian hermeneutic approach.	• Connectedness, someone who cares • Hospital admission important for staying alive • Support from family and friends
Lees, Procter and Fassett, 2014 [26]. Australia	To explore the experiences and needs of mental health-care consumers who had a suicidal crisis (shortened).	Nine patients recovered from a recent suicidal crisis where they received mental health in-patient care.	Setting not specified. Experiences of psychiatric in-patient care are described.	In-depth, semi-structured interviews collected as part of a larger multi-method study. Analysed with a constant comparative method and classical content analysis.	• Therapeutic engagement central to quality of care • Isolation, loss of control, objectification
Montross Thomas et al., 2014 [28]. USA	To better understand suicide experiences from the perspective of patients diagnosed with serious mental illness.	23 patients hospitalized after a suicide attempt. Diagnosed with serious mental illness. Interviewed after discharge.	Veterans Affairs Hospital, mental health program.	Qualitative interviews with audio/videotaping. Analysed using van Manen's phenomenological framework.	• Need for clinicians' empathy, compassion and listening skills • Addressing problems underlying suicide attempt
Vatne & Nåden, 2014 [32]. Norway	To explore the experiences of being suicidal and encounters with health care personnel.	Ten patients considered seriously suicidal. Psychosis excluded. Interviewed after suicide attempt.	Psychiatric emergency ward, sub-emergency psychiatric wards and one crisis resolution team.	Semi-structured interviews. Analysed using thematic analysis inspired by Braun and Clarke. Gadamerian hermeneutic approach.	• Openness and trust • Someone who addresses the matter • Being met on equal terms, humiliated
Cutcliffe et al., 2012a [41]. Unknown origin.	To better understand the observed increased risk for suicide following discharge from an in-patient psychiatric service. Key theme one.	20 patients admitted to the hospital with suicidal ideation and/or a lifetime history of suicidal behaviour. Interviewed after discharge.	In-patient psychiatric service.	Hermeneutic interviews. Analysed using van Manen's phenomenology.	• Anxiety to go back to life without having a sense of control • Need to be involved in discharge planning
Cutcliffe et al., 2012b [42]. Unknown origin.	To better understand the observed increased risk for suicide following discharge from an in-patient psychiatric service. Key theme two.	20 patients admitted to the hospital with suicidal ideation and/or a lifetime history of suicidal behaviour. Interviewed after discharge.	In-patient psychiatric service.	Hermeneutic interviews. Analysed using van Manen's phenomenology.	• Patients still suicidal at discharge • Disorientation concerning what to do with their life • Need for post-discharge support
Pavulans et al. 2012 [27]. Sweden	To explore the experience of being suicidal, including a suicide attempt, and identify possible implications for health care professionals.	Ten patients interviewed after a suicide attempt while hospitalized in a psychiatric ward.	Psychiatric in-patient care at one university hospital.	Semi-structured interviews. Analysed using van Manen's phenomenology and qualitative content analysis.	• Being in need of control • Re-establish control before the point of no return • Control related to problem-solving and insight

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 6 of 13

Table 2 The list of included studies (*Continued*)

Study	Aim	Sample	Setting	Method	Findings
Vatne & Nåden, 2012 [29]. Norway	To explore experiences of persons after a suicide crisis or a recent suicide attempt.	Ten patients considered seriously suicidal. Psychosis excluded. Interviewed after suicide attempt.	Psychiatric emergency ward, sub-emergency psychiatric wards and one crisis resolution team.	Qualitative interviews. Analysed using thematic analysis. Gadamerian hermeneutic approach.	• Losing touch with the world • Someone to see, listen and understand • Desperation increases with involuntary hospitalization
Holm & Severinsson, 2011 [31]. Norway	To explore how recovery processes facilitate changes in suicidal behaviour in women with borderline personality disorder.	13 patients with suicidal behaviour. Borderline personality disorder.	Recruited from different settings within mental health. Experiences of psychiatric in-patient care were described.	In-depth interviews. Data analysed with thematic analysis.	• *Changing suicidal behavior by feeling confirmed, safe, and trusted.*
Cutcliffe et al, 2006 [36]. England	To determine if psychiatric/mental health nurses provide meaningful caring responses to suicidal people, and if so, how was it achieved.	20 patients with experiences from a serious suicide attempt.	Crisis care in emergency psychiatric services.	Semi-structured interview. Data analysed with constant comparative method. Glaserian grounded theory approach.	• Reconnecting the person with humanity • Guiding the individual back to humanity, learning to live
Sun, et al 2006b [25]. Taiwan	Presentation of a nursing care theory developed to guide the care given to people with suicidal ideas and those with a previous suicide attempt.	15 patients with either suicidal ideas or attempted suicide. Interviewed while hospitalized.	Psychiatric hospital ward.	Semi-structured interviews and participant observation. A grounded theory approach.	• Safe and compassionate care giving via the therapeutic relationship
Sun et al, 2006a [24]. Taiwan	To investigate nurses' and patients' perceptions of psychiatric wards (the context of care) and the professionals' response (the intervening conditions) that may impact the delivery of suicidal nursing care.	15 patients with either suicidal ideas or attempted suicide. Interviewed while hospitalized.	Psychiatric hospital ward.	Semi-structured interviews and participant observation. A grounded theory approach.	• Protective environment • Access to lethal items • Group support, spiritual support
Talseth, Gilje & Nordberg, 2003 [30]. Norway	To describe a process of consolation revealed by two suicidal patients' experiences.	Two patients. Interviewed after a suicide attempt (from the Talseth et al, 1999 [34] study).	Psychiatric hospital ward.	Qualitative interviews. Phenomenological hermeneutic study inspired by Ricoeur's philosophy.	• Vulnerability and deep despair • Closeness • Connection • The dialogue with HCPs
Wiklander, Samuelsson, & Åsberg, 2003 [33]. Sweden	To extract and analyse the interview data concerning experiences of shame.	13 patients with experiences from attempted suicide. Interviewed after discharge.	Specialized psychiatric in-patient care.	Qualitative semi-structured interviews. Transcripts analysed using qualitative methods (not specified).	• Sensitive to attitudes and behaviours of HCPs • Shame reactions related to aspects of care
Talseth, Jacobsson & Nordberg, 2001 [39]. Norway	To illuminate the experience of being treated by physicians.	21 patients expressing the wish to die or attempted to commit suicide. Interviewed while hospitalized.	Psychiatric emergency wards, psychiatric sub-emergency wards and one psycho-geriatric ward.	Qualitative interviews interpreted using a phenomenological hermeneutic approach inspired by Ricoeur's philosophy.	• Need for confirmation in interactions with physicians

Table 2 The list of included studies *(Continued)*

Samuelsson et al., 2000 [35]. Sweden	To describe the attempted suicide patients' perceptions of receiving specialized in-patient psychiatric care.	18 patients. Interviewed after a suicide attempt near the time of discharge.	Specialized psychiatric in-patient care.	Qualitative interviews. Analysed for qualitative content using methods inspired by Burnard.	• Perception of care and caregivers, a sense of security • Confirmation and lack of confirmation • Commitment and respect
Cardell & Pitula, 1999 [40]. USA	To explore patients' experience of constant observation to determine whether they derived any therapeutic benefits beyond the intended protective benefit.	20 patients placed under constant observation for suicidality.	Psychiatric hospital ward and a general medical centre with a psychiatric in-patient unit.	Extensive in-depth interviews. Analysis of themes consistent with Hutchinson's recommended management of grounded theory data.	• Constant observation not merely a protective intervention, but with therapeutic potential. • Need for engaged and supportive observers
Fletcher, 1999 [43]. UK	To explore the perceptions of staff regarding the constant observation of a suicidal patient in mental health settings.	24 patients at risk for suicide, constantly observed for at least 48 h.	Acute psychiatric hospital.	Ethnographic study with participant observation and semi-structured interviews. Data transcribed onto cards and subjected to content analysis.	• Patients' negative feelings of being under constant observation related to staff actions
McLaughlin, 1999 [37]. UK	To explore psychiatric nurses' and patients' opinions regarding the care offered to suicidal patients and how the care for suicidal patients could be improved.	17 patients admitted for depression, suicidal ideation or overt suicidal behaviour.	Three psychiatric hospital wards.	Observation and semi-structured interview. Data analysed using content analysis by Field and Morse.	• The need to address difficulties • Help with problem-solving
Talseth et al., 1999 [34]. Norway	To illuminate the meaning of suicidal psychiatric in-patients' experiences of being cared for by mental health nurses.	21 patients admitted with suicidal ideations or after a suicide attempt.	Psychiatric emergency wards, psychiatric sub-emergency wards and one psycho-geriatric ward.	Qualitative narrative interviews. A phenomenological–hermeneutic method inspired by Ricoeur used in the data analysis.	• Being confirmed • Lack of confirmation

Abbreviations: *HCP* health care professional

Berg et al. BMC Health Services Research (2017) 17:73

Page 8 of 13

Table 3 Analytical and descriptive themes

Analytical theme	Descriptive theme
Connection	Meeting someone who cares Receiving a confirmation of feelings Being acknowledged as a human being
Protection	Being protected from death Receiving support from the observers
Control	Gaining insight Coping with difficulties and symptoms Attaining discharge readiness

sensitivity regarding how they were perceived and approached by health care professionals, and this sensitivity affected their perceptions of themselves, their recent suicide attempt, their therapeutic relationships [26, 32, 33] and their feelings of safety in the hospital [31, 34, 35]. Patients' connections with health care professionals enabled them to feel valued as human beings by *meeting someone who cares*; to feel understood by *receiving a confirmation of feelings*; and to feel respected and trusted by *being acknowledged as a human being.*

Meeting someone who cares
Suicidal patients expressed feeling lonely, being alone with their despair, being separated from the external world and feeling a need to be connected with others [28–30, 34]. A sense of being cared for could be achieved by meeting the patient's basic needs, such as bodily contact, fresh air, food, hygiene, sleep and rest [34]. Patients also felt cared for when they engaged with health care professionals who were active and empathetic listeners, who spent time with them, and who showed interest in them as well as compassion for their situation [26, 28, 34, 36–38]. These interpersonal interactions and the physical presence of the health care professionals helped patients feel that they were valuable [30, 34, 39] and that they mattered and belonged in the world [30, 36]; these feelings reduced their suicidal ideations [36] and made them feel safe in the psychiatric ward [34, 35]. Cutcliffe ([36], s. 797) described this recovery process as a "re-connection with humanity" driven by connecting with and feeling cared for by nurses.

Some patients felt that their health care providers had neither time nor compassion for them [25, 34, 37], and these feelings had potentially fatal consequences. These patients experienced that their health care providers spent little time with them because the providers were busy performing other tasks or were interrupted during patient visits. Some patients experienced having no one to talk to, feeling ignored or feeling that they were being stored away as though they were an object [34, 39]. When met with a lack of interest and disengagement

from health care professionals, patients lost confidence in their providers [34], refrained from seeking help and felt unsafe in the ward [35]. The experience of being isolated and alone on the ward raised feelings of hopelessness and worthlessness [39]. Some patients felt redundant and started to plan ways to take their lives on the ward [34].

Receiving a confirmation of feelings
Patients indicated that they needed someone who could listen to and understand their story and situation [29, 32, 34] and provide confirmation of their feelings [24, 34, 36]. They also expressed a need to be taken seriously in their suffering, to be allowed to express their feelings [33–35] and to be able to talk about their suicidality [28, 32]. The patients positively described their experiences being asked directly about their suicidal thoughts and plans, as they longed for opportunities to talk about difficult questions [32]. Patients felt confirmed when they perceived that their mental health providers understood their situation and their need to step away from the demands of their lives [33] and supported their need for hospitalization [35]. The quality of the patient-physician relationship depended on patients' experience of this confirmation, as it enabled them to feel safe and understood [34, 36] and mitigated the despair and shame elicited by their suicide attempts [30, 33, 34].

Patients experienced a lack of confirmation when health care professionals denied their feelings, neglected their illness, diverged from topics that the patients wanted to address, did not address difficult feelings [33–35], merely emphasized their positive resources [32], or did not provide adequate or empathetic responses when they disclosed sensitive issues [33]. Some patients reported that their health care professionals did not spend sufficient time with them to properly understand the reasons for their suicide attempts or that the professionals avoided talking about their suicide attempt [34, 39]. Other patients felt that their nurses were concerned only about their symptoms or the effects of their medications and thus did not allow them opportunities to share their thoughts and feelings [34, 39]. Patients perceiving these types of nonresponsive attitudes with respect to sensitive or important topics experienced worsening feelings of shame and humiliation [32, 33] that exacerbated their suicidal ideations and, in some cases, resulted in subsequent suicide attempts [32, 35].

Being acknowledged as a human being
Patients stated that it was important for providers to meet them on equal ground in order for them to feel acknowledged as a human being [26, 33, 34]. This meant being treated non-judgementally [24, 28, 33, 36] – being empowered and understood as individuals rather than as objects, cases or diagnoses [30, 31, 33]. When the patients

Berg et al. BMC Health Services Research (2017) 17:73

Page 9 of 13

felt that they were acknowledged as a human being, they were able to feel trusted, respected, and safe in the ward and were thus receptive to help [26, 30, 31, 35]. Through these feelings, patients regained their sense of human dignity and thereby felt that it was worthwhile to be alive [26, 33, 36].

Not being seen as a human being was related to feelings of inequality [32, 34], e.g., patients whose providers overused medical jargon or limited their visits to discussions about medications and diagnoses [31, 34], as well as the feeling of being punished by health care professionals through the use of ward rules, verbal expressions or body language to exert their power [33]. Not being seen as a human being was also related to feelings of disempowerment, e.g., being talked about when they were present [32], not being informed about ward routines [33] or who their primary nurse was [25, 37], not being informed about their own arrangements [35], or experiencing that their opinions, information or histories were not considered important [32, 39]. Suicidal patients with borderline personality disorder experienced that they were able to recover by experiencing feelings of safety and trust during their encounters with health care professionals. However, when treated as inferior, the patients did not feel safe in the hospital [31].

Protection
The "Protection" theme pertained to patients' experiences when under constant observation and their struggles to feel safe from themselves and their invasive suicidal impulses [31, 40]. Patients felt safe from themselves and their suicidal impulses and *protected from death* during constant observation. *Receiving support from the observers* was the most important aspect during constant observation, as patients lacking these relationships felt detached and objectified, and their anxiety and symptoms worsened [26, 40].

Being protected from death
During constant observation, some patients experienced a state of mind in which they continually searched for available means to attempt suicide. Some experienced feeling powerless against their suicidal thoughts, whereas others experienced command hallucinations related to suicide [40]. Patients perceived constant observation as a means of altering their suicidal ideations and self-destructive behaviour. Patients considered this practice life-saving because of the presence of vigilant observers, the limited availability of objects to use for suicide attempts, the passage of time [40] and the distraction and escape from the outside world [24]. Patients struggled to feel safe from themselves and to assume responsibility for their

own lives when they lacked protection during acute suicidal crises [31, 41]. Adequate protection was also related to their perceptions of the hospital as a safe place [41, 42]. Accordingly, patients who easily found ways to attempt suicide in the ward and those who did not receive safety searches or monitoring often felt unsafe in the hospital [25].

However, one patient explained that not being able to end his life actually increased his suffering, as he believed that being able to end his suffering in the event that it became unbearable was a source of comfort that helped him cope with his situation [29]. Patients experienced a lack of freedom and privacy under constant observation [25, 40, 41], and most were happy when it was discontinued because of its invasiveness. Some patients even lied about their suicidality to discontinue their observation [40].

Receiving support from observers
Cardell and Pitula [40] concluded that the relationship with care providers was at the heart of constant observation and highlighted the importance of patients having supportive observers as opposed to impersonal and detached observers. Patients experienced observer support as vital for decreasing their suicidality during constant observation [36, 40], as these relationships facilitated reduced suicidality. It was important for the observers to have an optimistic attitude, encourage problem-solving, enable patients to gain self-esteem, acknowledge patients as unique and meaningful human beings [40], and try to understand patients by talking with them about their feelings [43]. By interacting with supportive observers, the patients internalized what the observers projected and felt worthy as human beings and thus worthy of being alive [40].

Some patients experienced a lack of acknowledgement and a lack of interpersonal engagement under constant observation, in which the observers appeared disinterested or distant or behaved as though their patients were a burden [26, 40]. When attempting to start a conversation, the observers either did not respond or displayed hostile facial expressions, which was perceived as a lack of empathy [40]. Lees [26] observed that having minimal interpersonal engagements limits the therapeutic potential of interventions, such as formal observation and medications. Patients deprived of interpersonal engagement felt objectified and separated from their health care professionals [26] or that nobody was there for them or acknowledged their existence [40]; these experiences exacerbated their feelings of anxiety and hopelessness and supported their perceptions that nobody cared about them and that their lives were not worth living [40].

Berg et al. BMC Health Services Research (2017) 17:73

Page 10 of 13

Control

The "Control" theme involved patients' need to re-establish a feeling of control over their lives [27]. Suicidal patients experienced a sense of not being in control, a desire to regain control and a sense of losing control during suicidal crises [26, 27], which they often described as periods of overwhelming emotional suffering that left them unable to cope with life [27–31]. Patients whose health care professionals enabled them to *gain insight* and *cope with difficulties and symptoms* were able to regain control of themselves. This sense of control was important for attaining *discharge readiness* and feeling safe from themselves. Patients without this sense of control experienced increased suicidal thoughts.

Gaining insight

Gaining insight into their illnesses enabled patients to regain control after their suicide attempt [27, 31, 41]; patients who understood themselves were able to address the difficulties in their life without attempting suicide [27] and also felt safer from themselves [31], which helped them feel in control of their lives [41].

Coping with difficulties and symptoms

Patients felt that a sense of control could be achieved by being able to manage difficulties and by learning new problem-solving and help-seeking skills, as well as by receiving adequate treatment for mental health problems and obtaining assistance for social and economic problems. Patients who were able to manage difficulties were able to visualize a way back to their lives [27, 36, 37]. Variations in coping strategies related to different support and independence needs were described, as some patients expressed a need for others to "fix" their problems, some expressed a need for a break from any type of demand, and others emphasized a need to strengthen their self-efficacy to more effectively cope with their life situations [27, 33, 41]. Some patients experienced that their problems were best addressed through one-on-one conversations with health care professionals [35, 37], whereas others preferred group support [25, 28, 37], spiritual support [25], or family or friend support [25, 38]. Patients needed health care professionals who could adapt to their needs and coping strategies [38].

Attaining discharge readiness

Patients expressed the expectation that their admission would result in a cure for or solution to their problems; this belief represented a major disconnect between patients' expectations and the treatment provided during short-term hospitalization [41]. At discharge, some patients felt that their problems were unsolved [37] and that they lacked the skills and tools for coping with their problems and their unchanged circumstances; this

feeling resulted in increased distress and suicidal thoughts [41, 42]. At discharge, patients experienced unaddressed problems related to their suicidality [32, 37, 41]. Thus, they did not feel prepared for discharge and feared that leaving the hospital would lead to subsequent suicide attempts [41]. These patients experienced the feeling that the system was failing them and indicated that they did not know where to seek support in the event that formal mental health services could not help [41].

Patients' sense of control was strengthened by having a post-discharge support plan and by being able to contact the ward after discharge if necessary [27, 35, 41], as well as by being prepared for the upcoming change in their freedom by feeling empowered and supported prior to discharge [31, 41]. Thus, it was important for patients to be allowed to participate in decision making regarding their post-discharge support, as this reduced their fears and anxieties at discharge when being sent "back to the lion's den" ([41], s. 24).

Discussion

This paper posed the following review question: "How can we describe suicidal patients' experiences regarding safety during psychiatric in-patient care?" Suicidal patients' experiences with safety during psychiatric in-patient care were described in 20 studies that addressed whether their needs were met during their hospitalization. This review argues that patients define safety in terms of "feeling safe" and that connection, protection and control play vital roles in their safety-related experiences. Fulfilment of these needs are experienced as essential for recovery from their suicidal crises, in addition to the ability to feel safe during their encounters with health care professionals and to feel safe from their suicidal impulses. When experiencing unmet needs, the patients not only felt unsafe but also exhibited increased suicidal thoughts and feelings. For some patients, these experiences were characterized as triggers for another suicide attempt.

The patient experiences discussed in our review are related to the relational and emotional aspects of hospital care and are consistent with the findings of other studies regarding patient experiences [10, 13]. Our findings also resonate with those of psychiatric in-patient care studies, in which patients identified psychological safety as the most common safety issue [44]. The *connection* and *protection* components discussed herein emphasize the importance of the therapeutic relationship in not only establishing feelings of safety but also optimizing patient outcomes, such as those related to increases or decreases in patient suicidality. The suicidal patients in this review addressed the vital importance of the therapeutic relationship in helping patients both feel safe and be safe. These findings are consistent with those of studies

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 11 of 13

highlighting the therapeutic alliance in effective suicidal patient assessments and management [45–47] and studies identifying the staff–patient relationship as important to patients' feelings of safety [44, 48, 49]. Poor staff-patient relationships were found to play key roles in preventable suicides and were attributed to poor communication and relationship quality [50].

This review highlights the importance of addressing the control component to enable suicidal patients to feel and be safe after discharge from the hospital ward. The *control* component demonstrates the importance of supporting external and internal processes that help suicidal patients feel a sense of control and of understanding the individual from an ideographic point of view. Consistent the results of this review, Connell [51] found that, for mental health patients, a sense of control was linked to feelings of safety. The level of desired dependence or independence varied according to each patient's current circumstances and differed over time.

Undrill [52] stated that psychiatric risks should be perceived as manifestations of suffering. Thus, maintaining high-quality core activities during care and acknowledging suicidal patients' suffering through trust and therapeutic closeness should be the primary methods of addressing patients' suicide risk and improving their safety. In accordance with Undrill's [52] findings, our review indicates that ensuring patient safety entails addressing patients' therapeutic needs and psychological safety in addition to their physical safety. Although integrating relational and technical patient safety measures into psychiatric care is challenging [53, 54], safety is dependent on this integration. The link between feeling safe and being safe is vital for suicidal patients; suicidal patients' physical safety cannot be ensured if they do not feel safe. A system that is designed to physically prevent patients from committing suicide but that neglects their need for a connection with health care professionals may not be successful, as patients may exhibit increased suicidality despite the implementation of procedures to prevent this outcome. Furthermore, patients may not only feel unsafe, but they may also be unsafe because of an increased suicide risk imposed by the complex dynamics between emotionally vulnerable patients and their health care professionals. A broader perspective regarding patient safety that integrates therapeutic needs, psychological safety and physical safety is therefore needed.

Limitations
There were a few limitations to this review. There is a risk of missed studies due to a lack of common nomenclature. To address this limitation, the search terms and strategy were designed to increase the sensitivity to relevant literature. Furthermore, the systematic search included only published peer-reviewed studies, resulting in the exclusion of possibly valuable grey literature and unpublished papers. Although there is a risk of reviewer bias, efforts were made to minimize this bias by applying systematic search methods and by following the PRISMA guidelines for systematic reviews.

The review was limited to studies regarding psychiatric in-patient care. Studies examining the experiences of suicidal patients when receiving emergency care and outpatient treatment were excluded, as were studies regarding the experiences of patients without access to psychiatric care. These types of studies should be included in future reviews that aim to explore patient pathways and continuity of care, as poor continuity of psychiatric care has been associated with preventable suicides [50].

Implications for research and practice
The literature included a diverse group of patients characterized by suicidal behaviour. These different patient groups may present distinct experiences, thus limiting the general understanding of suicidal patients as a group. To account for the diversity of patients in suicidal crises, more studies involving the elderly, youths, low-income countries and non-Western health care settings are necessary. There is also a need to explore the experiences of suicidal patients in different diagnostic groups, such as suicidal in-patients with/without psychotic symptoms and patients with/without chronic suicidality or borderline personality disorder. The similarities and differences between the experiences of suicidal patients and non-suicidal patients must be elucidated to identify the generic versus group-specific characteristics that determine patient safety in psychiatric care. Additionally, patients may have different needs during different stages of their suicidal crises. For example, Rise et al. [55] observed that patients indicated different safety-related needs depending on their symptoms. However, this distinction was not addressed in the studies included in our review and represents a direction for further research.

We recommend the following changes regarding in-patient care practices for suicidal patients based on the results of our systematic review:

- Patient experiences should be considered an integral part of suicidal patients' safety to guide clinical practice and the design of patient safety measures.
- Suicidal patients' need for connection with health care personnel indicate that the relational component of patient safety is considered the most vital aspect of care and should thus be integrated into measures such as constant observation, suicide risk assessments, clinical supervision, ward therapeutic environments and encounters with health care personnel groups.

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 12 of 13

- Suicidal patients' need for protection highlights the importance of constant observation in suicidal crises and the need for skilled professionals in close proximity to patients.
- Suicidal patients' need for control emphasizes the need for therapeutic interventions that increases the patient's insight and problem-solving skills as well as shared decision making regarding treatment plans, crisis plans, support systems and post-discharge follow-up activities.

Conclusion

Our review addresses the importance of having a broader view of safety for suicidal patients rather than merely understanding safety in technical terms. When considering suicidal patients' experiences, safety appears to be related to more than the absence of suicide risk and the need for physical protection. Safety for the suicidal patient is highly dependent on patients' perceptions of their connections with health care professionals, the fulfilment of their needs during care and their psychological safety. To be safe, patients must feel safe through their *connections* with health care professionals; they must be *protected* against their suicidal impulses and they must have a sense of *control* over their lives. These components should serve as the basis of future efforts designed to understand the ontology of safety for suicidal patients during in-patient psychiatric care.

Additional files

Additional file 1: Search strategy for PsychINFO. (DOCX 12 kb)

Additional file 2: Table of themes and meaning units. (DOCX 24 kb)

Additional file 3: Malterud's [22] "Guidelines for authors and reviewers of qualitative studies – an example of checks and scores". (DOCX 15 kb)

Additional file 4: An overview of the included studies' scores: high, middle or low. (DOCX 16 kb)

Authors' contributions
All three authors (SHB, KR and KAA) devised the search strategy and eligibility criteria. SHB conducted the database searches and the primary exclusion of studies. SHB and KR performed the eligibility assessments of the full-text articles. SHB completed the synthesis of the results, and KR and SHB conducted the quality appraisal. All three authors (SHB, KR and KAA) validated the results synthesis and quality appraisal. SHB drafted the manuscript, and KR and KAA provided critical revision of intellectual content. All authors approved the final manuscript.

Authors' information
SHB is a Ph.D. scholar in risk management and societal safety at the University of Stavanger and a psychologist at Stavanger University Hospital. KR has a Ph.D. and is a researcher in Psychiatric Nursing at Stavanger University Hospital. KAA is a professor and head of the research group "Quality and safety in health care systems" in the Department of Health Studies at the University of Stavanger.

Competing interests
The authors declare that they have no competing interests.

Consent for publication
Not applicable.

Ethics approval and consent to participate
Not applicable.

Author details
[1]Division of Psychiatry, Stavanger University Hospital, N-4068 Stavanger, Norway. [2]Department of Health Studies, University of Stavanger, N-4036 Stavanger, Norway.

References
1. Cavanagh JT, Carson AJ, Sharpe M, Lawrie SM. Psychological autopsy studies of suicide: a systematic review. Psychol Med. 2003;33:395–405. doi:10.1017/S0033291702006943.
2. Appleby L, Shaw J, Amos T, McDonnell R, Harris C, McCann K, et al. Suicide within 12 months of contact with mental health services: national clinical survey. BMJ. 1999;318:1235–9. doi:10.1136/bmj.318.7193.1235.
3. Hunt IM, Windfuhr K, Swinson N, Shaw J, Appleby L, Kapur N, et al. Suicide amongst psychiatric in-patients who abscond from the ward: a national clinical survey. BMC Psychiatry. 2010;10:14. doi:10.1186/1471-244X-10-14.
4. Bowers L, Banda T, Nijman H. Suicide inside: a systematic review of inpatient suicides. J Nerv Ment Dis. 2010;198:315–28. doi:10.1097/NMD.0b013e3181da47e2.
5. Emanuel LL, Taylor L, Hain A, Combes JR, Hatlie MJ, Karsh B, et al. PSEP Canada module 13a: mental health care: preventing suicide and self-harm Canada. Canada: Safety Education Program; 2010. http://www.patientsafetyinstitute.ca/en/education/PatientSafetyEducationProgram/PatientSafetyEducationCurriculum/Documents/Module%2013a%20Preventing%20Suicide%20and%20Self-Harm.pdf. Accessed Aug 2015.
6. Norwegian Knowledge Centre for the Health Services. Prevention of suicide in acute pychiatric inpatient department/units. In: National Patient Safety Programme: Safe Hands Norway; 2013. http://www.pasientsikkerhetsprogrammet.no/om-oss/innsatsomr%C3%A5der/forebygging-av-selvmord. Accesed Jul 2015.
7. The Joint Commision Accreditation Hospital. Hospital national patient safety goals. 2014. http://www.jointcommission.org/assets/1/6/2014_HAP_NPSG_E.pdf. Accessed Jul 2016.
8. Lakeman R, Fitzgerald M. Ethical suicide research: a survey of researchers. Int J Ment Health Nurs. 2009;18:10–7. doi:10.1111/j.1447-0349.2008.00569.x.
9. Hollnagel E, Braithwaite J, Wears RL. Resilient health care England: Ashgate studies in resilience engineering. United Kingdom: Ashgate Publishing; 2013.
10. Massó Guijarro P, Aranaz JM, Mira JJ, Perdiguero E, Aibar C. Adverse events in hospitals: the patient's point of view. Qual Saf Health Care. 2010;19:144–7. doi:10.1136/qshc.2007.025585.
11. King A, Daniels J, Lim J, Cochrane DD, Taylor A, Ansermino JM. Time to listen: a review of methods to solicit patient reports of adverse events. Qual Saf Health Care. 2010;19:148–57. doi:10.1136/qshc.2008.030114.
12. de Silva D. Measuring patient experience. UK: The Health Foundation; 2013. http://www.health.org.uk/sites/health/files/MeasuringPatientExperience.pdf. Accessed Aug 2016.

Berg *et al. BMC Health Services Research* (2017) 17:73

Page 13 of 13

13. Doyle C, Lennox L, Bell D. A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. BMJ Open. 2013;3. doi:10.1136/bmjopen-2012-001570.

14. Katsakou C, Priebe S. Patient's experiences of involuntary hospital admission and treatment: a review of qualitative studies. Epidemiol Psichiatr Soc. 2007; 16:172–8. doi:10.1017/S1121189X00004802.

15. Strout TD. Perspectives on the experience of being physically restrained: an integrative review of the qualitative literature. Int J Ment Health Nurs. 2010; 19:416–27. doi:10.1111/j.1447-0349.2010.00694.x.

16. Lelliott P, Quirk A. What is life like on acute psychiatric wards? Curr Opin Psychiatr. 2004;17:297–301. doi:10.1097/01.yco.0000133833.49790.53.

17. Van Der Merwe M, Muir-Cochrane E, Jones J, Tziggili M, Bowers L. Improving seclusion practice: implications of a review of staff and patient views. J Psychiatr Ment Health Nurs. 2013;20:203–15. doi:10.1111/j.1365-2850.2012.01903.x.

18. Van Der Merwe M, Bowers L, Jones J, Simpson A, Haglund K. Locked doors in acute inpatient psychiatry: a literature review. J Psychiatr Ment Health Nurs. 2009;16:293–9. doi:10.1111/j.1365-2850.2008.01378.x.

19. Hopkins JE, Loeb SJ, Fick DM. Beyond satisfaction, what service users expect of inpatient mental health care: a literature review. J Psychiatr Ment Health Nurs. 2009;16:927–37. doi:10.1111/j.1365-2850.2009.01501.x.

20. Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JP, et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. PLoS Med. 2009;6:e1000100. doi:10.1371/journal.pmed.1000100.

21. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Med Res Methodol. 2008;8:45. doi:10.1186/1471-2288-8-45.

22. Malterud K. Qualitative research: standards, challenges, and guidelines. Lancet. 2001;358:483–8. doi:10.1016/S0140-6736(01)05627-6.

23. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3:77–101. doi:10.1191/1478088706qp063oa.

24. Sun F, Long A, Boore J, Tsao L. A theory for the nursing care of patients at risk of suicide. J Adv Nurs. 2006;53:680–90. doi:10.1111/j.1365-2648.2006.03774.x.

25. Sun F-K, Long A, Boore J, Tsao L-I. Patients and nurses' perceptions of ward environmental factors and support systems in the care of suicidal patients. J Clin Nurs. 2006;15:83–92. doi:10.1111/j.1365-2702.2005.01232.x.

26. Lees D, Procter N, Fassett D. Therapeutic engagement between consumers in suicidal crisis and mental health nurses. Int J Ment Health Nurs. 2014;23: 306–15. doi:10.1111/inm.12061.

27. Pavulans KS, Bolmsjö I, Edberg A-K, Ojehagen A. Being in want of control: Experiences of being on the road to, and making, a suicide attempt. Int J Qual Stud Health Well-Being. 2012;7:1–11. doi:10.3402/qhw.v7i0.16228.

28. Montross LP, Palinkas LA, Meier EA, Iglewicz A, Kirkland T, Zisook S. Yearning to be heard: what veterans teach us about suicide risk and effective interventions. Crisis. 2014;35:161–7. doi:10.1027/0227-5910/a000247.

29. Vatne M, Nåden D. Finally, it became too much – experiences and reflections in the aftermath of attempted suicide. Scand J Caring Sci. 2012; 26:304–12. doi:10.1111/j.1471-6712.2011.00934.x.

30. Talseth AG, Gilje F, Norberg A. Struggling to become ready for consolation: experiences of suicidal patients. Nurs Ethics. 2003;10:614–23. doi:10.1191/0969733003ne651oa.

31. Holm AL, Severinsson E. Struggling to recover by changing suicidal behaviour: narratives from women with borderline personality disorder. Int J Ment Health Nurs. 2011;20:165–73. doi:10.1111/j.1447-0349.2010.00713.x.

32. Vatne M, Nåden D. Patients' experiences in the aftermath of suicidal crises. Nurs Ethics. 2014;21:163–75. doi:10.1177/0969733013493218.

33. Wiklander M, Samuelsson M, Åsberg M. Shame reactions after suicide attempt. Scand J Caring Sci. 2003;17:293–300. doi:10.1046/j.1471-6712.2003.00227.x.

34. Talseth AG, Lindseth A, Jacobsson L, Norberg A. The meaning of suicidal psychiatric in-patients' experiences of being cared for by mental health nurses. J Adv Nurs. 1999;29:1034–41. doi:10.1046/j.1365-2648.1999.00990.x.

35. Samuelsson M, Wiklander M, Åsberg M, Saveman B-I. Psychiatric care as seen by the attempted suicide patient. J Adv Nurs. 2000;32:635–43. doi:10.1046/j.1365-2648.2000.01522.x.

36. Cutcliffe JR, Stevenson C, Jackson S, Smith P. A modified grounded theory study of how psychiatric nurses work with suicidal people. Int J Nurs Stud. 2006;43:791–802. doi:10.1016/j.ijnurstu.2005.09.001.

37. McLaughlin C. An exploration of psychiatric nurses' and patients' opinions regarding in-patient care for suicidal patients. J Adv Nurs. 1999;29:1042–51. doi:10.1046/j.1365-2648.1999.01000.x.

38. Vatne M, Nåden D. Crucial resources to strengthen the desire to live: experiences of suicidal patients. Nurs Ethics. 2016;23:294–307. doi:10.1177/0969733014562990.

39. Talseth A-G, Jacobsson L, Norberg A. The meaning of suicidal psychiatric inpatients' experiences of being treated by physicians. J Adv Nurs. 2001;34: 96–106. doi:10.1046/j.1365-2648.2001.3411729.x.

40. Cardell R, Pitula CR. Suicidal inpatients' perceptions of therapeutic and nontherapeutic aspects of constant observation. Psychiatr Serv. 1999;50: 1066–70. doi:10.1176/ps.50.8.1066.

41. Cutcliffe J, Links P, Harder H, Bergmans Y, Balderson K, Eynan R, et al. Understanding the risks of recent discharge: the phenomenological experiences: trying to survive while living under the proverbial "Sword of Damocles". Crisis. 2012;33:265–72. doi:10.1027/0227-5910/a000132.

42. Cutcliffe J, Links P, Harder H, Bergmans Y, Balderson K, Eynan R. Understanding the risks of recent discharge: the phenomenological experiences. Crisis. 2012;33:265–72. doi:10.1027/0227-5910/a000132.

43. Fletcher RF. The process of constant observation: perspectives of staff and suicidal patients. J Psychiatr Ment Health Nurs. 1999;6:9–14. doi:10.1046/j.1365-2850.1999.00181.x.

44. Stenhouse RC. Safe enough in here?: patients' expectations and experiences of feeling safe in an acute psychiatric inpatient ward. J Clin Nurs. 2013;22: 3109–319. doi:10.1111/jocn.12111.

45. Bryan CJ, Corso KA, Corso ML, Kanzler KE, Ray-Sannerud B, Morrow CE. Therapeutic alliance and change in suicidal ideation during treatment in integrated primary care settings. Arch Suicide Res. 2012;16:316–23. doi:10.1080/13811118.2013.722055.

46. Linehan MM. Cognitive behavioral treatment of borderline personality disorder. New York: Guilford Press; 1993.

47. Linehan MM, Comtois KA, Murray AM, Brown MZ, Gallop RJ, Heard HL, et al. Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. Arch Gen Psychiatry. 2006;63:757–66. doi:10.1001/archpsyc.63.7.757.

48. Gilburt H, Rose D, Slade M. The importance of relationships in mental health care: a qualitative study of service users' experiences of psychiatric hospital admission in the UK. BMC Health Serv Res. 2008;8:92. doi:10.1186/1472-6963-8-92.

49. Wood D, Pistrang N. A safe place? Service users' experiences of an acute mental health ward. J Community Appl Soc Psychol. 2004;14:16–28. doi:10.1002/casp.755.

50. Burgess P, Pirkis J, Morton J, Croke E. Lessons from a comprehensive clinical audit of users of psychiatric services who committed suicide. Psychiatr Serv. 2000;51:1555–60. doi:10.1176/appi.ps.51.12.1555.

51. Connell J, O'Cathain A, Brazier J. Measuring quality of life in mental health: are we asking the right questions? Soc Sci Med. 2014;120:12–20. doi:10.1016/j.socscimed.2014.08.026.

52. Undrill G. The risks of risk assessment. Adv Psychiatr Treat. 2007;13:291–7. doi:10.1192/apt.bp.106.003160.

53. Curtis S, Gesler W, Wood V, Spencer I, Mason J, Close H, et al. Compassionate containment? Balancing technical safety and therapy in the design of psychiatric wards. Soc Sci Med. 2013;97:201–9. doi:10.1016/j.socscimed.2013.06.015.

54. Plumb J. Taming uncertainty? Performance, personalisation and practices of patient safety in an Australian mental health service. In: Institutional respository of UNSW Australia. Australian Institute of Health Innovation, Faculty of Medicine, UNSW; 2013. http://www.unsworks.unsw.edu.au/primo_library/libweb/action/dlDisplay.do?vid=UNSWORKS&docId=unsworks_11424&fromSitemap=1&afterPDS=true. Accessed Aug 2015.

55. Rise MB, Westerlund H, Bjørgen D, Steinsbekk A. Safely cared for or empowered in mental health care? Yes, please. Int J Soc Psychiatry. 2014;60: 134–8. doi:10.1177/0020764012471278.

Article II

Safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis: a qualitative study of patient experiences

Authors: Siv Hilde Berg 1*, Kristine Rørtveit 2, Fredrik. A. Walby 3, Karina Aase 4

Authors' affiliations

* Corresponding author: E-mail: siv.hilde.berg@sus.no, +47 90022463.

1. Division of Adult Mental Health, Sandnes DPS, Stavanger University Hospital, Postveien 181, N-4307 Sandnes, Norway.

2. Nursing and Health Care Research Group, Department of Research, Stavanger University Hospital, P.O. Box 8100, N-4068 Stavanger, Norway. E-mail: Kristine.rortveit@sus.no

3. National Centre for Suicide Research and Prevention, Faculty of Medicine, University of Oslo, Norway. Sognsvannsveien 21, Building 12. N-0320 Oslo. E-mail: fredrik.wably@medisin.uio.no

4. Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, N-4036, Stavanger, Norway. E-mail: Karina.aase@uis.no

Abstract

Aim: The aim of this study was to explore suicidal patients' experiences of safe clinical practice during hospitalisation in mental healthcare. The study was guided by the following research question: How do suicidal patients experience safe clinical practice during hospitalisation in mental health wards?

Design, setting and participants: A qualitative design with semi-structured individual interviews was applied. Eighteen patients hospitalised with suicidal behaviour in specialised mental healthcare for adults at a Norwegian hospital participated in the study. Data were analysed thematically and inductively using qualitative content analysis.

Results: Patients in a suicidal crisis experienced safe clinical care in mental health wards characterised by the following three themes: (1) being detected by mindful healthcare professionals, (2) receiving tailor-made treatment and (3) being protected by adaptive practice.

Conclusion: This study illuminates the experiences of safe clinical practice for patients in a suicidal crisis. The patient group was multifaceted with fluctuating suicidal behaviour, which highlights the importance of embracing personalised activities. Safe clinical practice needs to recognise rather than efface patients' variability.

Key words: patient safety, suicidal behaviour, suicide prevention, patient experiences

Strengths and limitations of this study

- This study used qualitative interviews to provide rich and variable in-depth data of inpatients with suicidal behaviour, which is an under-researched group.

- Patient experience consultants were involved in the design of the study.

- The study results are suitable for analytical generalisations regarding the suicidal patients' perspectives on safe clinical practice.

- The patient sample provided rich variability regarding diagnoses, symptom/function level, sex, number of previous hospital admissions and compulsory/voluntary admissions.

- The qualitative methodological approach is not suited for assessing the effects of interventions.

Background

Patients in mental health wards are a population at particular risk of suicide [1, 2]. Inpatient suicide constitutes a proportionately small but clinically important fraction of suicides, and it is a major issue for patient safety in mental inpatient care [3]. How to define and understand patient safety in mental inpatient care has been rarely explored [4, 5]. Patient safety in mental healthcare is commonly described in physical terms [5]. However, other topics emerge when suicidal patients' experiences are considered. In a systematic review [6], we found that suicidal inpatients felt safe due to their connection with healthcare professionals (HCPs), being protected against their suicidal impulses and through having a sense of control over their lives. No studies have specifically explored what suicidal patients emphasise as vital for their experiences of safety during inpatient care, and the literature on suicidal patients' experiences of safe clinical practice is limited. Although asking patients at high risk of suicide about suicidal ideations is not associated with increased suicidal ideation [7], knowledge of how suicidal patients experience suicide risk assessments is limited. Suicidal patients' experiences of being behind locked doors [8] and under constant observation [9, 10] have been sparsely documented in the literature. Although robust evidence supports restricting access to lethal means [11], no studies have explored patients' experiences of lethal means restriction in hospital wards.

Preventing suicides in wards is a challenging task. Similar to most healthcare activities, safe clinical practice for patients with suicidal behaviour is complex and unpredictable, as knowledge of its underlying principles is incomplete, which often leads to a high degree of uncertainty [12]. Expert clinicians cannot predict which patients will commit suicide [13-15], and some patients do not communicate their suicidal ideation to HCPs [8, 16-18]. The aetiological heterogeneity of suicidal behaviour further complicates the creation of an all-encompassing model of best treatment practices. Consequently, each patient is

understood and approached differently [19]. More knowledge on the variability of safe clinical practice from suicidal patients' perspectives is needed. Thus, this article aims to explore suicidal patients' experiences of safe clinical practice during hospitalisation in mental healthcare. The study was guided by the following question: How do suicidal patients experience safe clinical practice during hospitalisation in mental health wards?

Methods

A qualitative design with a phenomenological-hermeneutic approach [20] based on semi-structured individual interviews [21] was applied.

Setting

The study was conducted at a university hospital in Norway that provides specialised mental health services for patients with mental illness. The hospital treats approximately 10,000 patients per year. Patients were recruited from seven mental health wards for adults: one locked acute ward, one locked specialised ward for affective disorders, four open general mental health wards and one short-term open crisis ward. A national patient safety programme for suicide prevention was taking place at the hospital wards during the data collection. The national programme included a checklist to document whether a patient had been assessed for suicide risk, had received an assessment by a specialist on the first day and had received a safety plan and follow-up appointment at discharge as well as whether the next-of-kin had been contacted [22].

Participants

The study used a purposeful sampling strategy that aimed to recruit patients with serious suicidal behaviour and/or active suicide ideation who were admitted to open or locked wards in specialised mental health settings for adults. Patients admitted with non-suicidal self-injury were not included in the study [23]. The participants were recruited by their therapists at the study sites and self-identified with "being in a suicidal crisis". The sample consisted of seven men and eleven women (n=18) aged 18-57 years (mean age 40 years). All but one of the participants were of Western origin. See Table 1 for details regarding the participants' characteristics. A sample size of 18 participants was considered an adequate size to offer sufficient information power to respond to the study aim and ensure participant variability [24].

Table 1 Participants' characteristics

Insert table 1 here

Ethical considerations

All participants provided voluntary and informed consent to participate in the study. They were guaranteed that the information they provided would not be passed on to healthcare professionals in the ward. The interviews were performed before discharge. The timing of the interviews was determined in collaboration with the participants and their therapists to ensure that the participants were sufficiently stable to engage in the interview and without acute suicidal ideation. The study protocol is provided in supplementary file 1 [25]. The participants have been given fictitious names here.

Data collection

The interviews were conducted by the first author (SHB) between September 2016 and January 2017. The interviews were semi-structured and followed an interview guide (supplementary file 2) designed to explore safe clinical practice from different angles. The interview guide was developed in collaboration with an advisory panel and tested in a pilot interview. The pilot interview was included in the study. The interviews focused on the patients' experiences in the context of daily practices in mental health wards. Of particular interest were interactions with HCPs and experiences of safe clinical practice. A phenomenological-hermeneutic approach was applied during the interviews [20], which implied being sensitive to openness during the interviews by following up with the participant's responses to the guided questions [20]. The interviews lasted for a median of 70 min. The first author (SHB) transcribed the interviews verbatim.

Analysis

The data were analysed using a phenomenological-hermeneutic approach to content analysis, which guided a systematic move from the manifest content towards a higher level of abstraction and interpretation [26, 27]. Each interview transcript was read several times by SHB to gain an overall understanding of what the participant expressed. Collaborative discussions of first impressions were conducted with all authors. The unit of analysis was related to experiences of safe clinical practice across the entire data set. These units were marked and condensed by SHB. In an attempt to understand the life world of each individual, the meaning units pertaining to each participant were condensed and coded separately before moving to more general codes across the data set [20]. At this stage of analysis, the manifest content was coded [27]. The codes were sorted into five content areas that shed light on specific aspects (talking about suicide, recognising acute suicidality, relational interactions and the therapeutic milieu, protection and treatment). Categories representing a thread through

the codes were created using tables and abstracted into three themes and seven sub-themes. The analytical process constantly moved between the whole and the parts [20]. The authors read and reread the text to grasp the meaning in relation to the study's aim and to determine the meaning of the data for the participants. The interpretations and findings were continuously discussed by the authors, and feedback on the themes was provided by the advisory panel, which increased reflexivity and allowed interpretations to be contested and nuanced [28].

Results

All participants had active suicidal ideation during inpatient care, and nine had recently attempted suicide prior to their admission to mental healthcare. Safe clinical practice for suicidal inpatients was described by three themes with nine sub-themes, as displayed in Table 2.

Table 2. Themes and sub-themes

Themes	Being detected by mindful HCPs	Receiving tailor-made treatment	Being protected by adaptive practice
Sub-themes	Struggle to communicate suicidal ideations Sensitivity towards deterioration Understood in trusted and familiar relationships	Relieved emotional pressure Collaborative dialogue	Withdrawing from and mastering the outside world Internal and external control Closeness and distance during observation

Patients experienced safe clinical practice when *being detected by mindful HCPs* during acute suicidal deteriorations. As they struggled to communicate their suicidal ideation, they were recognised by HCPs, who showed sensitivity towards their deterioration. Their suicidal behaviour was better understood in trusted and familiar relationships.

Struggle to communicate suicidal ideations

Several participants found it difficult to verbalise their suicidal ideation, which they experienced as more profound during episodes of severe mental illness. This experience was related to losing the ability to articulate their inner thoughts when mentally ill, a fear of being locked inside a mental ward, being fixated on death, or having suicidal impulses with sudden deteriorations and acting on impulse without telling anyone. They depended on others to recognise and express their psychological needs when they deteriorated. Family members fulfilled this function before admission, and HCPs did so in the ward:

> *"I did not say so much (about my suicidal ideation) at the beginning. It was them (parents and girlfriend) who explained most of it because I did not manage to talk. I was completely broken down."* (Nathan)

Because they were limited by fear, mental illness and difficulty with verbal expression, many of the participants stated that the severity of their suicidal ideation was never detected during formal risk assessments.

Many participants felt unsafe when they were hospitalised through the emergency room and the centralised acute ward because of reduced predictability in terms of whom they would meet and where they would be transferred next. For some of the participants, in particular those admitted for the first time, this insecurity prevented them from verbally

communicating their suicidal ideation and reaching out to HCPs for help, as they feared being misunderstood, misinterpreted or mistreated in the form of punishment or seclusion.

Sensitivity towards deterioration

Participants experienced that HCPs showed sensitivity towards their acute suicidal state, which saved them from an impending suicide attempt. The HCP who responded was not always the participant's contact person. The situations were described as "being picked up" or "being read" by someone who was mindful, who cared about them as an individual, who was vigilant and who was able to immediately make sense of changes in their mental state by reading their body language, signs of instability or signs of withdrawal. Patients experienced being seen beyond spoken words by HCPs who acted as lifeguards; they noticed and heard everything:

> *"There is one nurse who reads me like an open book. She picked me up and managed to read me so clearly and get hold of me. Her presence prevented suicide…She says that she can see it in my face, my eyes and my body posture and that I start tightening my fists."* (Aina)

The participants experienced that the HCPs immediately understood how to change their suicidal mind-set through, among other strategies, talking about casual everyday topics, addressing sleep problems, connecting and showing genuine interest, thus helping them to regulate their emotions.

Some participants also described that they required HCPs to interpret their spoken words as they struggled to use the term "suicidal" when communicating suicidal ideations, e.g., *"I am in pain; I need to go out for a walk"* (Aina) and *"My life is truly hard to live"* (Ester). In another example, when Patricia said, "*Just send me home; there is nothing here that works for me",* she planned to go home and take pills to commit suicide, but a nurse

10

understood her communication and told her that she had been neglected in the ward and that she should be taken seriously. Patricia expressed that this understanding saved her from an impending suicide attempt.

Understood in trusted and familiar relationships

The participants sought trusted and familiar relationships in the healthcare system because such relationships gave them predictability in terms of how their suicidal behaviour would be understood and treated. Participants who had been hospitalised previously described active strategies for being admitted to a familiar ward milieu. The safety plan helped them to be hospitalised in a familiar place. Being in a familiar place was emphasised as vital for the detection of acute deterioration because such familiarity meant that the participants were close to HCPs who knew from experience how the patient deteriorated and how to intervene:

> *"They know me, and that is why I think it is important to be admitted to the same ward. They have seen it in the change in my mental state, the things I say and do not say, my facial expressions. They have read me when I get truly, truly silent; then I am ill, and they watch me extra carefully… I have survived because they have watched me like hawks. They have given me my personal freedom, but not too much."* (Gunn)

The participants described the active strategies that they used to cope with their suicidal deteriorations when they did not have access to HCPs who they perceived as being able to read their suicidal behaviour fluctuations. Turid described how she was saved from suicide attempts by fellow patients who detected her behaviour and called ward personnel at times when she deteriorated and by ensuring that she used medications to fall asleep in order to keep her safe from her impulses at night. These strategies were experienced as unfortunate and made the participants feel unsafe, as they were used to compensate for the lack of trusted HCPs in the ward.

Receiving tailor-made treatment

Safe clinical practice was experienced when *receiving tailor-made treatment*, which relieved emotional pressure through targeting underlying stressors and mental health issues. A collaborative dialogue was preferred during suicide risk assessment.

Relieved emotional pressure

The participants presented diverse reasons for their suicidal behaviour, which were approached with equally diverse interventions. When treated as an individual their underlying issues and stressors could be addressed, enabling them to re-establish a feeling of internal emotional control that allowed them to cope with their lives without committing suicide, at least in the short term. Experiences of safe clinical practice were highly related to whether the treatment efficiently relieved emotional pressure. The emotional pressure could be due to chaos in their inner worlds, e.g., difficult feelings, delusions, existential issues and sleep deprivation, and/or the outer world, e.g., relational and economic issues and lack of a place to live. For Eva, her emotional pressure was relieved when she was eventually medicated with a mood stabiliser and her delusions telling her to die faded. For Hannah, her emotional pressure was relieved when she received practical support that helped her cope economically with her new life after surviving a suicide attempt:

> *"I was very miserable in my job. You are in a prison and they have thrown away the key. The key was the assurance that I would never go back to that job. It gave me hope to live and took away my suicidal thoughts… I felt safe when the social worker guided me in the outer world, because I knew how to take hold of my new life."* (Hannah).

Their underlying issues were targeted by unique combinations of helpful and lifesaving care at the wards that was tailored to the individual (e.g., psychotherapy, medications, rest, isolation, having a strict daily structure, group therapy and activities) by

diverse professionals (e.g., social workers, psychologists, nurses and psychiatrists). When these issues were not addressed, the participants experienced being a great risk to themselves after discharge.

Tailor-made treatment was important to ensuring safe clinical practice for patients with complicated mental health issues, as exemplified by Janet. Janet had a history of trauma due to abuse and felt out of control of her suicidal impulses and flashbacks. She managed to find hope and to cope with her flashbacks by talking about her trapped emotions with a psychologist. However, during acute phases she exhibited a severe lack of self-control, and any attempt to restrain her worsened her flashbacks and suicidality. She managed to gradually improve through treatment with sedatives during acute phases and the presence of HCPs who stayed with her in the bathroom in the dark, as this made her feel safe because no one could find her.

Feeling that the conversation relieved emotional pressure was important when talking about suicide. The participants longed for confirmation that their suffering and suicidal ideation were understandable. Many participants experienced HCPs asking about suicidal ideation, but their pain was not alleviated when they opened up.

> *"They do not have the time, they are looking at their watch, as if they would rather be somewhere else. When they do not take my suicidal ideation seriously, I think I am worthless and should instead keep these thoughts to myself"* (Aina).

Opening up about difficult emotions and suicidal ideation involved being in a vulnerable position, as described by Gunn: *"elaborating on my suicidal thoughts is extremely personal for me. It is worse than undressing and being naked. It is like going to the gynaecologist"*. A lack of emotional confirmation elicited feelings of hopelessness, shame and withdrawal from disclosing suicidal thoughts.

13

Collaborative dialogue

The participants had positive experiences of being assessed for suicide risk when the questions appeared to occur naturally as part of a collaborative dialogue in which they were perceived as individuals and HCPs validated their feelings. Merely asking questions about suicidal ideations was described as "ticking off boxes", "being a part of a machine", and "being interrogated", leading to the impression that their personal experiences, stories and feelings were not important*:*

> "*They should ask other questions than just about suicidality, such as what is your life situation like... It is meaningless to be asked about suicidal thoughts and plans when they do not understand the context of why I do not want to live."* (Kate)

The participants said that when addressing suicidal ideation, the HCPs should tailor their responses and adjust the conversation about suicide towards topics that matter instead of giving only general advice. One example of what was perceived as generic advice was reminding patients to think of their children. However, having children was not necessarily a protective factor for keeping the patients alive at different stages of their suicidal crisis. The participants said that they had periods when they struggled with guilt and felt like a burden and thought that their children would manage better without them. Whether the participants experienced a need to elaborate on their suicidal ideation also varied. While some experienced less suicidal ideation when they shared their inner suicidal thoughts and feelings, others improved by focusing on different topics (e.g., finding hope through coping with economic issues and coping with delusions).

Being protected by adaptive practice

Safe clinical practice was experienced when *being protected by adaptive practice* as their suicidal behaviour fluctuated, and the need for protection varied between the participants. Safe clinical practice was experienced as a balance between withdrawing from and mastering the outside world, internal and external control and closeness and distance during observation.

Withdrawing from and mastering the outside world

The participants experienced being protected from suicidal impulses during inpatient care by being removed from the overwhelming stressors and demands of the outside world that triggered their suicidal ideation. However, withdrawal was described as a short-term strategy, and they clearly stated they needed to cope with the outside world:

> *"I struggle with guilt about not coping with things at home. When I am hospitalised, I do not get these reminders all the time and I have fewer episodes of suicidal ideation. At home, I have so much to cope with that the suicidal thoughts are triggered. However, the experience is two-sided: I feel guilty about the fact that I am not with my family and I feel defeated when I do not deal with my home situation because my life should not be here."* (Ida)

The participants felt safe during discharge when HCPs balanced their need to withdraw from and master the outside world. They needed to feel able to cope with both their symptoms and their life situations to be ready to leave the ward. Safety was also experienced when the participants were involved in the discharge process of finding the right balance between activity and peace, testing this balance during ward leaves and receiving support when the balance failed. The patients emphasised the need for predictability regarding follow-up after discharge for their own safety. They experienced severe anxiety about being discharged without feeling prepared:

"To be notified about discharge on the same day is like hitting the pavement at 100 km per hour. I was discharged without being prepared, and I became very confused and even more of a danger to myself." (Gunn)

Internal and external control

The participants described experiencing safety from their suicidal impulses through either internal or external control, which changed during their suicidal crisis, as described by Magnus:

"To feel safe from myself, I needed to get out of that psychosis where I believed that I was completely bound to kill myself because I had let everything and everyone down. Because I did not truly want to kill myself.... I lost my sense of self, my motor control, my sight and my concentration during the psychosis. I thought this was the way my life had become...I needed rest, isolation and medication, and with time I understood that I would get better and then I needed to experience that I could function normally again and trust that I wold not kill myself" (Magnus).

When experiencing safety through external control, the participants felt safe by being physically held back from suicidal impulses, delusions or hallucinations commanding them to commit suicide or moments of overwhelming agitation or despair. Locked doors or restraints replaced their sense of no control, and the lack of such protection placed greater demands on their own self-control. In the aftermath, they perceived that they were being saved from death when they received proper protection:

"Being restrained has a calming effect on me. I can hand control over to others and relax because I know that I cannot do any harm. My suicidal thoughts fade because I know that I am totally without control... When you are so intensely agitated, nothing

stops you... Being hospitalised by force has been crucial for not committing suicide.”
(Klaus)

When feeling safe through experiencing internal control, participants had the freedom to experience that nothing happened as a result of their ideations. Barred windows, locked doors and having to walk through metal detectors increased their anxiety regarding losing this freedom and provoked thoughts such as being a *prisoner*, a *child*, or *“having passed the point of no return”*, which was especially evident among those who were admitted for the first time. In such cases, locked wards could result in feelings of claustrophobia, panic attacks and increased suicidal ideation. Patients' anxiety was reduced when they understood that the physical barriers and procedures were intended to help them.

Being deprived of personal belongings was experienced as a necessary protection for all participants during an acute suicidal crisis, and the procedure was easily accepted and intuitively understood as necessary for their own safety. The participants emphasised the importance of not having access to any potentially lethal items, such as belts or medications, in both open and closed wards to prevent suicide during moments of deterioration.

Closeness and distance during observation

Due to the invasiveness of observations, the participants emphasised the need to balance closeness and physical distance. They needed a balance between being acknowledged and seen and being left in peace, having their privacy respected without being given too much freedom*: “Firm but soft, but not too much freedom,”* The participants' ability to establish relational contact during constant observation varied. Their needs and their ability to connect altered as their mental state fluctuated. Some participants needed active support and dialogue with the HCPs, while others wanted to be left in peace but needed confirmation that the HCPs were present (i.e., outside the room with the door open) if required. Participants experiencing

a psychotic episode reported being in a mental state that left them unable to communicate and establish relationships with the HCPs. In this state, they indicated that they simply needed the HCPs to show that they genuinely cared for them, keeping them within sight and recognising their fluctuations. They described being fixated on death and constantly thinking about suicide and therefore experienced the constant presence of HCPs as lifesaving.

Although constant observation was experienced as invasive, in the aftermath of their crisis the participants perceived this practice as safe and necessary to preventing suicide:

> *"I still hate being followed everywhere when I have a suicide plan, but they watch all the time because they care; it is a sign of humanity. They have saved me many times."* (Janet).

However, observation was experienced as unsafe when the patients' need for connection and acknowledgement was neglected and they felt left on their own and ignored. It was important that the HCPs established relationships with the patients and asked how they were doing rather than just *"checking whether they were alive"* and acting as though they were *"guardians of a prison".* Such practices increased the participants' suicidality, and for some, this had devastating effects on trust.

When under intermittent observation, patients felt safe by having relationships with HCPs based on trust rather than control. Trusting relationships were established when the participants felt they were treated as valuable and equal human beings. Such encounters could be in the form of simple informal contact, which made the participants feel that the HCPs were available and genuinely cared about them as individuals and were not just doing their job. It made them feel safe knowing that the HCPs would intervene during a suicidal crisis if they were unable to call for help themselves.

Discussion

This article aimed to explore the experiences of safe clinical practice among patients hospitalised during a suicidal crisis. There was rich variation in the participants' experiences of safe clinical practice expressed in the following themes: "being detected by mindful HCPs", "receiving tailor-made treatment" and "being protected by adaptive practice".

"Being detected by mindful HCPs" highlights the experiences of struggling to verbally communicate suicidal ideation, which was more profound during severe mental illness. The connection between the severity of mental illness and the lack of verbal communication of suicidal ideation has been described among patients with depressive disorder [17]. Levi-Bels et al. [29] found that suicide attempters who did not verbally communicate suicidal ideation were characterised by higher levels of suicide ideation, distress and victimization than those who did communicate their ideations. An inability to identify and communicate suicidal ideation has also been documented in a sample of patients with psychotic depression [8]. Furthermore, the findings of the present study are in line with other findings in the literature that shame and trust issues inhibit honest communication during suicide risk assessment [18, 30]. Nevertheless, knowledge regarding how patients who do not communicate their suicidal ideation are saved by others is limited. In the present study, HCPs' observation of patient behaviour enabled detection of suicidal behaviour in the participants. The study emphasises the importance of understanding warning signs among inpatients [31], in particular for those who struggle to participate in a collaborative dialogue about suicidal ideations. As warning signs vary among the participants in the present study and across time, the success of such understanding seems to be dependent on HCPs who are familiar with and vigilant about changes in a patient's mental status, irrespective of whether they were that participant's contact person in the ward. These findings emphasise the importance of a high level of

expertise among all HCPs who interact with patients, enabling them to connect with each patient and make sense of her/his situation.

The findings also highlight the importance of being informed about a clear pathway on admission to hospital. The importance of suicidal patients having trust in their HCPs [32-36] has been well documented in the literature. Familiar and trusted relationships are important for enabling suicidal patients to feel safe because they provide predictability in how their suicidal behaviour is understood and approached. Considering that the suicide risk is highest in the first week after psychiatric hospitalisation [37], immediate admission to familiar places that patients trust may be one strategy to employ during re-admissions, as highlighted in the current study.

"Receiving tailor-made treatment" highlights the rich variation in underlying issues and associated treatment paths for patients with suicidal behaviour, emphasising that practice is characterised by differing treatment strategies across participants as opposed to practices with high similarity [38], emphasising that suicidal behaviour is characterised by aetiologic heterogeneity [19]. The findings indicate that tailor-made treatment efficiently relieved the patients' emotional pressure through addressing the individuals' need to re-establish a feeling of control regarding their suicidal impulses. Individualised care and tailored services are highly central topics of patient experiences in healthcare [39]; however, their relevance to suicidal patients' experiences of safety has been less explored. The findings support the assumption that a sense of safety for the individual patient can be achieved through addressing her/his manifestations of suffering, as discussed by Undrill [40]. Furthermore, for the suicidal patient, experiences of safety relate to re-establishing a feeling of control, as found by Berg et al. [6].

This study also addresses the how patients experiencing suicide risk assessments as safe. Through the collaborative dialogue and relieving emotional pressure during suicide risk

assessment, harm may be avoided, and HCPs may help patients to re-establish a feeling of control. The emphasis on the role of a collaborative assessment of suicide risk that accounts for the suicidal patients' individual drivers has been described elsewhere [41]. Patients have stressed the importance of trust and support to verbally communicate their suicidal thoughts [30, 42]. Consequently, this study supports the recommendations provided by the British NICE guidelines [43] to avoid using tools and scales to predict suicide; to manage risk and not merely assess it; and to identify and agree with patients regarding their specific risks [43]. Experiencing safety during suicide risk assessments involves a collaborative dialogue, establishing a therapeutic alliance that includes trust, confirmation of feelings and tuning into the patient's issues to manage emotional pressure. Nevertheless, some patients have difficulties participating in a collaborative dialogue.

The theme "*being protected by adapted practice*" adds knowledge regarding the dynamic, fluctuating and interactive nature of experiencing protection as a means of safe clinical practice. Patients have utterly different experiences of safety in relation to locked doors, barred windows, restraints and involuntary commitment. This finding is in accordance with other descriptions in the literature, e.g., locked doors have been experienced as both "being admitted to prison" and "having access to shelter" [44], while involuntary commitment has been experienced as both "necessary" and "being cared for" and as "unjust" or a "restriction of autonomy" [45, 46]. However, this does not imply that protective interventions are entirely good or bad; it depends on what works for whom [47]. It is not a matter of whether doors should be locked but rather which patients need to be behind locked or open doors along with when and how. Locking all wards as a means of safety may have consequences for help-seeking behaviour, compliance and recovery for patients experiencing being safe with internal control. To ensure that healthcare can adjust to the patients' need for control, it is necessary to have both open and locked wards. Furthermore, identifying patients

who suffer emotionally when they are physically protected is important to minimising their catastrophic thoughts and emotional reactions. To our knowledge, this is the first study of patients' experiences of being deprived of lethal means in hospital wards. There is robust evidence for the preventive effect of not having access to any lethal means in hospital wards [11], and this study provides evidence that patients do not perceive this procedure as invasive when they understand its purpose.

Safe clinical practice was additionally a matter of having a balance between closeness and distance during observation. The importance of supportive HCPs who acknowledge patients during constant observation [48-50] and interchange between control and building the therapeutic relationship [51] has been described in previous research. This study adds to the importance of understanding the dynamic relationship during observation. Patients' needs change throughout a suicidal crisis, so to their capability to connect with others. Safe clinical practice involves a flexible relationship during observations, where HCPs tune into patients' need for closeness and distance. During this complex endeavour, HCPs can make a difference between life and death. Both experiencing inattentive HCPs and feeling ignored can potentially increase suicidal behaviour and cause patients to feel unsafe. Accordingly, this study supports the perspective of Cutcliffe and Barker [52] that observation should be regarded as a dynamic relational practice, without neglecting the vitality of being watchful and physical present.

Strengths and weaknesses of the study

A phenomenological-hermeneutic approach was employed with a sample of 18 participants. While the methodological approach cannot study the effects of interventions, it can provide a deeper understanding of how safe clinical practice is experienced and how it varies among patients. Credibility is strengthened by including a sample that covered significant variations,

and participants with relevant experiences with the phenomenon under study [26], and through providing a sample size with sufficient information power [24]. The findings cannot be generalised to the entire population of patients hospitalised in mental health wards during a suicidal crisis. Nevertheless, analytical generalisations can be made regarding the suicidal patients' perspectives on safe clinical practice [53].

Conclusion

This study contributes to the understanding of how suicidal patients experience safe clinical practice. Safe clinical practice is experienced by patients hospitalised during a suicidal crisis when they are detected by mindful HCPs, receive tailor-made treatment and are protected by adaptive practice. The patient group was multifaceted with fluctuating suicidal behaviour, which highlights the importance of embracing personalised activities. Safe clinical practice needs to recognise rather than efface patients' variability. This requires expert knowledge from HCPs in terms of interpersonal skills, competence and experience with understanding mental illness and how to adapt practices to the individual patient.

Abbreviations

HCP- Healthcare professionals

Supplementary files

1. Study protocol
2. Interview guide

Declarations

Conflicts of interest

None declared.

Patient consent for publication

Not required.

Ethical approval

This study was approved by the Regional Committees for Medical and Health Research Ethics (2016/34; Norway).

Dataset availability

The datasets generated and/or analysed during the present study are not publicly available due to restrictions regarding individual privacy, but anonymised data are available from the corresponding author upon reasonable request.

Author contributions

All authors provided substantial contribution in the conception of the work and analysis of data. SHB was accountable for the design of the study, the data collection and organisation of the data. SHB read, coded all transcripts and developed summaries. KR and KAA read half of the transcripts and drafted summaries of early impression of the material. FAW read summaries and participated in collaborative discussions of first impressions of the material with all authors. All authors participated in analytical reflections and validation of the analysis. SHB drafted the manuscript, and all authors provided critical revisions for intellectual content.

Author information

SHB: PhD scholar in Health and Medicine, consultant clinical psychologist, safety science. KR: PhD, researcher in nursing science, mental health nurse. FAW: Consultant clinical psychologist, researcher in suicide research and head of the Norwegian Surveillance System for Suicide in Mental Health and Substance Misuse Services. KA: professor in patient safety, researcher in health services research.

References

1. Large, M., et al., *Systematic review and meta-analysis of the clinical factors associated with the suicide of psychiatric in-patients.* Acta Psychiatr Scand, 2011. **124**(1): p. 18-29.
2. Appleby, L., *Suicide in psychiatric patients: Risk and prevention.* British Journal of Psychiatry, 1992. **161**: p. 749-758.
3. Bowers, L., T. Banda, and H. Nijman, *Suicide Inside: A Systematic Review of Inpatient Suicides.* The Journal of Nervous and Mental Disease, 2010. **198**(5): p. 315-328 10.1097/NMD.0b013e3181da47e2.
4. Kanerva, A., J. Lammintakanen, and T. Kivinen, *Patient safety in psychiatric inpatient care: a literature review.* Journal of Psychiatric and Mental Health Nursing, 2013. **20**(6): p. 541-548.
5. Brickell, T.A., et al., *Patient safety in mental health*. 2009, Canadian Patient Safety Institute and Ontario Hospital Association: Edmonton, Alberta.
6. Berg, S.H., K. Rørtveit, and K. Aase, *Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies.* BMC Health Services Research, 2017. **17**(1): p. 73.
7. Mathias, C.W., et al., *What's the Harm in Asking about Suicidal Ideation?* Suicide & life-threatening behavior, 2012. **42**(3): p. 341-351.
8. Fredriksen, K.J., et al., *Psychotic Depression and Suicidal Behavior.* Psychiatry, 2017. **80**(1): p. 17-29.
9. Cardell, R. and C.R. Pitula, *Suicidal inpatients' perceptions of therapeutic and nontherapeutic aspects of constant observation.* Psychiatric Services, 1999. **50**(8): p. 1066-1070.
10. Pitula, C.R. and R. Cardell, *Suicidal inpatients' experience of constant observation.* Psychiatric services 1996. **47**(6): p. 649-651.
11. Zalsman, G., et al., *Suicide prevention strategies revisited: 10-year systematic review.* The Lancet Psychiatry, 2016. **3**(7): p. 646-659.
12. Braithwaite, J., et al., *Health Care as a Complex Adaptive System*. Resilient Health Care ed. E. Hollnagel, J. Braithwaite, and R.L. Wears. Vol. 1. 2013, England: Ashgate Studies in Resilience Engineering.
13. Large, M., et al., *Risk factors for suicide within a year of discharge from psychiatric hospital: a systematic meta-analysis.* Aust N Z J Psychiatry, 2011. **45**(8): p. 619-28.
14. Large, M., C. Ryan, and O. Nielssen, *The validity and utility of risk assessment for inpatient suicide.* Australasian Psychiatry, 2011. **19**(6): p. 507-512.
15. Franklin, J.C., et al., *Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research.* Psychol Bull, 2017. **143**(2): p. 187-232.
16. Eskin, M., et al., *A cross-cultural investigation of suicidal disclosures and attitudes in Austrian and Turkish university students.* Death studies, 2015. **39**(10): p. 584-591.
17. Apter, A., et al., *Relationship between self-disclosure and serious suicidal behavior.* Comprehensive Psychiatry, 2001. **42**(1): p. 70-75.
18. Julie, E.R., et al., *Understanding Why Patients May Not Report Suicidal Ideation at a Health Care Visit Prior to a Suicide Attempt: A Qualitative Study.* Psychiatric Services, 2019. **70**(1): p. 40-45.
19. Turecki, G. and D.A. Brent, *Suicide and suicidal behaviour.* The Lancet. **387**(10024): p. 1227-1239.
20. Dahlberg, K., H. Dahlberg, and M. Nystrøm, *Reflective Lifeworld Research*. Studentlitteratur. 2008, Sweden
21. Johnson, J.M. and T. Rowlands, *The interpersonal dynamics of in-depth interviewing*, in *The SAGE Handbook of Interview research: the complexity of the craft* J.F. Gubrium, et al., Editors. 2012, SAGE: USA.
22. Directorate of Health. *The Norwegian Patient Safety Programme: In Safe Hands*. 2011 [cited 2019 April]; Available from: https://www.pasientsikkerhetsprogrammet.no/om-oss/english/the-norwegian-patient-safety-programme-in-safe-hands.

23.   Turecki, G. and D.A. Brent, *Suicide and suicidal behaviour.* The Lancet, 2016. **387**(10024): p. 1227-1239.

24.   Malterud, K., V.D. Siersma, and A.D. Guassora, *Sample Size in Qualitative Interview Studies:Guided by Information Power.* Qualitative Health Research, 2016. **26**(13): p. 1753-1760.

25.   Berg, S.H., et al., *Safe clinical practice for patients hospitalised in a suicidal crisis: a study protocol for a qualitative case study.* BMJ Open, 2017. **7**(1).

26.   Graneheim, U.H., B.M. Lindgren, and B. Lundman, *Methodological challenges in qualitative content analysis: A discussion paper.* Nurse Educ Today, 2017. **56**: p. 29-34.

27.   Graneheim, U.H. and B. Lundman, *Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness.* Nurse Educ Today, 2004. **24**(2): p. 105-12.

28.   Malterud, K., *Qualitative research: standards, challenges, and guidelines.* The Lancet, 2001. **358**(9280): p. 483-488.

29.   Levi-Belz, Y., et al., *Psychosocial Factors Correlated with Undisclosed Suicide Attempts to Significant Others: Findings from the Adolescence SEYLE Study.* Suicide and Life-Threatening Behavior, 2019. **49**(3): p. 759-773.

30.   Ganzini, L., et al., *Trust is the Basis for Effective Suicide Risk Screening and Assessment in Veterans.* Journal of General Internal Medicine, 2013. **28**(9): p. 1215-1221.

31.   Rudd, M.D., *Suicide warning signs in clinical practive.* Current Psychiatry Reports 2008. **10**: p. 87-90.

32.   Hagen, J., B.L. Knizek, and H. Hjelmeland, *Former suicidal inpatients' experiences of treatment and care in psychiatric wards in Norway.* International journal of qualitative studies on health and well-being, 2018. **13**(1): p. 1461514.

33.   Talseth, A.G., F. Gilje, and A. Norberg, *Struggling to become ready for consolation: experiences of suicidal patients.* Nurs Ethics, 2003. **10**(6): p. 614-23.

34.   Holm, A.L. and E. Severinsson, *Struggling to recover by changing suicidal behaviour: narratives from women with borderline personality disorder.* Int J Ment Health Nurs, 2011. **20**(3): p. 165-73.

35.   Wiklander, M., M. Samuelsson, and M. Åsberg, *Shame reactions after suicide attempt.* Scandinavian Journal of Caring Sciences, 2003. **17**(3): p. 293-300.

36.   Samuelsson, M., et al., *Psychiatric care as seen by the attempted suicide patient.* Journal of Advanced Nursing, 2000. **32**(3): p. 635-643 9p.

37.   Qin, P. and M. Nordentoft, *Qin P, Nordentoft M. Suicide risk in relation to psychiatric hospitalization: evidence based on longitudinal registers. Arch Gen Psychiatry 62: 427-432*. Vol. 62. 2005. 427-32.

38.   Hoffman, R.R. and L.G. Militello, *Expertice studies* in *Perspectives on cognitive task analysis: Historical origins and modern communities of practice*, R.R. Hoffman and L.G. Militello, Editors. 2014, Psychology Press New York.

39.   Wolf, J., et al., *Defining patient experience.* Patient Experience Journal., 2014. **1**(1): p. 7-19.

40.   Undrill, G., *The risks of risk assessment.* Advances in Psychiatric Treatment 2007. **13**(291-297).

41.   Jobes, D.A., *The Collaborative Assessment and Management of Suicidality (CAMS): An Evolving Evidence-Based Clinical Approach to Suicidal Risk.* Suicide and Life-Threatening Behavior, 2012. **42**(6): p. 640-653.

42.   Hom, M.A., et al., *"Are You Having Thoughts of Suicide?" Examining Experiences With Disclosing and Denying Suicidal Ideation.* Journal of Clinical Psychology, 2017. **73**(10): p. 1382-1392.

43.   National Institute for Health & Excellence, *Self harm: Longer-term management: National ClinicalGuideline Number 133*. 2012, The British Psychological Society and The Royal College of Psychiatrists England.

44.   Lindgren, B.-M., et al., *Patients' experiences of isolation in psychiatric inpatient care: Insights from a meta-ethnographic study.* **0**(0).

45.   Katsakou, C., et al., *Psychiatric patients' views on why their involuntary hospitalisation was right or wrong: a qualitative study.* Soc Psychiatry Psychiatr Epidemiol, 2012. **47**(7): p. 1169-79.

46.   Katsakou, C. and S. Priebe, *Patient's experiences of involuntary hospital admission and treatment: a review of qualitative studies.* Epidemiologia e psichiatria sociale, 2007. **16**(2): p. 172-178.

47.   Roth, A. and P. Fonagy, *What Works for Whom?: A Critical Review of Psychotherapy Research*. Vol. second edition. 2006, New York London: Guilford PRess

48.   Pitula, C.R. and R. Cardell, *Suicidal inpatients' experience of constant observation.* Psychiatric services (Washington, D.C.), 1996. **47**(6): p. 649-651.

49.   Cutcliffe, J.R., et al., *A modified grounded theory study of how psychiatric nurses work with suicidal people.* Int J Nurs Stud, 2006. **43**(7): p. 791-802.

50.   Lees, D., N. Procter, and D. Fassett, *Therapeutic engagement between consumers in suicidal crisis and mental health nurses.* International Journal of Mental Health Nursing, 2014. **23**(4): p. 306-315.

51.   Vraale, G.B. and E. Steen, *The dynamics between structure and flexibility in constant observation of psychiatric inpatients with suicidal ideation.* Journal of Psychiatric and Mental Health Nursing 2005. **12**(5): p. 513-518.

52.   Cutcliffe, J.R. and P. Barker, *Considering the care of the suicidal client and the case for 'engagement and inspiring hope' or 'observations'.* Journal of Psychiatric & Mental Health Nursing, 2002. **9**(5): p. 611-621.

53.   Polit, D.F. and C.T. Beck, *Generalization in quantitative and qualitative research: Myths and strategies.* International Journal of Nursing Studies, 2010. **47**(11): p. 1451-1458.

Table 1 – Participants' characteristics

	Gender	Occupation	Hospitalizations*	Age	Protection level	Main ICD 10 diagnoses at discharge
1. pilot	F	Social secured	2	31-40	Open, voluntary	F31.3 Bipolar affective disorder, current episode mild or moderate depression
2.	F	Social secured	22	41-50	Locked, voluntary	F31.5 Bipolar affective disorder, current episode severe depression with psychotic symptoms
3.	M	Employed	2	51-60	Open, voluntary	F32.2 Severe depressive episode without psychotic symptoms
4.	M	Unemployed	2	18-30	Open, voluntary	F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms
5.	M	Unemployed	2	41-50	Locked, voluntary	F32.2 Severe depressive episode without psychotic symptoms
6.	M	Unemployed	1	18-30	Closed, involuntary	F33.3 Recurrent depressive disorder, current episode severe with psychotic symptoms
7.	F	Social secured	80	18-30	Open, voluntary	F60.3 Emotionally unstable personality disorder F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms
8.	F	Social secured	93	41-50	Open, involuntary	F20.0 Paranoid schizophrenia
9.	F	Social secured	56	51-60	Open, voluntary	F60.3 Emotionally unstable personality disorder F33.1 Recurrent depressive disorder, current episode moderate F. 10.1 Mental and behavioural disorders due to use of alcohol, Harmful use

10.	F	Employed part-time	3	41-50	Open, voluntary	F31.3 Bipolar affective disorder, current episode mild or moderate depression
						F. 10.0 Mental and behavioural disorders due to use of alcohol, Acute intoxication
						F90.0 Disturbance of activity and attention
11.	M	Social secured		6 51-60	Open, voluntary	F33.1 Recurrent depressive disorder, current episode moderate
						F 10.1 Mental and behavioural disorders due to use of alcohol, harmful use
12.	F	student	5	41-50	Open, voluntary	F31.3 Bipolar affective disorder, current episode mild or moderate depression
						F90.0 Disturbance of activity and attention
13.	F	Social secured	N.A.	31-40	Locked, involuntary	F31.5 Bipolar affective disorder, current episode severe depression with psychotic symptoms
14.	M	Unemployed	1	18-30	Locked, voluntary	F32.2 Severe depressive episode without psychotic symptoms
15.	M	Employed	5	51-60	Locked, voluntary	F31.6 Bipolar affective disorder, current episode mixed
16.	F	Social secured	19	18-30	Open, involuntary	F43.1 Post-traumatic stress disorder
						F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms
17.	F	Employed	1	51-60	Locked, voluntary	F33.1 Recurrent depressive disorder, current episode moderate
						F 19.0 Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances, acute intoxication
18.	F	Student	1	31-40	Open, voluntary	F31.9 Bipolar affective disorder, unspecified

* Number of hospitalizations* in adult inpatient care

Article III

BMC Psychiatry

RESEARCH ARTICLE

Open Access

Adaptive capacities for safe clinical practice for patients hospitalised during a suicidal crisis: a qualitative study

Siv Hilde Berg[1]* ᴵᴰ, Kristine Rørtveit[2], Fredrik A. Walby[3] and Karina Aase[4]

Abstract

Background: Safe clinical practice for patients hospitalised in mental health care during a suicidal crisis is situated within a dynamic, non-linear and uncertain context. Under such complex conditions, the adaptive capacity is considered vital to handling challenges and changes in clinical care. This study aimed to explore safe clinical practice for suicidal patients hospitalised in mental health wards through understanding healthcare professionals' (HCPs') capacities to adapt to challenges and changes in clinical care.

Methods: This study applied a qualitative design with focus group and individual interviews. Twenty-five HCPs participated in the focus groups, and 18 participated in individual interviews. The study was conducted in open and locked wards in a university hospital in Norway providing specialised mental health services for patients with mental illness.

Results: HCPs described their adaptive capacities for clinical practice relative to three themes. 1) HCPs *used expertise to make sense of suicidal behaviour* to support complex decision making. Their strategies included setting aside forms and checklists to prioritise trust and making judgements based on more than just patients' spoken words. They improved their understanding by seeking others' perspectives through collaborative sense-making processes involving the healthcare team and patient. 2) HCPs *individualised the therapeutic milieu* to address the diversity of patients with suicidal behaviour by creating individual clinical pathways, making trade-offs between under- and over-protection and adjusting observations. 3) HCPs described *managing uncertainty* as necessary for providing safe clinical practice. They managed uncertainty as a team by developing mutual collegial trust and support and creating a shared understanding.

Conclusion: HCPs' adaptive capacities are vital to the complex set of practices involved in safe clinical practice for patients hospitalised during a suicidal crisis. By using expertise, individualising the therapeutic milieu, and managing uncertainty, HCPs individually and collectively develop their capacities to adapt to challenges and changes in clinical care. HCPs cannot easily ensure safe clinical practice by following standards; safe clinical practice depends on HCPs' adaptations. Ward systems that ensure collegial trust and support, as well as arenas that foster shared understanding and situational awareness, are needed.

Keywords: Adaptation, Sense making, Trade-offs, Mental health, Suicide, Uncertainty

---

* Correspondence: siv.hilde.berg@sus.no
[1]Division of Adult Mental Health, Sandnes DPS, Stavanger University Hospital, Postveien 181, N-4307 Sandnes, Norway
Full list of author information is available at the end of the article

Berg *et al. BMC Psychiatry*   (2020) 20:316

Page 2 of 12

Background

Suicide is a particular concern for patient safety in mental health wards. However, knowledge to support an understanding of safety for patients hospitalised during a suicidal crisis is lacking [1, 2]. Despite the growing body of literature on patient safety research, knowledge on patient safety in mental health settings is limited [3]. Studies have documented that different safety practices are simultaneously enacted in mental health care. The personalised- psychological safety and therapeutic safety are created in the personal contact with patients, and healthcare professionals (HCPs) attempt to manage risk by ensuring that suicidal patients feel safe [4–6]. Technical safety and disciplinary safety attempt to reduce risk through implementing barriers and control systems, such as physical infrastructure and the documentation of suicide risk [5–7].

Preventing suicides in wards is undoubtedly a complex and challenging task. It is well documented that HCPs who care for suicidal patients carry an emotional burden and experience fear of blame [8–11]. Clinical suicide risk instruments and risk scales do not enable HCPs to predict which patients will die by suicide [12–15], and clinical decision making in hospital wards often involves a high degree of uncertainty. Suicidal behaviour is characterised by aetiological heterogeneity both in terms of presentation and treatment [16]; thus, each patient needs to be understood and approached differently. In particular, being detected by mindful HCPs who show sensitivity toward the individual during acute suicidal deteriorations, receiving tailor-made treatment and being protected by adaptive practice are vital for suicidal patients' experiences of safe clinical practice [17].

Safe clinical practice for a patient during a suicidal crisis is situated within a dynamic, non-linear and uncertain context [18, 19]. Under such complex conditions, the adaptive capacity is considered vital to handling challenges and changes in clinical care [20–22]. To ensure for good outcomes for patients HCPs make adaptations by relying on their skills, knowledge and experience [20], and they go beyond their assigned tasks and roles to adapt in everyday practice [23, 24]. Although adaptability is perceived as a source of safety in complex practices, it is acknowledged that adaptability may also have negative consequences [20, 25–27].

Studies of clinical decision making in complex care settings have found that HCPs constantly make trade-offs between competing goals, adjust procedures to complete their work, and apply sense-making skills to increase their situational awareness of ill-structured situations. These are all examples of adaptive capacities that HCPs exhibit in different healthcare contexts [27]. Such adaptive capacities also apply to suicide risk detection and response in clinical care practices. A study among community-based mental health workers in the UK revealed a complex decision-making process involving uncertainty and trade-offs regarding patient clinical needs, patient desires, legal and procedural obligations, and resource considerations [28].

What particularly distinguishes an expert from a novice is the ability to make sense of comprehensive and complex information through situational awareness [29]. These abilities are essential for adaptation [20]. Currently, there is a lack of literature regarding how HCPs use their expertise to improve clinical decision making in mental health [30], how they experience challenges and changes, and how they adapt to ensure safe clinical practice for patients hospitalised during a suicidal crisis. Inpatient care settings for suicidal patients involve clinical decision making about multiple aspects of safe care, e.g., acute and long-term risk management, physical protection and coordination of multi-professional care. This study aimed to explore safe clinical practice for suicidal patients hospitalised in mental health wards through understanding healthcare professionals' (HCPs') capacities to adapt to challenges and changes in clinical care. The specific research question was as follows: How can we describe the adaptive capacities that HCPs use to ensure safe clinical practice for patients hospitalised during a suicidal crisis?

Methods

Study context

The study was conducted at a university hospital in Norway that provides specialised mental health services for patients with mental illness. The hospital treats approximately 10,000 patients per year. A national patient safety programme for suicide prevention was ongoing in the hospital wards during data collection. This national programme included a checklist to document whether the patient had been assessed for suicide risk, had received an assessment by a specialist within the first day, and had received a safety plan and follow-up appointment at discharge and whether the next of kin had been contacted [31, 32]. In addition, the hospital had developed its own forms for documenting risk factors and warning signs for suicide risk. National guidelines for the prevention of suicide in mental health care systems were also implemented [33].

Study design

The study applied a qualitative design with focus group interviews and individual interviews [34, 35]. The purpose of the use of multiple, complementary methods was to increase the understanding of the studied phenomenon of safe clinical practice [36, 37]. We applied sequential triangulation to integrate the data into a comprehensive whole, as described by Morse [38, 39].

First, we conducted focus group interviews to explore and identify the relevant values and perspectives on safe clinical practice. Then, we performed individual interviews to study in depth the themes that emerged in the focus group interviews [38, 39].

Data collection

We employed a purposeful sampling strategy, aiming to recruit HCPs who were working in open or locked wards in specialised mental health care settings for adults and who had different levels of expertise and diverse professional backgrounds [40]. We recruited HCPs from nine wards. The locked wards specialised in psychosis ($n = 1$), affective disorders (n = 1) or acute care (n = 2), and the open wards specialised in rehabilitation ($n = 3$) or short-term stabilisation during crisis (n = 2). The sample included nurses (registered nurses with and without a specialisation in mental health), social educators, a social worker, medical doctors (physicians and consultant psychiatrists), and consultant clinical psychologists (with and without a specialisation in clinical adult psychology). The participants were of both genders (7 males and 28 women) and had one to 24 years of work experience in mental health wards. We considered participants who had one to two years of experience to be novices and those who had more than five years of experience and a specialisation in mental health to have a high level of expertise. A sample of sufficient size was needed to represent the variation among HCPs involved in the provision of safe clinical practice [41]. We prioritised the representation of variations in gender, expertise and experience, professional backgrounds, and open/locked wards in the sample [42]. We evaluated the sample size continuously during the research process and considered the final sample to provide adequate information power [41]. To be included in the focus group interviews and the individual interviews, HCPs had to voluntarily consent to participate. None of the participants dropped out of the study. The interviews took place at a location close to the HCPs' workplace. The interviews were performed face to face and were audio-recorded. The researchers explained that the purpose of the study was to understand, not to evaluate, the participants' practices. Data were collected from May to December 2016.

Focus group interviews

Five focus group interviews were performed [34, 43], and a total of 25 HCPs from eight open and locked wards were included in the groups (Table 1). The interviews followed a semi-structured interview guide that was developed in collaboration with the advisory panel and pilot tested (additional file 1). Either SHB or KR moderated the interviews, and SHB or Marie Anbjørnsen co-moderated the interviews (see Acknowledgements). We

Table 1 Participants in the focus group interviews

Group nr.	Participants	Setting
1. (pilot)	5 nurses	1 open ward
2.	2 psychologists, 4 medical doctors	3 locked wards
3.	3 psychologists, 2 medical doctors	2 open wards
4.	4 nurses	3 locked wards
5.	5 nurses	3 open wards

made modifications to the interview guide after each interview to continuously improve the understanding of safe clinical practice in the mental health wards. During the interviews, we asked open-ended questions about experiences working with suicidal patients in wards, contingencies for good outcomes and safe clinical practice, and experiences with safety measures. The interviews lasted 90 min and yielded data about the participants' emotions, opinions and challenges related to safe clinical practice.

Individual interviews

We conducted individual interviews [34] with 18 HCPs from seven mental health wards (Table 2). Eight of the participants had participated in a focus group interview, which allowed us to follow up on specific issues from the focus groups with some of the participants while also including participants who were not influenced by the focus group discussions and thus could provide more intuitive reflections. SHB conducted the individual interviews utilising a semi-structured interview guide that had been developed and pilot tested (additional file 1). The interview guide aimed to elicit participants' elaboration on in-depth topics related to the five themes generated by the focus group interviews: making sense of suicidal behaviour, creating a shared understanding, handling emotional burdens, providing treatment and protection and learning from practice. The individual interviews lasted approximately 60 min and yielded data about each participant's feelings, experiences and strategies.

Data analysis

We analysed the data material from the focus group interviews and individual interviews sequentially [38] using Graneheim and Lundman's method for qualitative content analysis [44]. Consistent with a phenomenological hermeneutic point of view, we aimed to be open to the meanings presented by the participants and the relationships between the parts and the whole [34]. The analysis

Table 2 Participants in the individual interviews

Participants	Setting
3 psychologists	1 locked ward and 2 open wards
4 medical doctors	1 locked ward and 1 open ward
11 nurses	2 locked wards and 3 open wards

involved systematic movement from the manifest content towards a higher level of abstraction and interpretation, as well as movement back and forth between the content and interpretation to elicit meaning [45]. SHB read each interview transcript to gain an overall understanding of the participants' expressions. KR and KAA read a selection of the interviews and collaborated in discussions of their first impressions. SHB marked and condensed meaning units, generated codes that represented the manifest content, and developed categories across the data set that unified the codes. In the next stage, SHB sorted the categories into content areas and then abstracted them into sub-themes and themes. All authors collaborated analytically in the generation of themes. Finally, we triangulated the results from the focus groups and the individual interviews to generate integrated sub-themes and themes [34]. The integration of the data provided a more comprehensive picture and a fuller understanding than we could have been achieved by analysing the data collected with each method individually [38].

Results

In the analysis, we identified a set of eight sub-themes and organised them into three major themes, each representing an adaptive capacity for safe clinical practice, as displayed in Table 3.

Using expertise to make sense of suicidal behaviour

HCPs described their use of expertise to make sense of suicidal behaviour during risk assessment. They accomplished this by setting aside forms and checklist aside to prioritise trust, making judgements based on more than just patients' spoken words, and improving their understanding by seeking others' perspectives.

Setting aside the forms and checklist to prioritise trust

The participants emphasised the importance of establishing a trusting bond with patients during suicide risk assessment. They created a safe atmosphere and a trusting bond by engaging in a dialogue with the patient about his or her situation as a whole and by asking about suicidal ideations as a normal part of the dialogue.

A female medical doctor described these practices as follows:

> "I start off easy and ask why they are here, and the more the patient talks about their challenges, the more you can go into the things he talks about, and then in a way, it leads to a natural transition to 'when you have this struggle that you describe, have you ever had thoughts that it would have been easier to die or thoughts of taking your own life?' I try to make a natural transition and create some trust during the conversation so the patient feels it's safe to open up and talk about things along the way" (1 year of experience, locked wards).

HCPs ensured that employing checklists and forms did not compromise the therapeutic relationship. Thus, they completed the checklist and the form for suicide risk assessments after talking with the patient. As patients opened up about their emotions, HCPs affirmed their feelings and approached them with non-judgemental and exploratory attitudes, providing hope and signalling that they were able to and had time to listen. They considered trust to be essential to obtaining honest answers. Through relational contact with patients, the HCPs made sense of patients' spoken words and their individual ways of behaving and thinking when suicidal.

Making judgements based on more than patients' spoken words

HCPs knew they could not always trust what patients reported and often paid attention to their "gut feelings". They described the "gut feeling" as an unpleasant sense of uncertainty that made them worry that a patient was at immediate risk of suicide. The "gut feeling" was something they felt but could not express verbally, as described by a female medical doctor:

> "It's often a gut feeling you get, and that is what makes it difficult. You should be able to document this in a suicide risk assessment. But it is, in a way, what happens in a meeting with the patient, their spoken and unspoken words, their background, their

Table 3 Themes and sub-themes derived from the focus group and individual interviews

Themes	Sub-themes
Using expertise to make sense of suicidal behaviour	Setting aside the forms and checklists to prioritise trust Making judgement based on more than patients' spoken words Improving understanding by seeking others' perspectives
Individualising the therapeutic milieu	Creating individual clinical pathways Making trade-offs between under- and over-protection Adjusting observations
Managing uncertainty	Building mutual collegial trust and support Creating a shared understanding

history, everything, in a way, the overall picture" (1 year of experience, locked wards).

HCPs described their decision to trust a "gut feeling" as depending on the level of expertise and the quality of the therapeutic relationship with the patient. The experience of a "gut feeling" varied across situations and was related to a) a lack of contact and connection (e.g., lack of eye contact, withdrawal, lack of communication about suicidal ideations, poor mental state and/or lack of trust); b) a mismatch between a patient's observed behaviour and his or her spoken words (e.g., saying she felt fine while showing signs of withdrawal and stress); and c) an unpredictable or sudden change in behaviour (e.g., acting drugged, agitated, or withdrawn or exhibiting sudden contempt or happiness):

"Something happens with us when there are patients whom we are not familiar with; its feels more uncertain. Knowing how to ensure their safety is more challenging. We don't know their signals and cues; we don't know what we can use to keep them alive during crisis…. we don't have the connection" (Female social educator, 11 years of experience, open rehabilitation ward).

However, HCPs noted that they did not base their judgement solely on the "gut feeling". Experienced medical doctors and psychologists described looking at the whole picture when trying to understand each patient's suicidality and considering multiple sources of information. Experience increased the complexity of the information sources that were taken into account to understand the overall picture. Triangulating multiple sources of information improved HCPs' situational awareness. Looking at the whole involved everything from considering the observed behaviour and what the patient did not report, including their ability to connect and make eye contact, to reviewing their previous medical history and mental health diagnosis.

The experienced HCPs felt that the checklist could not help them during assessment because it did not account for the information obtained from observing the patient's behaviour, warning signs and current mental state. The novice HCPs preferred to follow the formal procedures and relied on risk factors, information from the patient's medical journal, and the patient's spoken words to assess suicide risk. They felt that the forms and the checklist helped them remember what to ask about.

HCPs perceived the "gut feeling" as fallible, as some had experienced patient suicide during inpatient care without sensing anything in advance. A male nurse described his thoughts after a young patient with schizophrenia died by suicide on leave from the ward:

"He was a man of few words; he kept mostly to himself and did not talk about his emotions. He was hard to get through to, but few HCPs in the wards had a gut feeling that he was feeling so much pain. In the aftermath, we could see some warning sings, but no one anticipated it happening" (4 years of experience, open rehabilitation ward).

While the medical doctors' and psychologists' suicide risk assessments were often restricted to consultations in a consultation room, the nurses' practices were not temporally or spatially restricted. A female mental health nurse described the lack of restrictions as follows:

"I can feel it just by being with them, and many times, especially if I know the patient, I can feel it before they can express it with words… She can tell me to leave and say everything is fine, and I will tell her that I feel I don't want to leave you; I will stay. And often, after a while, she can explain she had suicide plans at that moment" (24 years of experience, open rehabilitation ward).

The nurses were constantly alert to changes in suicidal behaviour.

Improving understanding by seeking others' perspectives

HCPs improved their understanding of suicide risk by discussing cases with more experienced colleagues, their teams or professionals with other backgrounds.

"We always talk with the patient together when assessing suicide. Then, we are two persons who can calibrate each other's experience afterwards, to talk about it and assess the risk together" (female nurse, 1.5 years of experience, short-term stabilisation ward).

Some HCPs reflected on their subjective clinical judgements together with the patient to make sense of the patient's suicide risk. This strategy improved their situational awareness.

In particular, HCPs made difficult decisions, such as whether a suicidal patient was ready for reduced protection, in collaboration with their colleagues and the patient. However, they experienced that attempting to understand patients' states of mind required face-to-face contact with them. Thus, there was limited value in consulting with the on-call doctors, as they had not seen the patients face to face and considered only the information they were given.

Individualising the therapeutic milieu

HCPs described individualising the therapeutic milieu for the delivery of safe clinical practice. They achieved

such individualisation by developing individualised clinical pathways, making trade-offs between under- and over-protection and making adjustments to be watchful and connected to provide protection.

Creating individual clinical pathways

HCPs considered suicidal patients to be a heterogeneous group: they believed there was no such thing as a typical "suicidal patient". Safe clinical practice for these patients was therefore dependent on HCPs' diverse approaches to the individual patients. An HCP's approach to creating individual clinical pathways varied according to his or her professional perspective. The nurses emphasised the importance of patient involvement for the re-establishment of a sense of hope and dignity for the individual patient. The medical doctors emphasised the importance of individualised approaches that addressed underlying mental health disorders. The psychologists emphasised the need to explore what suicidality meant for each individual, the feelings behind the suicidal behaviour, the patient's logic, the patient's despair, and unique warning signs and triggers. A psychologist explained how he helped patients feel safe from suicide by helping them gain insight and emotional control:

> "I work with the individual patients' underlying feelings about suicidality... Through gaining insight, the patients find other ways to express their emotions" (male psychologist with specialisation, 15 years of experience, open rehabilitation ward).

The therapeutic milieu had a calming effect on patients with "chaotic and acute suicidal behaviour" through its daily structure for activities, rest and meals. However, to ensure safe clinical practice for the patients, HCPs needed the flexibility to individualise the therapeutic milieu within the frames of this predictable structure, which again depended on their expertise:

> "You need good people who have the expertise to interact with people; without that, you won't benefit from any structure, systems or forms to fill out" (female consultant psychiatrist, 10 years of experience, locked ward).

Individualised approaches were considered essential for making a safety plan. However, safety planning did not always emphasise individualisation. All patients were offered a safety plan consisting of a list of individual warning signs, coping strategies, and sources of support. To make these plans effective for patient safety, HCPs co-created them with the patient so that they reflected the patient's conditions and coping strategies. Development of the safety plan was dependent on the therapeutic relationship with the patient and the patient's capability to reflect and gain insight. The creation of the plan sometimes was delayed due to the patient's mental condition and other times was delayed because HCPs were overloaded with discharge tasks. The safety procedure focused on documenting whether a plan had been created. Thus, HCPs often hastily created a plan without patient engagement just to "get the job done". Without individualisation, the safety plan lost its function as a safety tool for the patient, as it was not actively used during a crisis:

> "The safety plan, it's stressful. We must start early to make it count, but sometimes, I see patients standing in the hallway with their luggage ready for discharge, and a stressed nurse runs after them and says, 'Wait, this is a safety plan'" (nurse, 8 years of experience, locked ward).

HCPs considered therapeutic and individualised approaches to be essential in conversations about suicidal ideations; however, the procedures focused merely on documenting suicide risk assessment and not on how to talk about suicide. Medical doctors and psychologists were supposed to complete a form and a checklist for suicide risk assessment to ensure that risk factors were taken into account. HCPs described competing goals: documenting risk vs. approaching patients' feelings and understanding them as individuals. Their strategy to achieve safe clinical practice was to prioritise the therapeutic conversation with the patient, eliminating questions about risk factors that they considered irrelevant. They completed the forms and checklist for suicide risk assessments after talking with the patient.

Making trade-offs between under- and over-protection

HCPs' considered making judgements about a safe level of protection to be a difficult and complex task. Making these judgements was a dynamic process that required constant monitoring of the level of suicide risk and continuous adjustments to the level of protection. A safe level of protection also depended on the individual patient's underlying mental health problems and therefore needed to be individualised. A female consultant psychiatrist illustrated the complexity of the task:

> "I feel damned if I do and damned if I don't. Society criticises us (specialised mental health care) for using too many physical constraints and calls for more autonomy (for the patient), but at the same time, we are made accountable for the suicides and are told that we should have done more to prevent them. They (members of society) don't truly comprehend the complexity of this task" (10 years of experience, locked ward).

To cope with this complexity, HCPs made trade-offs between under-protection and over-protection for each patient. They used some rough categories to distinguish suicidal patients' need for protection. They often categorised patients with affective disorders and psychotic disorders as "acute suicidal" and categorised patients who constantly struggled with suicidal ideations and often used suicidality as an approach to communicate hopelessness or a need for something else as "chronic suicidal". For participants with acute suicidal behaviour, the greatest fear among HCPs was the under-protection of the patient (e.g., access to lethal means when hospitalised in an open ward), particularly during psychotic phases. In these cases, HCPs prioritised physically preventing the patient from attempting suicide, with the risk of over-protection (e.g., loss of autonomy).

HCPs perceived both under-protecting and over-protecting (e.g., constant observation for a long period) patients with chronic suicidal behaviour to be harmful. Therefore, the HCPs constantly assessed patients' suicidality and made daily trade-offs. They had to decide whether to empower the patient to take responsibility for his/her own safety, despite the risk of suicide attempts, or to increase protection for a brief period at the risk of worsening the suicide risk and reducing the patient's sense of independence. A nurse described the complexity of making such judgements in daily practices:

> "If there is a chronic suicidal patient, one should not talk about suicidality all the time. Therefore, I don't want to ask if the patient has thoughts of suicide before I let that patient out unless the patient says very clearly that he or she has suicidal plans. If I see that the patient struggles, I would ask the patient, 'Do you think it is okay for you to go out now?', and then you will get some gut feeling about this. It has been difficult at times to risk locking out patients, especially at night and on weekends, when you are alone there. However, there is an assessment the therapist has done, and we have to stick to the plan, especially with emotionally unstable patients with chronic suicidality. You have to give them responsibility back, and it is challenging" (female mental health nurse, 4 years of experience, locked acute ward).

Safe clinical practice for patients with chronic suicidal behaviour involves a delicate balance between under- and over-protection.

Adjusting observation

Although the procedures distinguished between constant and intermittent observation with specified intervals, HCPs reported taking individualised approaches to ensure patient safety with multiple considerations: they aimed to ensure connection with the patient without neglecting the need to be watchful and to take the patient's need for privacy into account while still physically protecting him or her from a suicide attempt. HCPs noted that all patients had their own ways of connecting and feeling safe, for example, some patients wanted to talk, while others just needed to be assured that HCPs were present if they needed them:

> "I understood that he had a desire to talk, but then there is almost a kind of rejection when you go out again. Then, you come back again after 5 minutes, look in and go out again. It's like, 'I just have to check that you are still alive'; it's not an act of kindness. I always try to get them out of the room, so it becomes less forced, and I can give more attention to them" (male nurse, 1 year of experience, locked ward).

Keeping patients safe during observation involved making adjustments in observations of the individual and finding ways to re-establish the patient's sense of dignity while still being watchful.

Managing uncertainty

HCPs described managing personal uncertainty by building mutual trust and support and a creating a shared understanding of safe practice.

Building mutual collegial trust and support

HCPs felt constantly alert and worried about suicide in their daily work, despite knowing that such incidents rarely happen. They often left work with a feeling of uncertainty, and they knew that when caring for suicidal patients, it was not possible to be 100% certain that the patient would not die by suicide. Furthermore, HCPs often felt driven by a fear of being held accountable for a suicide and being responsible for an adverse event. They applied strategies to avoid blame and responsibility in the case of a suicide, such as excessively documenting information in the patient's journal, ensuring that someone else was involved in decisions about suicide risk or simply transferring responsibility for the patient to someone else or to another ward. They perceived these strategies as threats to patient safety because they compromised HCPs' ability to fulfil patients' therapeutic needs. HCPs felt that their focus shifted from doing their best for the patient to making sure they were "covering their backs". HCPs believed that they lacked the agency to address these issues, which elicited feelings of hopelessness and shame.

To address uncertainty, HCPs needed a climate of mutual trust and support in which they felt safe enough to be vulnerable and unsure. Such a climate allowed them

to discuss their doubts and uncertainties with the ability to express disagreement within the team while also taking a coordinated approach to caring for the patient, as described by a male nurse:

> "If we have good communication within the team, we will be able to spread it and take a safe approach to the patients. However, if we have a poor climate in the ward, it will reflect on the patients. There will be disagreements and aggression" (1 year of experience, locked ward).

Managing uncertainty also involved doing the right thing and not having to complete difficult tasks alone. Thus, when the ward supported patient-centred care and provided arenas for support, case reflection and learning, HCPs were able to address the emotional burden of caring for suicidal patients.

Support mechanisms needed to be adaptive and support ad hoc responses to immediate needs for feedback. After suicides and suicide attempts, HCPs needed to be assured that they would not be used as a scapegoat by the clinical team or the organisation as a whole. In this context, leadership support and team debriefings were perceived as important. While psychologists and medical doctors described multiple structures for support, nurses often described lacking formal support systems in the wards.

> "Many times, you don't want to open that door alone. You never know what you will find behind that door, so you go together in pairs. It is safe to have someone with you because many times when you enter, they (patients) have tried to strangle themselves or cut their wrists... It's an emotional burden to find them in all these situations" (female social educator, 3 years of experience, locked ward).

The nurses self-organised and conducted nurse observations together to ensure they did not carry the burden alone. Instead of receiving formal supervision, they had informal conversations after work. They supported each other by making difficult decisions together to avoid one person becoming the scapegoat for adverse events.

Creating a shared understanding
Considering how to approach suicidal behaviour often generated feelings of uncertainty. HCPs had different understandings of suicidality and often disagreed on how to approach it. These disagreements were often related to determining the safe level of protection for patients in acute phases. In particular, patients often talked about their suicidality differently with different HCPs. In addition, nurses, psychologists and medical doctors had

different tasks, responsibilities, and degrees of familiarity and therapeutic relationships with the patient, which affected their perceptions of risk and the acceptable level of uncertainty for each patient. Safe clinical practice for suicidal patients was seen as dependent on reducing uncertainty through feeling capable in his or her professional role.

Diverse approaches influenced by different psychotherapeutic schools served to create common ground in three of the nine wards included in this study. By applying the same therapeutic approach, all the professional groups shared multiple arenas for training, supervision, and education using the same patient-directed tools and language. Having common ground helped them approach the patient as a team.

Discussion
The current study documents three main adaptive capacities used by HCPs to provide safe clinical practice for patients in mental health wards during a suicidal crisis.

Using expertise
The theme *using expertise to make sense of suicidal behaviour* describes an adaptive capacity involving strategies to deal with uncertainty. The findings indicate that experts use intuition and detect warning signs for suicidal behaviour to make sense of uncertainty and to manage complex and high-risk decision making [46]. This finding corresponds with a previous study by Waern et al. [47] that found that few HCPs used checklists but translated non-verbal cues into a "gut feeling", which was essential to the assessment process. This study adds to the knowledge that intuition is not the sole source of information in an assessment; rather, it supplements multiple sources of context-specific and general information, which together improve situational awareness [48].

The findings also reflect the importance of collaborative sense-making processes and the improvement of expertise through teamwork. As such, there is a need to directly support the creation of shared situational awareness that involves both healthcare teams and patients. Training in suicide risk assessment can benefit multidisciplinary training for HCPs who regularly interact as a team to establish a shared vision and values [49, 50]. In addition, training can benefit from the use of real-life examples of clinical decision making [51] and educating HCPs in collaborative approaches to suicide risk assessment that involve patient perspectives [52, 53].

Consistent with studies on expertise, this study indicates that novice HCPs focus on patients' verbal reports, written information in patients' journals, and formal risk factors, while experienced HCPs rely more on non-verbal information, cues and their intuition to

understand what constitutes critical suicide behaviour [20, 54]. This finding suggests that HCPs require different guidance at different stages of expertise development, which is in accordance with the findings of Benner et al. [55, 56]. These authors claimed that novice HCPs need context-free rules to guide their task performance, while experts' decision making cannot be captured in explicit formal steps because they no longer use rules to guide their practice; instead, they use past concrete experiences [55, 56]. However, a fallacy is that the novice HCP may be over-focused on rules at the expense of being insensitive to the context and the individual patient, while the expert HCP may be overconfident, relying on intuition and taking pride in risk-taking [20]. Working together as a team to make sense of suicidal behaviour improves HCPs' comprehension and interpretation of the information obtained and might thus improve situational awareness for both novice and expert HCPs [57].

Individualising the therapeutic milieu
The theme *individualising the therapeutic milieu* describes both an adaptive capacity and conditions in which adaptations are vital to ensure safe clinical practice.

A number of studies have shown that patients experience constant observation as non-therapeutic due to, e.g., the lack of acknowledgement, lack of privacy and lack of empathy [58–62]. Studies have reported the importance of having experienced staff [63] who are therapeutically engaged with the patient [58] and interchange between exerting control and building the therapeutic relationship during constant observation [64]. The findings reflect that HCPs cope with the complexity of safe protection by making trade-offs between higher- and lower-level goals [65] and by ensuring that protection is individualised by taking multiple considerations into account for each patient through adaptations [66]. Guideline development should acknowledge the expertise needed to provide protection safely for each individual.

In accordance with the literature, the finding reflects that patient involvement and the individualisation of safety plans [67] and suicide risk assessments [52, 68] are essential for effective safe clinical practice. HCPs in this study described their attempts to involve the patient in and individualise the safety plan, but they did not always succeed. The intention of a safety plan is to help patients cope with symptoms at an early stage, and interventions emphasise patient involvement [67]. These prerequisites might not have been communicated properly when the checklist was introduced as part of the national patient safety programme for suicide prevention [31, 32]. Some patients might also be in a mental state that hinders them from being involved in making their own safety plan.

The findings imply that therapeutic measures and safety measures are not necessarily separate entities that are driven by distinct logics: they rely on individualisation and the therapeutic relationship. Efforts to better integrate safe clinical care across the technical-disciplinary perspective and the therapeutic and individualised perspective [5, 10] may benefit from the development of expertise in suicide risk assessment, constant observation, and the creation of safety plans, as well as requirements for documenting practice.

Managing uncertainty
The theme *managing uncertainty* describes an adaptive capacity that corresponds with the findings of previous studies that caring for suicidal patients involves dealing with uncertainty [8, 9, 69]. The findings reflect that ward systems that ensure mutual trust and support and a shared understanding help HCPs deal with the uncertainty surrounding suicide risk and provide essential support for safe clinical practice. Having common ground is related to the development of shared mental models and shared situational awareness in teams [70, 71], which is a strategy to reduce uncertainty in ambiguous situations by making HCPs able to improve their comprehension of the situation [72]. Furthermore, as uncertainty is managed through mutual collegial trust and collegial support, there is a need to create systems that ensure feedback on safe clinical practice and to foster HCPs' trust that their colleagues will provide constructive support [20, 73]. The findings also reflect that a lack of support systems to address uncertainty can lead to the emergence of counterproductive behaviour among HCPs to protect themselves from punishment. These findings support Undrill's [7] arguments that unintended consequences may arise in suicide prevention if HCPs are put in a position in which they feel a greater need to protect themselves than to protect patients. This study finds that to counteract such mechanisms, HCPs must address uncertainty as a team, and management responsibility should be emphasised through the establishment of formal support structures in wards. These findings correspond with previous study findings that nurses often call for formal support arenas [9, 74], supervision and training when caring for suicidal patients [8, 60]. These formal support arenas are often guaranteed for psychologists during their specialisation in clinical adult psychology and for medical doctors during their specialisation in psychiatry. This study reflects the importance of support structures for all professional groups to achieve safe clinical practice. Relying too heavily on individual HCPs' capacities to adapt without providing support to maintain these capacities will eventually cause overload and burnout and leave the system brittle to adverse events [21, 27].

Strengths and limitations

This study applied two different data collection methods to develop a comprehensive understanding of safe clinical practice. Multiple researchers participated in the data collection and analysis, adding various perspectives and breadth to the study of the phenomenon of interest [36]. We did not conduct member checks; instead, the advisory panel and co-authors helped test the coherence and plausibility of the interpretations [34]. The use of triangulation and the variety of the study settings strengthened the internal validity of the study. The external validity of the study is limited, as we conducted the study within a single hospital, and the local organisational culture therefore affected the study. However, the study findings support analytical generalisations regarding safe clinical practice for patients hospitalised during a suicidal crisis [75]. The focus of this study was limited to safe clinical practice at the micro level within hospital ward settings. Researchers could gain increased insight into adaptive capacities by applying a meso-macro perspective (e.g., hospital management, government and regulators) to study adaptive capacities at the interface between primary and secondary care and by employing multiple methods, particularly direct observation of HCP interactions and strategies.

Conclusions

HCPs' adaptive capacities are a vital component of the complex set of practices involved in safe clinical practice for patients hospitalised during a suicidal crisis. By using expertise, individualising the therapeutic milieu, and managing uncertainty, HCPs develop their capacity to adapt to challenges and changes in clinical care, both individually and collectively. HCPs cannot easily ensure safe clinical practice simply by following standards; safe clinical practice depends on HCP adaptations. However, individual HCPs cannot hold the responsibility for safe clinical practice alone. Ward systems that ensure collegial trust and support, as well as arenas that support shared understanding and shared situational awareness, are needed.

Supplementary information

Supplementary information accompanies this paper at https://doi.org/10.1186/s12888-020-02689-8.

Additional file 1. Guides for interviewing the healthcare professionals.

Abbreviation

HCP: Healthcare professional

Author details

SHB: PhD scholar, safety scientist and consultant clinical psychologist. KR: PhD, clinical specialist in mental health nursing and a senior research counsellor. FAW: PsyD, suicide researcher and consultant clinical psychologist. KA: professor in patient safety and health services researcher.

Availability of data and materials

The data generated and analysed during the current study are not publicly available to protect the anonymity of the participants. Materials may be available from the corresponding author upon reasonable request.

Ethics approval and consent to participate

All participants provided voluntary and informed written consent to participate in the study. This study was approved by the Regional Committees for Medical and Health Research Ethics, REC West Norway (2016/34).

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Author details

[1]Division of Adult Mental Health, Sandnes DPS, Stavanger University Hospital, Postveien 181, N-4307 Sandnes, Norway. [2]Nursing and Health Care Research Group, Department of Research, Stavanger University Hospital, P.O. Box 8100, N-4068 Stavanger, Norway. [3]National Centre for Suicide Research and Prevention, Faculty of Medicine, University of Oslo, Sognsvannsveien 21, Building 12, N-0320 Oslo, Norway. [4]Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, N-4036 Stavanger, Norway.

References

1. Bowers L, Banda T, Nijman H. Suicide inside: a systematic review of inpatient suicides. J Nerv Ment Dis. 2010;198(5):315–28.
2. Thibaut B, Dewa LH, Ramtale SC, D'Lima D, Adam S, Ashrafian H, et al. Patient safety in inpatient mental health settings: a systematic review. BMJ open. 2019;9(12).

3. Brickell TA, Nicholls TL, Procyshyn RM, McLean C, Dempster RJ, Lavoie JAA, et al. Patient safety in mental health. Canadian Patient Safety Institute and Ontario Hospital Association: Edmonton, Alberta; 2009.
4. Berg SH, Rørtveit K, Aase K. Suicidal patients' experiences regarding their safety during psychiatric in-patient care: a systematic review of qualitative studies. BMC Health Serv Res. 2017;17(1):73.
5. Plumb J. Taming uncertainty? Performance, personalisation and practices of patient safety in an Australian mental health service: Australia University of New South Wales; 2013.
6. Curtis S, Wilbert G, Wood V, Spencer V, Mason J, Close H, et al. Compassionate containment? Balancing technical safety and therapy in the design of psychiatric ward. Soc Sci Med. 2013;97:201–9.
7. Undrill G. The risks of risk assessment. Adv Psychiatr Treat. 2007;13.
8. Cutcliffe JR, Stevenson C. Never the twain? Reconciling national suicide prevention strategies with the practice, educational, and policy needs of mental health nurses (part two). Ment Health Nurs. 2008;17(5):351–62.
9. Hagen J, Knizek BL, Hjelmeland H. Mental health Nurses' experiences of caring for suicidal patients in psychiatric wards: an emotional endeavor. Arch Psychiatr Nurs. 2017;31(1):31–7.
10. Mulder R. Problems with suicide risk assessment. Australian & New Zealand Journal of Psychiatry. 2011;45(8):605–7.
11. Hoifodt T, Talseth A-G. Dealing with suicidal patients - a challenging task: a qualitative study of young physicians' experiences. BMC Medical Education. 2006;6(1):44.
12. Runeson B, Odeberg J, Pettersson A, Edbom T, Jildevik Adamsson I, Waern M. Instruments for the assessment of suicide risk: a systematic review evaluating the certainty of the evidence. PLoS One. 2017;12(7):e0180292.
13. Carter G, Milner A, McGill K, Pirkis J, Kapur N, Spittal MJ. Predicting suicidal behaviours using clinical instruments: systematic review and meta-analysis of positive predictive values for risk scales. Br J Psychiatry. 2017;210(6):387–95.
14. Large M, Smith G, Sharma S, Nielssen O, Singh SP. Systematic review and meta-analysis of the clinical factors associated with the suicide of psychiatric in-patients. Acta Psychiatr Scand. 2011;124(1):18–29.
15. Large M, Sharma S, Cannon E, Ryan C, Nielssen O. Risk factors for suicide within a year of discharge from psychiatric hospital: a systematic meta-analysis. Aust N Z J Psychiatry. 2011;45(8):619–28.
16. Turecki G, Brent DA. Suicide and suicidal behaviour. Lancet. 2016;387(10024): 1227–39.
17. Berg SH, Rørtveit K, Walby FA, Aase K. Safe clinical practice for patients hospitalised in mental health wards during a suicidal crisis: a qualitative study of patient experiences (under consideration); 2020.
18. Braithwaite J, Clay-Williams R, Nugus P, Plumb J. Health care as a complex adaptive system. Farnham, Surrey, England : Ashgate Publishing; 2013.
19. Ellis LA, Churruca K, Braithwaite J. Mental health services conceptualised as complex adaptive systems: what can be learned? Int J Ment Heal Syst. 2017; 11(1):43.
20. Foster CJ, Plant KL, Stanton NA. Adaptation as a source of safety in complex socio-technical systems: a literature review and model development. Saf Sci. 2019;118:617–31.
21. Anderson JE, Ross AJ, Macrae C, Wiig S. Defining adaptive capacity in healthcare: a new framework for researching resilient performance. Appl Ergon. 2020;87:103111.
22. Wiig S, Aase K, Billett S, Canfield C, Røise O, Njå O, et al. Defining the boundaries and operational concepts of resilience in the resilience in healthcare research program. BMC Health Serv Res. 2020;20(1):330.
23. Ellis LA, Churruca K, Clay-Williams R, Pomare C, Austin EE, Long JC, et al. Patterns of resilience: a scoping review and bibliometric analysis of resilient health care. Saf Sci. 2019;118:241–57.
24. Hollnagel E. Safety-I and safety-II: the past and future of safety management. London: CRC Press; 2014.
25. Wears RL, Hettinger AZ. The tragedy of adaptability. Ann Emerg Appl Ergon. 2014;3:227–339.
26. Anderson J, Ross A, Back J, Duncan M, Snell P. Walsh K, et al. Implementing resilience engineering for healthcare quality improvement using the CARE model: a feasibility study protocol. 2016;2(1):61.
27. Berg SH, Aase K. Resilient Characteristics as Described in Empirical Studies on Health Care. Exploring Resilience A Scientific Journey from Practice to Theory. SpringerBriefs in Applied Sciences and Technology. Safety Management Springer Nature; 2019. p. 79–87.
28. Jun GT, Canham A, Noushad F, Gangadharan SK, editors. Safety I and Safety II for Suicide Prevention – Lessons from How Things Go Wrong and How

Things Go Right in Community-Based Mental Health Services. Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018); 2019; Cham: Springer International Publishing.
29. Hoffman RR, Militello LG. Naturalistic Decision Making In: Hoffman RR, Militello LG, editors. Perspectives on Cognitive task analysis: historical origins and modern communities of pratice New York/East Sussex: Tailor & Francis Group, LLC; 2009.
30. Crook JA. How do expert mental health nurses make on-the-spot clinical decisions? A review of the literature. J Psychiatr Ment Health Nurs. 2001;8(1): 1–5.
31. Directorate of Health. The Norwegian Patient Safety Programme: In Safe Hands 2011 [Available from: https://www.pasientsikkerhetsprogrammet.no/ om-oss/english/the-norwegian-patient-safety-programme-in-safe-hands.
32. Brudvik M, Ness E, Walby F. Selvmordsforebygging i akuttpsykiatriske døgnavdelinger - erfaringer fra nasjonalt læringsnettverk. Suicidologi. 2014;2.
33. Norwegian Directorate of Health. National guidelines for prevention of suicide in mental health care systems. Oslo 2008.
34. Dahlberg K, Dahlberg H. Nyström M. Sweden: Reflective Lifeworld Research; 2008.
35. Dahlberg H, Dahlberg K. Open and reflective Lifeworld research: a third way. Qual Inq. 2019;1077800419836696.
36. Patton MQ. Enhancing the quality and credibility of qualitative analysis. Health Serv Res. 1999;34(5):1189–208.
37. Meijer PC, Verloop N, Beijaard D. Multi-method triangulation in a qualitative study on teachers' practical knowledge: an attempt to increase internal validity. J Quality quantity. 2002;36(2):145–67.
38. Morse JM. Principles of mixed methods and multimethod research design. In: Tashakkori A, Teddle C, editors. Handbook of mixed methods in social behavioral research. 1: Sage; 2003. p. 189–208.
39. Morse JM. Mixed method design: principles and procedures: Routledge; 2009.
40. Coyne IT. Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? J Adv Nurs. 1997;26(3):623–30.
41. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies:guided by information power. Qual Health Res. 2016;26(13):1753–60.
42. Berg SH, Rørtveit K, Walby FA, Aase K. Safe clinical practice for patients hospitalised in a suicidal crisis: a study protocol for a qualitative case study. BMJ Open. 2017;7(1):6.
43. Malterud K. Fokusgrupper som forskningsmetode for medisin og helsefag Oslo: Universitetsforlaget; 2012.
44. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today. 2004;24(2):105–12.
45. Graneheim UH, Lindgren BM, Lundman B. Methodological challenges in qualitative content analysis: a discussion paper. Nurse Educ Today. 2017;56: 29–34.
46. Klein G. Naturalistic decision making. Hum Factors. 2008;50(3):456–60.
47. Waern M, Kaiser N, Renberg ES. Psychiatrists' experiences of suicide assessment. BMC Psychiatry. 2016;16(1):440.
48. Endsley MR. Expertise and Situation Awareness. In: Ericsson KA, Charness N, Feltovich PJ, Hoffman RR, editors. The Cambridge Handbook of Expertise and Expert Performance. Cambridge Handbooks in Psychology. Cambridge: Cambridge University Press; 2006. p. 633–652.
49. Mathieu JE, Heffner TS, Goodwin GF, Salas E, Cannon-Bowers JA. The influence of shared mental models on team process and performance. J Appl Psychol. 2000;85(2):273–83.
50. Gillespie BM, Gwinner K, Fairweather N, Chaboyer W. Building shared situational awareness in surgery through distributed dialog. J Multidiscip Healthc. 2013;6:109–18.
51. Wright MC, Endsley MR. Building shared situation awareness in healthcare settings. Improving healthcare team communication: CRC Press; 2017. p. 97–114.
52. Jobes DA. The collaborative assessment and Management of Suicidality (CAMS): an evolving evidence-based clinical approach to suicidal risk. Suicide Life Threat Behav. 2012;42(6):640–53.
53. Perlman CM, Neufeld E, Martin L, Goy M, Hirdes JP. Suicide risk assessment guide: a resource guide for Canadian health care organizations. Ontario Hospital Association and Canadian Patient Safety Institute: Toronto, ON; 2011.
54. Hale A, Borys D. Working to rule or working safely? Part 2: the management of safety rules and procedures. Saf Sci. 2013;55:222–31.
55. Benner P, Hughes RG, Sutphen M. Clinical reasoning, decisionmaking, and action: Thinking critically and clinically. Patient safety and quality: An

evidence-based handbook for nurses: Agency for Healthcare Research and Quality (US); 2008.

56. Benner P. From novice to expert. Menlo Park. 1984.

57. Endsley EM, M.R. Toward a theory of situation awareness in dynamic systems. Human factors journal 37(1), 32-64. Human Factors: The Journal of the Human Factors and Ergonomics Society. 1995;37:32–64.

58. Cardell R, Pitula CR. Suicidal inpatients' perceptions of therapeutic and nontherapeutic aspects of constant observation. Psychiatr Serv. 1999;50.

59. Pitula CR, Cardell R. Suicidal inpatients' experience of constant observation. Psychiatr Serv. 1996;47(6):649–51.

60. Cutcliffe JR, Barker P. Considering the care of the suicidal client and the case for 'engagement and inspiring hope' or 'observations'. Journal of Psychiatric & Mental Health Nursing. 2002;9(5):611–21.

61. Jones J, Ward M, Wellman N, Hall J, Lowe T. Psychiatric inpatients' experience of nursing observation. J Psychosoc Nurs Ment Health Serv. 2000;38(12):10–20.

62. O'Brien L, Cole R. Close-observation areas in acute psychiatric units: a literature review. Int J Ment Health Nurs. 2003;12(3):165–76.

63. Flynn S, Nyathi T, Tham SG, Williams A, Windfuhr K, Kapur N, et al. Suicide by mental health in-patients under observation. Psychol Med. 2017;47(13): 2238–45.

64. Vraale GB, Steen E. The dynamics between structure and flexibility in constant observation of psychiatric inpatients with suicidal ideation. J Psychiatr Ment Health Nurs. 2005;12(5):513–8.

65. Wears RL, Schubert CC, Hunte G. S. Individual-collective trade-offs: implications for resilience in: Wear RE, Hollnagel E, Braithwaite J, editors. Resilient health care volume 2. England/Usa: Ashgate; 2015.

66. Ellis B. Complex adaptive systems: a tool for interpreting responses and behaviours. J Journal of Innovation in Health Informatics. 2011;19(2):99–104.

67. Stanley B, Brown GK. Safety planning intervention: a brief intervention to mitigate suicide risk. Cogn Behav Pract. 2012;19(2):256–64.

68. Sellin L. A personal-recovery oriented caring approach to suicidality Mälardalen University doctoral dissertation 245; 2017.

69. Cutcliffe JR, Stevenson C. Feeling our way in the dark: the psychiatric nursing care of suicidal people—a literature review. Int J Nurs Stud. 2008; 45(6):942–53.

70. Malakis S, Kontogiannis T. Exploring team sensemaking in air traffic control (ATC): insights from a field study in low visibility operations. Cogn Tech Work. 2014;16(2):211–27.

71. Siegel AW, Schraagen JM. Team reflection makes resilience-related knowledge explicit through collaborative sensemaking: observation study at a rail post. Cogn Tech Work. 2017;19(1):127–42.

72. Klein G, Moon B, Hoffman RR. Making sense of sensemaking 1: alternative perspectives. IEEE Intell Syst. 2006;21(4):70–3.

73. Hollnagel E, Braithwaite J, Wears R. Epilogue: how to make health care resilient. In: Hollnagel E, Braithwaite J, Wears R, editors. Resilient health care. England: Ashgate; 2013.

74. Takahashi C, Chida F, Nakamura H, Akasaka H, Yagi J, Koeda A, et al. The impact of inpatient suicide on psychiatric nurses and their need for support. BMC psychiatry. 2011;11(1):38.

75. Yin RK. Case study research: design and methods. Los Angeles, CA: Sage Publications; 2014.

Publisher's Note

Appendices

Appendix 1

Study Protocol

BMJ Open

Safe clinical practice for patients hospitalised in a suicidal crisis: a study protocol for a qualitative case study

Siv Hilde Berg,[1] Kristine Rørtveit,[1,2] Fredrik A Walby,[3] Karina Aase[2]

ABSTRACT

Introduction: Suicide prevention in psychiatric care is arguably complex and incompletely understood as a patient safety issue. A resilient healthcare approach provides perspectives through which to understand this complexity by understanding everyday clinical practice. By including suicidal patients and healthcare professionals as sources of knowledge, a deeper understanding of what constitutes safe clinical practice can be achieved.

Methods: This planned study aims to adopt the perspective of resilient healthcare to provide a deeper understanding of safe clinical practice for suicidal patients in psychiatric inpatient care. It will describe the experienced components and conditions of safe clinical practice and the experienced practice of patient safety. The study will apply a descriptive case study approach consisting of qualitative semistructured interviews and focus groups. The data sources are hospitalised patients in a suicidal crisis and healthcare professionals in clinical practice.

Ethics and dissemination: This study was approved by the Regional Ethics Committee (2016/34). The results will be disseminated through scientific articles, a PhD dissertation, and national and international conferences. These findings can generate knowledge to be integrated into the practice of safety for suicidal inpatients in Norway and to improve the feasibility of patient safety measures. Theoretical generalisations can be drawn regarding safe clinical practice by taking into account the experiences of patients and healthcare professionals. Thus, this study can inform the conceptual development of safe clinical practice for suicidal patients.

[1]Division of Psychiatry, Stavanger University Hospital, Stavanger, Norway
[2]Department of Health Studies, University of Stavanger, Stavanger, Norway
[3]National Center for Suicide Research and Prevention, University of Oslo, Oslo, Norway

Correspondence to
Siv Hilde Berg;
siv.hilde.berg@sus.no

INTRODUCTION

Although mental illness is the second most important predictor of suicide (behind only past suicide attempts),[1] suicides occur rarely in psychiatric inpatient care. From 2004 to 2014 in England, 28% of suicides in the general population were patient suicides; that is, the person had been in contact with mental health services in the 12 months prior to death. Inpatient suicides accounted for 9% of all patient suicides.[2] Statistically speaking, inpatient suicides are uncommon, which makes research on suicide highly challenging.[3] Nevertheless, suicide is among the most concerning patient safety issues in psychiatric care.

A common understanding of patient safety is the avoidance, prevention and amelioration of adverse outcomes or injuries stemming from the process of healthcare.[4] This approach to safety has been characterised as a linear model of risk in which hazards are perceived as phenomena that can be assessed and controlled by implementing different barriers of defences in the system. The linear model of risk represents events in terms of linear causality, where adverse outcomes occur due to combinations of active failures, unsafe acts, and latent conditions and hazards in the system. In the linear approach to safety, safety is achieved when procedures are well implemented in practice without deviations from the standard.[5]

The background for the linear approach to safety is found in well-understood, well-tested and well-behaved systems and has some limitations when applied to complex systems in which the risk is incompletely understood.[6]

Healthcare organisations, including psychiatric hospital wards, are examples of complex organisations with multiple stakeholders who interact with each other in a changeable context and make decisions that often involve a high degree of uncertainty.[7] Suicide prevention in psychiatric care is arguably complex and incompletely understood as a patient safety issue. First, suicidal behaviour is multifaceted and differs across sexes, age groups, geographic regions and sociopolitical settings, and it is variably associated with different risk factors, suggesting aetiological heterogeneity.[3] Second, there is a lack of clear means to assess and treat patients at risk of suicide, which complicates efforts to design safety systems to treat patients in suicidal

crises in hospital wards.[8–12] There is a need for a deeper understanding of safety for suicidal patients in clinical practice that embraces the complexity and uncertainty of everyday clinical practice.

Resilient healthcare (RHC) is a major discipline that embraces complexity in healthcare. RHC applies non-linear methods to understand and describe how systems work in complex contexts. The main methods used are qualitative case studies. The heart of RHC studies is the collection of knowledge of how everyday clinical work is performed at the sharp end of the system.[7 13] RHC is defined by Wears *et al*[14] as follows:

…the ability of the health care system (a clinic, a ward, a hospital, a county) to adjust its functioning prior to, during, or following events (changes, disturbances or opportunities), and thereby sustain required operations under both expected and unexpected conditions (pp. xxvii).

According to the RHC perspective, the purpose of safety management is to ensure that 'things go right' and not only to 'prevent things from going wrong'. Thus, there is a need to learn from successes in clinical practice, in addition to learning from errors. This knowledge is gained by learning about what happens regularly in clinical practice to ensure successful outcomes, including a better understanding of the core business of clinical practice.[15]

RHC applies a safety II perspective. This perspective acknowledges that healthcare systems are incompletely understood and that their conditions vary. To deal with complexity, healthcare professionals need to adjust their performance to perform the job successfully, and their approach may deviate from standard procedures.[15] This approach applies a broader perspective than the traditional linear approach to safety, and it embraces the need to understand why healthcare professionals adapt and what contributes to successes and failures in everyday clinical work. In this sense, knowledge about safe clinical practice for suicidal patients can be collected from the sharp end of the system, which can inform patient safety efforts.[16]

Aims and research questions

This descriptive study aims to provide a deeper understanding of safe clinical practice for patients hospitalised in a suicidal crisis from an RHC perspective. The specific research questions for the study are as follows:

1. How does existing literature describe suicidal patients' experiences regarding safety during psychiatric in-patient care?
2. How do patients and healthcare professionals describe the components and conditions of ensuring good patient outcomes for suicidal patients in clinical practice?
3. How do patients and healthcare professionals experience safe clinical practices for suicidal patients?

METHODS

Methodological design

The study applies a descriptive case study approach.[17] The case is defined as safe clinical practice for patients hospitalised in a suicidal crisis within specialised psychiatric inpatient care.

Study setting

The study setting will be one Norwegian university hospital. Studies of hospitalisation in Norway have found that suicidal behaviour accounts for 70% of all hospitalisations,[18] 54% of first-time admissions and 62% of rehospitalisations in psychiatric acute wards.[19] There are a considerable amount of activities directed to patient safety for suicidal patients in Norwegian hospital wards. Since 2008, national guidelines for preventing suicide in psychiatric hospital wards have been implemented in practice,[20] and in 2015, a patient safety campaign for preventing suicide in hospital wards was implemented at a national level.[21]

Data collection will take place in four psychiatric hospital wards, two specialised (sites A and B) and two decentralised wards (site C and D). The study sites are selected due to their different structures, staffing levels and tasks. Multiple embedded units of analysis at different levels are included in each ward, consisting of patients and healthcare professionals (see figure 1).

Data collection methods and sources

This case study will conduct qualitative interviews to collect information on the experiences of patients and healthcare professionals. See table 1 for detailed information on the methods, data sources and timing of the data collection.

Data on patients' experiences will be collected through semistructured interviews that are specifically designed to collect in-depth information on their experiences and descriptions of the topics of interest. A systematic review of qualitative studies of suicidal patients has

Macro level context
National patient safety strategy and guidelines for suicidal patients in psychiatric inpatient care

Meso level context
Ward management and procedures

Site A: specialised ward
Patients
Health care professionals

Site B: specialised ward
Patients
Health care professionals

Site C: decentralised ward
Patients
Health care professionals

Site D: decentralised ward
Patients
Health care professionals

Figure 1 Case study design.

Table 1 Data sources, methods, topics and time schedule

System level	Data collection methods	Data sources	Timing for data collection
Micro level	*Systematic review*	*Qualitative studies*	(completed 2017)
	Semi-structured interviews	*Patients* Approximately 20 patients from study sites A, B, C and D	September 2017–February 2017
	Focus group interviews 5 focus groups with 6 health care professionals in each group.	*Health care professionals* Approximately 30 health care professionals (psychologists, physicians, nurses) from closed and open wards at different sites at the hospital.	May-June 2016
	Semi-structured interviews	*Health care professionals* Approximately 18 health care professionals (psychologists, physicians, nurses) from study sites A, B, C and D.	September 2016 to January 2017
Meso level	*Review of documents*	*Procedures, patient safety measures*	January 2016
	Conversations and context mapping	*Ward managers at site A, B, C and D*	
Macro level	*Review of documents*	National patient safety programme, national guidelines and laws	January 2016

been conducted to inform the development of the interview guide. In addition, an advisory panel consisting of two service user consultants and two key informants on suicide prevention will help develop the interview guides and provide reflections about ethical considerations for the study. Follow-up interviews will be conducted during hospitalisation or after discharge when there is a need for more in-depth information.

Data on healthcare professionals' experiences will be collected through focus group interviews and semistructured individual interviews. The focus groups will provide an opportunity to explore and identify relevant categories and perspectives and for the professionals to correct one another.[22] The individual interviews will focus on the professionals' individual sense of making safe and successful practice and will aim to describe in depth the themes that emerge in the focus groups.

Sampling strategy and inclusion criteria

To be included in the study, patients must be hospitalised in specialised psychiatric care for adults, assessed as suicidal during hospitalisation, and able to provide voluntary and informed consent to participate in the study. The therapists (psychologists or physicians) at the study sites will select patients to be recruited to the interviews. As there is no support for the risk categorisation of suicidal patients, any tools or instruments used to clearly define suicidal patients in this study will be of limited value.[10] In this study, patients will be considered seriously suicidal if they have presented active suicide ideations or have recently attempted suicide.[23]

The study will follow a purposeful sampling strategy[24] that aims to include patients who have recently been in suicidal crisis and are hospitalised in psychiatric inpatient care. The patients will be enrolled in the study

consecutively by ward clinicians. Clinicians' assessment of patients and patients' identification with the topic of interest will determine whether the patient will be included in this study, as shown in box 1. Different experiences of safety are expected to emerge within different levels of hospital protection; thus, this study aims to sample patients in open and locked hospital wards and those admitted both voluntarily and involuntarily. Both men and women and all age groups within adult psychiatry are considered for inclusion (18–65 years).

This study seeks to describe the safety of hospitalised patients in a suicidal crisis by embracing the complexity and diversity that characterise this phenomenon and the patient group at large. Thus, patients within varying diagnostic groups will be included. The sample

---

Box 1 Patient inclusion and exclusion criteria

Inclusion criteria. The interview subject must:
► Be hospitalised in an open or closed ward for adults in specialised mental healthcare during the first interview.
► Have access to a therapist in specialised mental healthcare during the interviews.
► Have been regarded as seriously suicidal by a psychologist or psychiatrist during hospitalisation, but at the time of the interview, patients must be considered sufficiently stable to engage in the interview.
► Self-identify as 'being in a suicidal crisis'.
► Voluntarily consent to participate.
Exclusion criteria:
► Presenting self-harming behaviour without a desire to die.
► Being unable to provide consent, which includes presenting severe psychotic symptoms, severe cognitive deficits or ongoing symptoms of being in a state of crisis with high suicide risk.

description will contain clinicians' diagnoses at discharge, which will be extracted from patients' journals.

The healthcare professionals will be recruited through a purposeful sample strategy.[24] The sampling will aim to recruit healthcare professionals with different levels of experience and professional backgrounds. Psychologists, physicians, nurses and social workers at the study sites will be included.

To be included in the semistructured interviews, healthcare professionals must be willing to talk about their experiences with clinical practice and be able to provide voluntary consent to participate in the study. Some participants will participate in the focus groups and the semistructured interviews.

In addition, local procedures and national guidelines and political strategies for suicide prevention in hospital wards will be collected as contextual information.

Researchers' background

SHB is a PhD scholar in risk management and societal safety and a clinical psychologist. SHB has clinical experience with the treatment and assessment of patients at risk of suicide and has a background in safety science. KA is a professor and serves as head of the research group 'quality and safety in healthcare systems' at the University of Stavanger. KA has a background in safety science and has conducted multiple studies of patient safety, including studies of patient experiences and RHC studies. KR has a PhD and serves as a mental health nurse and has applied qualitative methods to studies of patient experiences. FAW is a consultant clinical psychologist with extensive work experience in inpatient psychiatry as well as suicide research and national prevention initiatives and guideline development.

The qualitative interviews will be conducted by SHB and KR, who have connections at the university hospital as healthcare professionals and researchers. Their connections to the study site constitute both strengths and dilemmas related to balancing closeness to and distance from participants and studying the sites. These dilemmas will be reflected in all stages of the research process, such as sampling, recruitment, data collection, ethical considerations, analysis and dissemination.

ETHICS AND DISSEMINATION
Ethical considerations

Considering the limited amount of evidence on how to provide safe practices for this vulnerable group of patients, access to valid knowledge is of vital importance. Patients can provide insights regarding care and can contribute important information when other sources of evidence in suicide research, particularly feedback regarding sensitive safety-related topics, are limited.[25]

It is well known that talking about suicide and talking with suicidal patients do not induce harm for patients;[26] thus, this study is not considered to induce harm or

risk to patients during the study or in the future. Participation in this study empowers patients' voice and may provide benefits to the patient group at large. However, as patients at risk of suicide represent a vulnerable group, patients will be interviewed while they are in the care of specialised healthcare professionals, enabling those in need of additional support to be referred to the therapist in their hospital ward or in their outpatient unit.

Ward psychologist/physicians will assess patients as sufficiently stable to participate in the interviews, and they will determine the appropriate timing of the interviews.

The hospital will have full responsibility for managing the suicide risk according to ordinary established procedures, and no new procedures or interventions will be implemented as part of this study.

All participants in this study will receive written and oral information about the study and will sign an informed consent form to participate. Patients who are unable to provide informed and voluntary consent will not be included in this study. Information will be collected for research purposes only. Information will be stored unidentified, and all participants will be made unidentifiable in publications.

Dissemination

This study protocol presents preliminary research questions, theories, methods and analytical strategies considered adequate for this purpose. By sharing this information, we aim to address reflexivity in this case study.[27]

The results of this study will be published in international journals, and presentations will be conducted at national and international conferences. Triangulation of research methods and data sources will be applied to create a viable understanding of safe clinical practices for suicidal patients in psychiatric inpatient care. A literature review will be used as the basis for conducting individual interviews with suicidal patients. Focus group interviews with professionals will be used to describe their experiences with safe clinical practices and as a basis for conducting individual follow-up interviews. Altogether, data from professionals and patients will be integrated in a framework for safe clinical practices for suicidal patients. Details on results from the study are provided in table 2 (planned scientific articles).

The quality of this study is dependent on its validity. Internal validity is often translated into credibility in qualitative research.[28] In this study, credibility will be achieved if the findings of the study make sense for patients and healthcare professionals in clinical practice in psychiatric wards. By including multiple sources of information and methods, this study strives for a nuanced description of the phenomenon of interest, increasing the credibility of the study.

The use of feedback to validate the themes will enhance the credibility and authenticity of this study. Feedback will be collected in the stage of planning and

Table 2 Planned scientific articles

Articles		Main data source
Article 1	Suicidal patients' experiences regarding their safety during psychiatric inpatient care: a systematic review of qualitative studies	Qualitative studies
Article 2	Patient experiences of safe clinical practice during a suicidal crisis	Individual in-depth interviews with patients
Article 3	Healthcare professionals experiences with the practice of patient safety for suicidal patients in hospital wards	Focus group study with healthcare professionals
Article 4	Safe clinical practice for patients hospitalised during a suicidal crisis: a resilient healthcare perspective	Focus group study with healthcare professionals Individual in depth interviews with healthcare professionals and patients

analysis using the advisory panel and presentations in clinical practice and conferences.

The study's external validity is often translated into transferability in qualitative research,[28] which indicates the applicability of the findings in other contexts. The use of multiple study sites in the hospital strengthens the external validity in this study. However, the findings of this study are not expected to be valid for the practice of this field overall but rather as descriptions of experiences and meaning within the specific setting of clinical practice for suicidal patients in psychiatric hospital wards in one university hospital in Norway. These findings can generate knowledge to be integrated in the practice of patient safety for suicidal inpatients in Norway and can improve the feasibility of patient safety measures. The findings can further generate knowledge of important topics for safe clinical practice in psychiatry and can inform the future development of structured surveys to measure patients' experiences regarding safety in mental health. Theoretical generalisations can be made regarding what constitutes safe clinical practice while taking into consideration patients' and healthcare professionals' experiences and meanings. Thus, this study can inform the conceptual development of safe clinical practice for suicidal patients.

Patient consent Obtained.

Ethics approval This study was approved by the Regional Ethical Committee (2016/34; Stavanger, Norway).

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement Only fellow researchers (SHB, KA, KR, FAW) have access to data collected in this study.

REFERENCES

1. Arsenault-Lapierre G, Kim C, Turecki G. Psychiatric diagnoses in 3275 suicides: a meta-analysis. *BMC Psychiatry* 2004;4:37.
2. Appleby L, Kapur N, Shaw J, *et al. The National Confidential Inquiry into suicide and homicide by people with mental illness.* Making Mental Health Care Safer: Annual Report and 20-Year Review. University of Manchester, 2016. http://research.bmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci/reports/2016-report.pdf (accessed Nov 2016).
3. Turecki G, Brent DA. Suicide and suicidal behaviour. *Lancet* 2016;387:1227–39.
4. Vincent CA. *Patient safety.* London: Elsevier, 2006.
5. Hollnagel E. *Safety-I and safety-II: the past and future of safety management.* England: Ashgate, 2014.
6. Hollnagel E, Braithwaite J, Wears RL. Preface: In the need for resilience in health care. In: Hollnagel E, Braithwaite J, Wears RL, eds. *Resilient health care.* England: Ashgate, 2013:x–xxvi.
7. Braithwaite J, Clay-Williams R, Nugus P, *et al.* Health care as a complex adaptive system. In: Hollnagel E, Braithwaite J, Wears RL, eds. *Resilient health care.* England: Ashgate, 2013:57–73.
8. Wand T. Investigating the evidence for the effectiveness of risk assessment in mental health care. *Issues Ment Health Nurs* 2012;33:2–7.
9. Large M, Sharma S, Cannon E, *et al.* Risk factors for suicide within a year of discharge from psychiatric hospital: a systematic meta-analysis. *Aust N Z J Psychiatry* 2011;45:619–28.
10. Large M, Ryan C, Nielssen O. The validity and utility of risk assessment for inpatient suicide. *Australas Psychiatry* 2011;19:507–12.
11. Bowers L, Park A. Special observation in the care of psychiatric in-patients: a literature review. *Issues Ment Health Nurs* 2001;22:769–86.
12. Zalsman G, Hawton K, Wasserman D, *et al.* Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry* 2016;3:646–59.
13. Hollnagel E, Braithwaite J, Wears RL. *Resilient health care.* England: Ashgate, 2013.
14. Wears R, Hollnagel E, Braithwaite J. Preface. In: Wears R, Hollnagel E, Braithwaite J, eds. *Resilient health care volume 2: the resilience of everyday clinical work.* England: Ashgate, 2015:xxvii.
15. Hollnagel E. Making health care resilient: from safety-I to safety-II. In: Hollnagel E, Braithwaite J, Wear RE, eds. *Resilient health care.* England: Ashgate, 2013:3–17.

16. Wears RL, Hollnagel E, Braithwaite J. *Resilient health care, volume 2: the resilience of everyday clinical work*. Farnham: Ashgate, 2015.
17. Yin RK. *Case study research: design and methods*. 5th edn. Los Angeles, CA: Sage Publications, 2014.
18. Ruud T, Gråwe R, Hatling T. Akuttpsykiatrisk behandling i Norge.— resultater fra en multisenterstudie. 2006. http://www.sintef.no/globalassets/upload/helse/psykisk-helse/pdf-filer/mapweb.pdf (accessed Jun 2016).
19. Mellesdal L, Mehlum L, Wentzel-Larsen T, *et al.* Suicide risk and acute psychiatric readmissions: a prospective cohort study. *Psychiatr Serv* 2010;61:25–31.
20. Directorate of Health. National Guidelines for Prevention Suicides in Psychiatric Care. 2008. https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/3/Nasjonal-fagligretningslinje-for-forebygging-av-selvmord-i-psykisk-helsevern-IS-1511.pdf (accessed Jun 2016).
21. Norwegian Knowledge Centre for the Health Services. Prevention of suicide in acute pychiatric inpatient department/Units National Patient Safety Programme: In Safe Hands. 2013. http://www.pasientsikkerhetsprogrammet.no/no/I+trygge+hender/In+English (accessed Jun 2016).
22. Macnaghten P, Myers G. Focus groups. In: Seale C, Gobom G, Gubrium JF, eds. *Qualitative research practice*. London: Sage Publications, 2007:65–79.
23. Posner K, Oquendo MA, Gould M, *et al.* Columbia Classification Algorithm of Suicide Assessment (C-CASA): classification of suicidal events in the FDA's pediatric suicidal risk analysis of antidepressants. *Am J Psychiatry* 2007;164: 1035–43.
24. Coyne IT. Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *J Adv Nurs* 1997;26:623–30.
25. Lakeman R, Fitzgerald M. Ethical suicide research: a survey of researchers. *Int J Ment Health Nurs* 2009;18:10–17.
26. Mathias CW, Michael Furr R, Sheftall AH, *et al.* What's the harm in asking about suicidal ideation? *Suicide Life Threat Behav* 2012;42:341–51.
27. Malterud K. Qualitative research: standards, challenges, and guidelines. *Lancet* 2001;358:483–8.
28. Guba E, Lincoln Y. *Effective evaluation*. San Francisco, CA: Jossey-Bass Publishers, 1981.

Appendix 2

Patient characteristics

Participants' characteristics

	Gender	Occupation	Hospitali zations*	Age	Protection level	Main ICD 10 diagnoses at discharge
1. pilot	F	Social secured	2	31-40	Open, voluntary	F31.3 Bipolar affective disorder, current episode mild or moderate depression
2.	F	Social secured	22	41-50	Locked, voluntary	F31.5 Bipolar affective disorder, current episode severe depression with psychotic symptoms
3.	M	Employed	2	51-60	Open, voluntary	F32.2 Severe depressive episode without psychotic symptoms
4.	M	Unemployed	2	18-30	Open, voluntary	F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms
5.	M	Unemployed	2	41-50	Locked, voluntary	F32.2 Severe depressive episode without psychotic symptoms
6.	M	Unemployed	1	18-30	Closed, involuntary	F33.3 Recurrent depressive disorder, current episode severe with psychotic symptoms
7.	F	Social secured	80	18-30	Open, voluntary	F60.3 Emotionally unstable personality disorder F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms
8.	F	Social secured	93	41-50	Open, involuntary	F20.0 Paranoid schizophrenia
9.	F	Social secured	56	51-60	Open, voluntary	F60.3 Emotionally unstable personality disorder F33.1 Recurrent depressive disorder, current episode moderate F. 10.1 Mental and behavioural disorders due to use of alcohol, Harmful use

10.	F	Employed part-time	3	41-50	Open, voluntary	F31.3 Bipolar affective disorder, current episode mild or moderate depression
						F. 10.0 Mental and behavioural disorders due to use of alcohol, Acute intoxication
						F90.0 Disturbance of activity and attention
11.	M	Social secured		6 51-60	Open, voluntary	F33.1 Recurrent depressive disorder, current episode moderate
						F 10.1 Mental and behavioural disorders due to use of alcohol, harmful use
12.	F	student	5	41-50	Open, voluntary	F31.3 Bipolar affective disorder, current episode mild or moderate depression
						F90.0 Disturbance of activity and attention
13.	F	Social secured	N.A.	31-40	Locked, involuntary	F31.5 Bipolar affective disorder, current episode severe depression with psychotic symptoms
14.	M	Unemployed	1	18-30	Locked, voluntary	F32.2 Severe depressive episode without psychotic symptoms
15.	M	Employed	5	51-60	Locked, voluntary	F31.6 Bipolar affective disorder, current episode mixed
16.	F	Social secured	19	18-30	Open, involuntary	F43.1 Post-traumatic stress disorder
						F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms
17.	F	Employed	1	51-60	Locked, voluntary	F33.1 Recurrent depressive disorder, current episode moderate
						F 19.0 Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances, acute intoxication
18.	F	Student	1	31-40	Open, voluntary	F31.9 Bipolar affective disorder, unspecified

* **Number of hospitalizations* in adult inpatient care**

Appendix 3

Recruitment poster

Hva er viktig for at du skal oppleve god hjelp når du er innlagt og er i en selvmordskrise?

Vi vet alt for lite om pasienters erfaringer med å være innlagt når man sliter med selvmordstanker, uansett om tankene skyldes depresjoner, psykoser, bipolare lidelser, livskriser eller annet. Vi trenger kunnskap om dette for å skape en helse tjeneste som ivaretar pasientens behov. Derfor ber vi om dine erfaringer til studien "sikkerhet for inneliggende pasienter i selvmordskrise".

Vil du dele dine erfaringer med å være innlagt?
Vi søker pasienter som er innlagt ved psykiatriske sengeposter ved SUS til å delta i forskningsintervju. Intervjuet (ca. 1 time) utføres av Siv Hilde Berg mens du er innlagt.

All informasjon er taushetsbelagt. Ingen personopplysninger om deg vil være tilgjengelige for andre– heller ikke din faste behandler.

Vil du vite mer?

Snakk med din behandler, som kan sette deg i kontakt med Siv Hilde Berg, som vil gi deg mere informasjon om studien og avtale intervju.

Velkommen til et viktig prosjekt, vi trenger din kunnskap og erfaring!

Prosjektleder Siv Hilde Berg
Psykolog og doktorgradsstipendiat
Telefon: 900 22 463
E-post: siv.hilde.berg@sus.no

HELSE STAVANGER
Stavanger universitetssjukehus

Appendix 4

Interview guide 1: patients

Guide for interviewing patients

Demographics

- Age, employment, social status

Current hospitalization

- Main cause of admission, diagnosed during admission
- Length of admission
- Patient pathway
- Voluntary/ involuntary commitment
- First-time, multiple hospitalizations
- Suicidal behaviour during admission

1. How do you experience being hospitalized?
2. What has been important for feeling safe during the suicidal crisis?
   Prompts: Conditions affecting feeling safe/unsafe.
3. What has been done during the hospitalization that was important for staying alive?
4. What does it mean to be treated well by healthcare professionals when you are suicidal?
5. Have you experienced increased suicidal ideation during hospitalization?
   Prompts: What do you relate these deteriorations to? What did the healthcare professionals do to understand your deterioration? How did you communicate your deterioration?
6. Can you describe a conversation regarding suicide that was beneficial?
   Prompts: What made this conversation beneficial/not beneficial for you?
7. How did you experience being asked about suicidal ideation and plans during hospitalization?
8. Did you experience being deprived of objects or medications during hospitalization?
   Prompts: What function did this have for preventing suicide?
9. What is your experience of being under observation when you are suicidal?
10. What makes you feel safe with yourself after discharge?
    Prompts: Do you feel prepared for discharge? The importance of a crisis plan, follow-up, next of kin

Appendix 5

Interview guide 2

Healthcare professionals

focus groups

Guide for interviewing the health care professionals. Focus groups

Opening question

1. How do you experience working with suicidal patients?
   o How to you cope with the challenges?

Contingencies for good outcomes

2. What ensures good outcomes for suicidal patients during hospitalization?
   o at system, ward, individual levels
   o any harmful conditions?
3. What does the suicidal patient need during hospitalization to ensure good outcomes?
   o What do you do to ensure good outcomes?

Patient safety and contingencies for safe care

4. How do you experience implementing the measures in the patient safety campaign?
   o Which safety measures ensure safe care for suicidal patients?
   o Which do not?
   o What do you do to ensure safe care?
5. Do you think there is something else that should be included in the safety procedures?
   o What else is of importance for safe care?
   o What would be the ideal patient safety campaign?

Appendix 6

Interview guide 3

Healthcare professionals

Individual interviews

Guide for interviewing the health care professionals. Individual interviews

Making sense of suicidal behaviour

1. What characterizes patients who are hospitalized with suicidal behaviour in the ward?
2. What challenges do you encounter when working with suicidal patients?
    a. How do you solve these?
3. How do you assess suicide risk?
    a. What do you do to make the assessment useful?
    b. How do you identify whether the patient is acutely suicidal/deteriorating?
    c. What do you do to cope with it?

Providing treatment and protection

4. What's in place in the ward when you experience good patient care for suicidal patients?
5. What are the contingencies for a good conversation about suicidality?
    a. When and where do you have these conversations with the patient?
6. What do you do to ensure good discharge processes?

Creating shared understanding

7. How do you work across different professional groups with suicidal patients?
    a. What arenas are of importance? Explain the function of the arena.
    b. What challenges arise? How are these solved?
    c. How do you ensure shared understanding?

Handling emotional burden

8. How do you experience uncertainty in encounters with suicidal patients?
    a. What is the uncertainty related to?
    b. How do you cope with the uncertainty?
9. How do you need to be taken care of on a daily basis when working with suicidal patients?

Learning from practice

10. How do you learn from good patient care?
    a. When and where does the learning take place?

Appendix 7

Approval from the hospital and

the Western Regional Ethics Committee

Notat

Til:
Siv Hilde Berg

Fra:
Rådgiver Torbjørn Aarsland

Kopimottakere:
Sølve Braut, Helle Schøyen, Juridisk rådgiver Ina Trane, Rolf Haaland, Lars Conrad Moe, Randi Mobæk

Dato: 16.03.2016
Arkivref: 2016/2206 - 28460/2016

Godkjennelse forskningsprosjekt - ID565

Forskningsprosjektet: «Sikkerhet for inneliggende pasienter i suicidal kris/Safe clinical practice fortients hospitalized in suicidal crisis»

Det vises til søknad vedrørende oppstart av ovennevnte forskningsprosjekt. Prosjektet har vært vurdert av forskningsansvarlig og prosjektet er registrert i vår database med referanse: ID565. Vi ber om at denne referansen oppgis ved alle henvendelser.

Nødvendige tillatelser foreligger. Basert på disse og forskningsprotokoll godkjennes oppstart av prosjektet.

Forskningsavdelingen ønsker å minne om at:
- Ved endringer i protokollen ber vi om å få en endringsmelding.
- Dersom innhenting av pasientopplysninger baserer seg på samtykke, må samtykkeskjemaene oppbevares i låsbart skap.
- Data skal slettes eller anonymiseres ved prosjektslutt og sluttmelding sendes Forskningsavdelingen.
- Dersom prosjektet ikke starter og/eller blir avbrutt må melding sendes til Forskningsavdelingen.

Forskningsavdelingen ønsker lykke til med gjennomføring av prosjektet.

Region:	Saksbehandler:	Telefon:		Vår dato:	Vår referanse:
REK vest	Øyvind Straume	55978496		22.02.2016	2016/34/REK vest
				Deres dato:	**Deres referanse:**
				12.01.2016	

Vår referanse må oppgis ved alle henvendelser

Siv Hilde Berg
Varatun psykiatriske senter

2016/34 Sikkerhet for inneliggende pasienter i suicidal krise

Forskningsansvarlig: Helse Stavanger HF
Prosjektleder: Siv Hilde Berg

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk (REK vest) i møtet 11.02.2016. Vurderingen er gjort med hjemmel i helseforskningsloven (hfl.) § 10, jf. forskningsetikkloven § 4.

Prosjektomtale
Formålet med studien er å etablere ny kunnskap om sikker klinisk praksis for suicidale pasienter ved å innhente data om hvordan sikker praksis beskrives av pasientene selv og av involvert helsepersonell. Semi-strukturerte dybdeintervju vil benyttes i datainnsamling av pasientenes erfaringer. Fokusgrupper og semi-strukturerte dybdeintervju vil benyttes i datainnsamling av helsepersonells erfaringer. Studien søker å bidra til forståelse av hvordan pasientsikkerhet oppleves og beskrives i praksis.

Vurdering

Fremleggingspliktig etter helseforskningsloven?
Helseforskningsloven gjelder for medisinsk og helsefaglig forskning på mennesker, humant biologisk materiale eller helseopplysninger, jf. hfl § 2. Medisinsk og helsefaglig forskning defineres som virksomhet som utføres med vitenskapelig metodikk for å skaffe til veie ny kunnskap om helse og sykdom, jf. hfl. § 4. Formålet med studien er å beskrive hvordan pasienter i suicidal krise opplever pasientsikkerhet. Komiteen diskuterte kort hvorvidt dette formålet kan generere ny kunnskap om helse og sykdom, og konkluderte med at studien vil stille noen helserelevante spørsmål som kan gi ny kunnskap om helse og sykdom. Studien faller dermed inn under helseforskningsloven og skal vurderes av REK.

Forsvarlighet og beredskap
Prosjektgruppen skal gjennomføre semi-strukturerte dybdeintervju til datainnsamling av pasientenes erfaringer. Fokusgrupper og semi-strukturerte dybdeintervju vil benyttes i datainnsamling av helsepersonells erfaringer. Det skal ikke gjøres noen datainnsamling utover intervjuene.

Dette er en sårbar gruppe og prosjektgruppen har utarbeidet en beredskapsplan, jf. søknad side 10: «Det er derfor nødvendig at det foreligger rutiner for ivaretakelse av pasienter med behov økt støtte eller psykisk helsehjelp underveis og i etterkant av intervjusituasjonen.» Og side 11: «Pasientens faste behandler kontaktes i første omgang for ø-hjelps time på dagtid. Hvis pasientens faste behandler ikke nås, vil ambulant akutt-team, fastlege eller Stavanger legevakt benyttes avhengig av hastegrad og alvorlighetsgrad.» REK vest vurderer at prosjektgruppen har utarbeidet en adekvat beredskap for studien, og ser på dette som en

Besøksadresse:
Armauer Hansens Hus (AHH),
Tverrfløy Nord, 2 etasje. Rom
281. Haukelandsveien 28

Telefon: 55975000
E-post: rek-vest@uib.no
Web: http://helseforskning.etikkom.no/

All post og e-post som inngår i
saksbehandlingen, bes adressert til REK
vest og ikke til enkelte personer

Kindly address all mail and e-mails to
the Regional Ethics Committee, REK
vest, not to individual staff

forsvarlig studie å gjennomføre.

Informasjonsskrivet
Informasjonsskrivet er i det store og hele godt, men trenger noen mindre justeringer:

1. Forskningsansvarlig sin logo må fremkomme på skrivet.
2. Deltakerne bør få informasjon om når prosjektslutt er planlagt.

Vennligst ettersend revidert informasjonsskriv til REK vest på epost post@helseforsknin.etikkom.no

Prosjektslutt og håndtering av data
Prosjektslutt er satt til 01.01.2019 og prosjektleder legger opp til lagring i fem år etter prosjektslutt. REK vest har ingen innvendinger til dette, men presiserer at lagringen etter prosjektslutt skal være for etterkontroll.

Vilkår

- Informasjonsskrivet skal revideres i tråd med ovenstående merknader og ettersendes REK vest.
- Lagring etter prosjektslutt skal være for etterkontroll.

Vedtak
REK vest godkjenner prosjektet på betingelse av at ovennevte vilkår tas til følge.

Sluttmelding og søknad om prosjektendring
Prosjektleder skal sende sluttmelding til REK vest på eget skjema senest 01.07.2019, jf. hfl. § 12. Prosjektleder skal sende søknad om prosjektendring til REK vest dersom det skal gjøres vesentlige endringer i forhold til de opplysninger som er gitt i søknaden, jf. hfl. § 11.

Klageadgang
Du kan klage på komiteens vedtak, jf. forvaltningsloven § 28 flg. Klagen sendes til REK vest. Klagefristen er tre uker fra du mottar dette brevet. Dersom vedtaket opprettholdes av REK vest, sendes klagen videre til Den nasjonale forskningsetiske komité for medisin og helsefag for endelig vurdering.

Med vennlig hilsen

Ansgar Berg
Prof. Dr.med
Komitéleder

Øyvind Straume
sekretariatsleder

Kopi til:forskning@sus.no

Region:	Saksbehandler:	Telefon:		Vår dato:	Vår referanse:
REK vest	Arne Salbu	55978498		18.10.2016	2016/34/REK vest
				Deres dato:	**Deres referanse:**
				17.10.2016	

Vår referanse må oppgis ved alle henvendelser

Siv Hilde Berg
Varatun psykiatriske senter

2016/34 Sikkerhet for inneliggende pasienter i suicidal krise

Forskningsansvarlig: Helse Stavanger HF
Prosjektleder: Siv Hilde Berg

Vi viser til søknad om prosjektendring datert 17.10.2016 for ovennevnte forskningsprosjekt. Søknaden er behandlet av REK vest på fullmakt til sekretariatet, med hjemmel i helseforskningsloven § 11.

Vurdering
Man ønsker å hente inn noen basisopplysninger fra journal. Dette er basert på samtykke.

Det er vedlagt en revidert forespørsel der endringen fremkommer tydelig.

REK vest har ingen merknader.

Vedtak
REK vest godkjenner prosjektendring i samsvar med søknad.

Med vennlig hilsen

Arne Salbu
rådgiver

Kopi til: *forskning@sus.no*

Besøksadresse:
Armauer Hansens Hus (AHH),
Tverrfløy Nord, 2 etasje. Rom
281. Haukelandsveien 28

Telefon: 55975000
E-post: rek-vest@uib.no
Web: http://helseforskning.etikkom.no/

All post og e-post som inngår i saksbehandlingen, bes adressert til REK vest og ikke til enkelte personer

Kindly address all mail and e-mails to the Regional Ethics Committee, REK vest, not to individual staff

Appendix 8

Safety plan

Beredskapsplan ved behov for psykisk helsehjelp

Denne studien omfatter ikke behandling av psykisk lidelse og ingen nye prosedyrer eller intervensjoner vil bli implementert som en del av dette studien. Det er nødvendig at pasienter som deltar i studien følger behandling som normalt. Sykehuset har det fulle ansvaret for behandling og vurdering av selvmordsrisiko ifølge de ordinære etablerte prosedyrer. Følgende prosedyrer tiltak og prosedyrer følges for å ivareta pasienter som har behov for økt støtte eller helsehjelp i intervjusituasjonen og i etterkant av intervjusituasjonen:

a) Behandlende lege/psykolog rekrutterer og vurderer pasientens mentale helse i forkant av studien for å ekskludere pasienter som ikke vurderes å være stabilisert nok psykisk eller ikke har samtykkekompetanse. Ved oppfølgingsintervju etter innleggelse vil oppfølgende behandler vurdere at pasient er stabilisert til å være deltakende i oppfølgingsintervju.

b) Intervjuene av pasienter utføres av Siv Hilde Berg (SHB), som er autorisert psykolog med NPFs spesialistkurs i selvmordsrisikovurdering og har erfaring med vurdering og behandling av suicidale pasienter. Klinisk kunnskap om pasienter i selvmordsfare bidrar til å beskytte pasientene ved at SHB kan gi støtte i intervjusituasjonen og sette pasienter med behov for helsehjelp i kontakt med helsetjenesten.

c) Alle pasienter får informasjonsskriv om kontaktpunkter ved behov for helsehjelp utdelt i forkant av intervjuet.

d) Pasienter som har behov for økt støtte eller psykisk helsehjelp under/ etter intervjuet vil settes i kontakt med ansvarlig behandler i sengeposten. Ved behov for økt støtte eller psykisk helsehjelp ved oppfølgingsintervju etter innleggelse settes pasient i kontakt med oppfølgende behandler.

e) Pasienter som tar kontakt med SHB og har behov for psykisk helsehjelp etter datainnsamling er avsluttet, vil settes i kontakt med helsetjenesten. Pasientens faste behandler kontaktes i første omgang for ø-hjelps time på dagtid. Hvis pasientens faste behandler ikke nås, vil ambulant akutt team, fastlege eller Stavanger legevakt benyttes avhengig av hastegrad og alvorlighetsgrad.

f) Oppstår det tilfeller hvor det er behov for øyeblikkelig hjelp jf. Helsepersonell-loven § 7, vil SHB ivareta nødvendig helsehjelp, og sette pasienten i kontakt med helsetjenesten.

Informasjonsskriv til deltakere i studien: Kontaktpunkter ved behov for psykisk helsehjelp

Dette er et forskningsintervju, og intervjuers rolle i denne samtalen er som forsker. Det vil si at deltakelse i ikke omfatter behandling av psykisk lidelse, men mange vil oppleve at det gjør godt å kunne prate om sine egne opplevelser, både positive og negative i forskningsintervjuet. Skulle du ha behov for psykisk helsehjelp eller støtte hjelper intervjuer deg med å sette deg i kontakt med helsetjenesten.

- Er du innlagt er kontaktpersonen din faste behandler (lege/psykolog) og ditt behandlingsteam ved sengeposten.

- Etter utskrivelse fra sengepost vil fast behandler på poliklinikk kunne kontaktes for hastetime/øyeblikkelig hjelp. Er du ikke i behandling ved poliklinikk eller ikke kommer i kontakt med din behandler kan fastlege/Stavanger legevakt kunne tilby hastetime/øyeblikkelig hjelp. Stavanger legevakt telefon 51 51 02 02

- Ambulant akutt team kan kontaktes uansett årsak når som helst på døgnet uten henvisning. Teamet vil kunne tilby støttende samtaler, veilede deg til rett instans, og kunne sette deg i kontakt med øyeblikkelig hjelp ved behov. Teamet avtaler samtale pr telefon, i hjemmet eller på DPSet. Ambulant akutt team, Stavanger. Telefon 51 51 45 45 / 957 45 203

- Ved behov for anonym samtaletjeneste: Kirkens SOS telefon 22 40 00 40. 24 timer i døgnet. Hjemmeside: www.kirkens-sos.no

- Kontaktinformasjon til intervjuer: Siv Hilde Berg. Tlf (egen tlf nr)

Informasjonsskriv til behandlere: Rekrutteringsprosedyre pasienter

Takk for at du deltar i rekrutteringen av pasienter til denne studien. Jeg ber behandlende lege og psykolog lese informasjonsskrivet *forespørsel om deltakelse i forskningsprosjektet* for å få et innblikk i hva studien omhandler. Rekruttering av pasienter til studien foregår ved at behandlende lege eller psykolog velger ut pasienter ut i fra studiens eksklusjon og inklusjonskriterier.

Inklusjonskriteriene er:

1. Pasientene må være i innlagt ved sengeposten ved førstegangsintervju. Dette er nødvendig for å sikre at ordinær helsehjelp ivaretas, da dette ikke er en intervensjonsstudie som tilbyr behandling. Pasientene skal intervjues mot slutten av innleggelsen før utskrivelse til hjemmet eller overføring til annen sengepost. Kun pasienter som har oppfølging av behandler i poliklinikk/sengepost (lege/psykolog) kan delta i oppfølgingsintervju etter utskrivelse.

2. Pasientene skal ha vært vurdert med moderat til høy selvmordsrisiko i løpet av innleggelsen i form av selvmordstanker, selvmordsplaner eller selvmordsforsøk før/under innleggelse. Ulike grader av alvorlighet i den suicidale atferd er relevant, da det er ønskelig med pasienter som har ulikt funksjons- og symptomnivå i løpet av innleggelsen.

3. Pasienten må være vurdert av lege eller psykolog til å være stabilisert i den suicidale krisen, og må være i stand til å forlate sengeposten og delta i samtale på intervjutidspunktet. Ved oppfølgingsintervju etter utskrivelse må pasientene være vurdert av oppfølgende behandler til å være stabilisert i den suicidale krisen og i stand til å delta i samtale på intervjutidspunktet.

4. Må kunne gi et frivillig og informert samtykke til å delta i studien.

Eksklusjonskriteriene er:

1. Pasienter som ikke har samtykkekompetanse skal ikke inkluderes. Dette omfatter pasienter med alvorlig nedsatt kognitiv fungering enten i form av psykisk utviklingshemming eller kognitiv svikt. Pasienter som har alvorlige psykotiske symptomer, eller pasienter med pågående krisereaksjoner, akutt suicidal atferd og med høyt symptomtrykk skal ikke rekrutteres til studien.

2. Pasienter med selvskading uten suicidal hensikt inkluderes ikke i studien

Variasjon i informantgruppen

Studien vil inkludere om lag 20 pasienter fra totalt fire sengeposter, men antallet er noe avhengig av hvorvidt det oppnås en god nok variasjon i pasientgruppen som inkluderes. Alle pasienter som inkluderes til studien må oppfølge inklusjon og eksklusjonskriteriene. Utover disse kriteriene søkes det etter variasjon i informantgruppen med hensyn til følgende karakteristika:

A) Omsorgsnivå: Frivillig innleggelse, tvungen innleggelse, innleggelse med åpne og lukkede dører og pasienter som har hatt tilsyn under innleggelse (med det menes intervall/kontinuerlig observasjon, også omtalt som tilsyn/fastvakt),

B) Kjønn: Menn og kvinner

C) Alder: Alle aldersgrupper innen voksenpsykiatri (18-65 år).

D) Diagnose og problematikk

Rekruttering til studien

Når behandler har selektert pasienter som passer til studien gis pasienten informasjonsskrivet *forespørsel om deltakelse i forskningsprosjektet.* På informasjonsskrivet er det oppgitt kontaktinformasjon til Siv Hilde Berg (SHB), som utfører intervjuene og er prosjektleder for studien. Pasienten settes i kontakt med SHB hvor informasjonsskrivet gjennomgås. Samtykker pasienten til å delta i intervjuet vil tidspunkt for intervju settes. Førstegangsintervju må utføres mens pasienten er innlagt, helst mot slutten av innleggelsen. Enkelte pasienter kan bli forespurt om å delta i et oppfølgingsintervju i etterkant av utskrivelse.

Personvern

Informasjonen som deles i intervjuet ikke vil bli delt med helsepersonell ved sengeposten, og at det ikke vil være mulig å gjenkjenne pasienten i offentliggjøring av resultatene. Det innhentes ikke ytterligere informasjon om pasienten (slik som pasientjournal, informasjon fra behandler, spørreskjemaundersøkelser), enn det pasienten selv oppgir under intervjuet. For videre informasjon om personvern i studien se informasjonsskrivet *forespørsel om deltakelse i forskningsprosjektet.*

Appendix 9

Consent forms patients

SIKKERHET FOR INNELIGGENDE PASIENTER I SELVMORDSKRISE

Dette er et spørsmål til deg om å delta i en forskningsstudie for å få kunnskap om sikkerhet for inneliggende pasienter i selvmordskrise. Studien tar for seg både helsepersonells og pasienters beskrivelse av hva sikker og usikker behandling innebærer, samt erfaringer med selvmordsrisikovurdering, tilsyn og forberedelser til utskrivelse. Du er forespurt om å delta i denne studien da du er innlagt ved en sengepost ved psykiatrisk divisjon, Stavanger Universitetssykehus, og vi er interessert i å innhente dine erfaringer til denne studien. Stavanger Universitetssykehus er ansvarlig virksomhet for studien. Prosjektleder er Siv Hilde Berg (SHB). Tlf 900 22 463, siv.hilde.berg@sus.no.

HVA INNEBÆRER STUDIEN?

Samtykker du til å være med i denne studien vil det settes opp en tid for intervju med Siv Hilde Berg. Intervjuet vil foregå som en samtale omkring temaer som: trygghet, møtet med helsepersonell, behandling, tilsyn og forberedelser til utskrivelse. Intervjuet vil vare i om lag en og en halv time. Intervjuet vil tas opp på båndopptaker for å sikre nøyaktige gjengivelser av dine beskrivelser. Intervjuet finner sted mens du er innlagt i sengeposten. Har vi behov for mer tid, setter vi opp ny avtale, slik at vi får muligheten til å beskrive dine erfaringer godt nok i dybden. Eventuelt oppfølgingsintervju vil finne sted under innleggelse eller i nær tid etter utskrivelse.

Informasjonen du deler vil ikke bli delt med helsepersonell ved din sengepost. Det bes om samtykke til å innhente følgende informasjon fra din journal: alder og diagnose ved utskrivelse, kontaktinformasjon (adresse og telefonnummer) og navn på ansvarlig behandler under innleggelse og i det polikliniske forløp. Kun overnevnte informasjon vil innhentes fra din journal.

MULIGE FORDELER OG ULEMPER

Det er ingen forventede positive eller negative effekter på din mentale helse ved å delta i studien og mange vil oppleve at det gjør godt å kunne prate om sine egne opplevelser med å være innlagt. Du vil støttes i intervjusituasjonen, og har du behov for støtte i etterkant av intervjuet vil du settes i kontakt med din behandler ved sengeposten.

Deltakelse i studien gir ingen fordeler eller ulemper for ditt behandlingsforløp mens du er innlagt. Deltakelse i studien innebærer ingen endringer i din ordinære behandling og deltakelse i forskningsstudien regnes ikke som behandling av psykisk lidelse. Din ordinære behandling ivaretas ved sengeposten du er innlagt.

Dette er den første studien internasjonalt som undersøker sikkerhet for den suicidale pasient i dybden, sett i pasientenes perspektiv. Din deltakelse i studien vil være viktig bidrag for å

skape en bedre forståelse av pasientenes perspektiv på sikkerhet, som vil være viktig for videre utforming av pasientsikkerhetstiltak for den selvmordstruede pasient, samt i utviklingen av systemer og instrumenter for å innhente pasienterfaringer. Ved å delta gir du nyttig kunnskap, som kan benyttes i forbedringen av kvalitet og sikkerhet for inneliggende pasienter i selvmordskrise.

FRIVILLIG DELTAKELSE OG MULIGHET FOR Å TREKKE SITT SAMTYKKE

Det er frivillig å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke. Dette vil ikke få konsekvenser for din videre behandling. Dersom du trekker deg fra studien, kan du kreve å få slettet innsamlede opplysninger, med mindre opplysningene allerede er inngått i analyser eller brukt i vitenskapelige publikasjoner. Dersom du senere ønsker å trekke deg eller har spørsmål til studien kan du kontakte SHB.

HVA SKJER MED INFORMASJONEN OM DEG?

I studien vil vi innhente og registrere opplysninger om deg. I etterkant av intervjuet vil samtalen bli skrevet ned i tekstform, som blir lagret på et dataområde. Alle opplysningene vil bli lagert og behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste og det er kun SHB som har adgang til navnelisten og som kan finne tilbake til deg.

Datainnsamling (intervjuer) er planlagt å være ferdig innen 2017. Data vil deretter analyseres og sluttproduktet vil fremkomme i vitenskapelige artikler. Prosjektet avsluttes innen 01.01.2019, hvor offentliggjøring av resultater kan forventes innen denne tid.

Det vil det ikke være mulig å identifisere deg i resultatene av studien når disse publiseres. I offentliggjøring av resultater fra studien vil dine svar bli sammenfattet med svar fra andre deltakere, og det vil også kunne forekomme eksempler på individuelle svar. Din identitet vil imidlertid bli beskyttet så godt som mulig slik at det ikke vil være mulig å gjenkjenne deg i studien. Identifiserbare karakteristika som navn, yrke, bosted vil ikke fremkomme, og du vil bli tildelt et pseudonym ved sitatgjengivelser.

SHB har ansvar for den daglige driften av forskningsstudien og at opplysninger om deg blir behandlet på en sikker måte. Informasjon om deg vil slettet senest fem år etter prosjektslutt. Informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Du har rett til innsyn i hvilke opplysninger som er registrert om deg og rett til å få korrigert eventuelle feil i de opplysningene som er registrert.

UTDYPENDE FORKLARING AV HVA STUDIEN INNEBÆRER

Studien er finansiert av Helse-Vest-RHF, og inngår i Siv Hilde Bergs doktorgradsavhandling i risikostyring og samfunnssikkerhet. Siv Hilde Berg er ansatt ved Stavanger Universitetssykehus som psykolog, og har tidligere arbeidet med mennesker med ulike psykiske lidelser og selvmordsproblematikk. Hovedveileder er Karina Aase, som er professor

i sikkerhet og leder for programområdet kvalitet og forskning og helsesystemer. Metoden for studien er en kvalitativ case studie, som tar for seg fire sengeposter ved psykiatrisk divisjon (to spesialiserte sengeposter, og to sengeposter ved distriktpsykiatriske sentere). Intervjudata vil innhentes i 2016.

INFORMASJON OM UTFALLET AV STUDIEN

Du har rett på å få informasjon om utfallet av studien. Resultatet fra studien vil publiseres i artikler i internasjonale tidsskrifter og formidles på konferanser nasjonalt og internasjonalt. Ved å ta kontakt med SHB vil du kunne få dette materialet tilsendt når det foreligger.

GODKJENNING

Studien er godkjent av Regional komite for medisinsk og helsefaglig forskningsetikk, 2016/34 hos REK 22.02.2016.

SAMTYKKE TIL DELTAKELSE I STUDIEN

JEG ER VILLIG TIL Å DELTA I STUDIEN

Sted og dato   Deltakers signatur

Deltakers navn med trykte bokstaver

Jeg bekrefter å ha gitt informasjon om studien

Sted og dato   Signatur

Prosjektleder
Siv Hilde Berg

HELSE STAVANGER
Stavanger universitetssjukehus

SIKKERHET FOR INNELIGGENDE PASIENTER I SELVMORDSKRISE

Dette er et spørsmål til deg om å delta i en forskningsstudie for å få kunnskap om sikkerhet for inneliggende pasienter i selvmordskrise. Studien tar for seg både helsepersonells og pasienters beskrivelse av hva sikker og usikker behandling innebærer, samt erfaringer med selvmordsrisikovurdering, tilsyn og forberedelser til utskrivelse. Du er forespurt om å delta i denne studien da du er innlagt ved en sengepost ved psykiatrisk divisjon, Stavanger Universitetssykehus, og vi er interessert i å innhente dine erfaringer til denne studien. Stavanger Universitetssykehus er ansvarlig virksomhet for studien. Prosjektleder er Siv Hilde Berg (SHB). Tlf (telefon i eie av psyk divisjon vil opprettes), siv.hilde.berg@sus.no.

HVA INNEBÆRER STUDIEN?

Samtykker du til å være med i denne studien vil det settes opp en tid for intervju med Siv Hilde Berg. Intervjuet vil foregå som en samtale omkring temaer som: trygghet, møtet med helsepersonell, behandling, tilsyn og forberedelser til utskrivelse. Intervjuet vil vare i om lag en og en halv time. Har vi behov for mer tid, setter vi opp ny avtale, slik at vi får muligheten til å beskrive dine erfaringer godt nok i dybden. Intervjuet vil tas opp på båndopptaker for å sikre nøyaktige gjengivelser av dine beskrivelser. Intervjuet finner sted mens du er innlagt i sengeposten, i nær tid til utskrivelse/overføring.

Informasjonen du deler vil ikke bli delt med helsepersonell ved din sengepost. Det innhentes ikke ytterligere informasjon om deg (slik som pasientjournal, informasjon fra din behandler, spørreskjemaundersøkelser), enn den du selv oppgir under intervjuet.

MULIGE FORDELER OG ULEMPER

Det er ingen forventede positive eller negative effekter på din mentale helse ved å delta i studien og mange vil oppleve at det gjør godt å kunne prate om sine egne opplevelser med å være innlagt. Du vil støttes i intervjusituasjonen, og har du behov for støtte i etterkant av intervjuet vil du settes i kontakt med din behandler ved sengeposten.

Deltakelse i studien gir ingen fordeler eller ulemper for ditt behandlingsforløp mens du er innlagt. Deltakelse i studien innebærer ingen endringer i din ordinære behandling og deltakelse i forskningsstudien regnes ikke som behandling av psykisk lidelse. Din ordinære behandling ivaretas ved sengeposten du er innlagt.

Dette er den første studien internasjonalt som undersøker sikkerhet for den suicidale pasient i dybden, sett i pasientenes perspektiv. Din deltakelse i studien vil være viktig bidrag for å skape en bedre forståelse av pasientenes perspektiv på sikkerhet, som vil være viktig for videre utforming av pasientsikkerhetstiltak for den selvmordstruede pasient, samt i utviklingen av systemer og instrumenter for å innhente pasienterfaringer. Ved å delta gir du

nyttig kunnskap, som kan benyttes i forbedringen av kvalitet og sikkerhet for inneliggende pasienter i selvmordskrise.

FRIVILLIG DELTAKELSE OG MULIGHET FOR Å TREKKE SITT SAMTYKKE

Det er frivillig å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke. Dette vil ikke få konsekvenser for din videre behandling. Dersom du trekker deg fra studien, kan du kreve å få slettet innsamlede opplysninger, med mindre opplysningene allerede er inngått i analyser eller brukt i vitenskapelige publikasjoner. Dersom du senere ønsker å trekke deg eller har spørsmål til studien kan du kontakte SHB.

HVA SKJER MED INFORMASJONEN OM DEG?

I studien vil vi innhente og registrere opplysninger om deg. I etterkant av intervjuet vil samtalen bli skrevet ned i tekstform, som blir lagret på et dataområde. Alle opplysningene vil bli lageret og behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste og det er kun SHB som har adgang til navnelisten og som kan finne tilbake til deg.

Datainnsamling (intervjuer) er planlagt å være ferdig innen 2017. Data vil deretter analyseres og sluttproduktet vil fremkomme i vitenskapelige artikler. Prosjektet avsluttes innen 01.01.2019, hvor offentliggjøring av resultater kan forventes innen denne tid.

Det vil det ikke være mulig å identifisere deg i resultatene av studien når disse publiseres. I offentliggjøring av resultater fra studien vil dine svar bli sammenfattet med svar fra andre deltakere, og det vil også kunne forekomme eksempler på individuelle svar. Din identitet vil imidlertid bli beskyttet så godt som mulig slik at det ikke vil være mulig å gjenkjenne deg i studien. Identifiserbare karakteristika som navn, yrke, bosted vil ikke fremkomme, og du vil bli tildelt et pseudonym ved sitatgjengivelser.

SHB har ansvar for den daglige driften av forskningsstudien og at opplysninger om deg blir behandlet på en sikker måte. Informasjon om deg vil slettet senest fem år etter prosjektslutt. Informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Du har rett til innsyn i hvilke opplysninger som er registrert om deg og rett til å få korrigert eventuelle feil i de opplysningene som er registrert.

UTDYPENDE FORKLARING AV HVA STUDIEN INNEBÆRER

Studien er finansiert av Helse-Vest-RHF, og inngår i Siv Hilde Bergs doktorgradsavhandling i risikostyring og samfunnssikkerhet. Siv Hilde Berg er ansatt ved Stavanger Universitetssykehus som psykolog, og har tidligere arbeidet med mennesker med ulike psykiske lidelser og selvmordsproblematikk. Hovedveileder er Karina Aase, som er professor i sikkerhet og leder for programområdet kvalitet og forskning og helsesystemer. Metoden for studien er en kvalitativ case studie, som tar for seg fire sengeposter ved psykiatrisk divisjon

(to spesialiserte sengeposter, og to sengeposter ved distriktpsykiatriske sentere). Intervjudata vil innhentes i 2016.

INFORMASJON OM UTFALLET AV STUDIEN

Du har rett på å få informasjon om utfallet av studien. Resultatet fra studien vil publiseres i artikler i internasjonale tidsskrifter og formidles på konferanser nasjonalt og internasjonalt. Ved å ta kontakt med SHB vil du kunne få dette materialet tilsendt når det foreligger.

GODKJENNING

Studien er godkjent av Regional komite for medisinsk og helsefaglig forskningsetikk, 2016/34 hos REK 22.02.2016.

SAMTYKKE TIL DELTAKELSE I STUDIEN

JEG ER VILLIG TIL Å DELTA I STUDIEN

Sted og dato   Deltakers signatur

                                                Deltakers navn med trykte bokstaver

Jeg bekrefter å ha gitt informasjon om studien

Sted og dato   Signatur

                                                Prosjektleder
                                                Siv Hilde Berg

UTVIDET SAMTYKKE TIL Å INNHENTE JOURNALOPPLYSNINGER

Jeg samtykker til at det kan innhentes følgende informasjon om meg fra journal.

- Alder og diagnose ved utskrivelse
- Kontaktinformasjon: Adresse og telefonnummer
- Navn på ansvarlig behandler under innleggelse og i det polikliniske forløp

Din alder og diagnose vil brukes for å gi en beskrivelse av utvalget av deltakere i studien. Ditt navn vil ikke fremkomme i beskrivelse av utvalget.

Hvis du ønsker å få informasjon om resultatene av studien vil kontaktinformasjon brukes for å gi resultater av studien når disse foreligger.

Ansvarlig behandler er ansvarlig for din helsehjelp under innleggelse og etter utskrivelse. Informasjon du deler i intervjuet vil ikke deles med din ansvarlige behandler.

Journalopplysninger innhentes av Siv Hilde Berg, som kun vil innhente overnevnte informasjon fra din journal.

JEG GIR SAMTYKKE TIL AT OVERNEVNTE INFORMASJON KAN INNHENTES FRA MIN JOURNAL

Sted og dato   Deltakers signatur

                                                Deltakers navn med trykte bokstaver

----

Sted og dato   Signatur

                                                Prosjektleder
                                                Siv Hilde Berg

Appendix 10

Consent forms healthcare professionals

SIKKERHET FOR INNELIGGENDE PASIENTER I SELVMORDSKRISE

Dette er et spørsmål til deg om å delta i en forskningsstudie for å få kunnskap om sikkerhet for inneliggende pasienter i suicidal krise. Studien tar for seg både helsepersonells og pasienters beskrivelse av hva sikker og usikker behandling innebærer, samt erfaringer med selvmordsrisikovurdering, tilsyn og forberedelser til utskrivelse. Du er forespurt om å delta i dette prosjektet da du er ansatt ved psykiatrisk divisjon som helsepersonell (lege/psykolog/sykepleier/miljøarbeider/assistent), i ledelse eller i arbeid med selvmordsforebygging. Stavanger Universitetssykehus er ansvarlig virksomhet for studien. Prosjektleder er Siv Hilde Berg (SHB). Tlf 900 22 463 siv.hilde.berg@sus.no.

HVA INNEBÆRER STUDIEN?

Samtykker du til å være med i denne studien vil du settes opp til fokusgruppe intervju, individuelt intervju eller en ustrukturert samtale. Hvilken type intervju du settes opp til vil avklares i samtale med SHB.

Fokusgruppeintervju: helsepersonell

Formålet med fokusgruppeintervjuene med helsepersonell er å tematisere erfaringer med pasientsikkerhetstiltak og behandling av selvmordstruede pasienter, samt hva som oppleves som sikker og usikker praksis. Dette vil videre danne grunnlag for intervjuguider til individuelle intervju. Fokusgruppene ledes av Siv Hilde Berg og Marie Anbjørnsen. Intervjuet vil bære preg av gruppe samtale, hvor alle får komme til ordet. Fokusgruppene vil bestå av 6-12 deltakere fra ulike sengeposter ved psykiatrisk divisjon, hvor en gruppe består av leger og psykologer og en annen som består av sykepleiere, miljøarbeidere og assistenter. Fokusgruppeintervjuet vil vare i 90 minutter, og gruppesamtalen vil tas opp på en båndopptaker for å sikre nøyaktige gjengivelser av dine beskrivelser. Det oppfordres til taushetsplikt ovenfor informasjon som deles innad i fokusgruppene.

Individuelle intervju: helsepersonell

Formålet med individuelle intervju med helsepersonell er å undersøke erfaringer med sikkerhet i klinisk praksis for den selvmordstruede pasient, opplevelse av sikkerhet og erfaringer med pasientsikkerhetstiltak for den selvmordstruede pasient. Det settes opp samtaler i form av individuelle intervju med SHB. Intervjuet vil vare i om lag en og en halv time og vil følge en intervjuguide. Har vi behov for mer tid, setter vi opp ny avtale, slik at vi får muligheten til å beskrive dine erfaringer godt nok i dybden. Intervjuet vil tas opp på båndopptaker for å sikre nøyaktige gjengivelser av dine beskrivelser. Intervjuet finner sted på din arbeidsplass, eller et sted etter ditt ønske.

Ustrukturert samtale: ledelse og nøkkelpersoner

Formålet med ustrukturerte samtaler med ledere og nøkkelpersoner som arbeider med selvmordsforebygging er å innhente kontekstuell informasjon om organisering og implementering av det selvmordsforebyggende arbeidet. Disse samtalene vil foregå som en samtale, hvor det tas notater i løpet av samtalen. Intervjuet finner sted på din arbeidsplass, eller et sted etter ditt ønske.

MULIGE FORDELER OG ULEMPER

Det er ingen forventede positive eller negative effekter ved å delta i studien, men selvmordsforebygging er et sensitivt og komplekst tema, hvor deling av erfaringer med praksis kan være vanskelig for enkelte. I denne studien finnes det ingen rette eller gale svar, og det er din opplevelse som er viktig å beskrive. SHB vil støtte deg gjennom intervjusituasjonen, og du kan kontakte SHB i etterkant av intervjuet ved behov.

Det å prate om egne erfaringer med praksis kan oppleves nyttig. Deltakelse gir en mulighet for å dele informasjon fra din kliniske praksis som blir anonymisert og formidlet lokalt, nasjonalt og internasjonalt. Din deltakelse i studien er et viktig bidrag for å skape en bedre forståelse helsepersonells perspektiv på sikkerhet, som kan benyttes i forbedringen av kvalitet og sikkerhet for inneliggende pasienter i selvmordskrise.

FRIVILLIG DELTAKELSE OG MULIGHET FOR Å TREKKE SITT SAMTYKKE

Det er frivillig å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke. Dette vil ikke få konsekvenser for din videre behandling. Dersom du trekker deg fra studien, kan du kreve å få slettet innsamlede opplysninger, med mindre opplysningene allerede er inngått i analyser eller brukt i vitenskapelige publikasjoner. Dersom du senere ønsker å trekke deg eller har spørsmål til studien kan du kontakte SHB.

HVA SKJER MED INFORMASJONEN OM DEG?

I prosjektet vil vi innhente og registrere opplysninger om deg. I etterkant av intervjuet vil samtalen bli skrevet ned i tekstform, som blir lagret på et dataområde. Alle opplysningene vil bli lagret og behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste og det er kun SHB som har adgang til navnelisten og som kan finne tilbake til deg.

Datainnsamling er planlagt å være ferdig innen 2017. Data vil deretter analyseres og sluttproduktet vil fremkomme i vitenskapelige artikler. Prosjektet avsluttes innen 01.01.2019, hvor offentliggjøring av resultater kan forventes innen denne tid.

I offentliggjøring av resultater fra studien vil dine svar bli sammenfattet med svar fra andre deltakere, og det vil også kunne forekomme eksempler på individuelle svar. Din stillingstittel vil fremkomme i publikasjoner for å skille mellom ulike profesjoners opplevelser og erfaringer, eksempelvis «nurse» eller «psychiatrist». Selv om alle forhåndsregler tas for å

ivareta anonymisering er det en mulighet for at personer med lokal kjennskap til studiesettingene kan komme til å gjenkjenne deg i artiklene basert på data som deles. Din identitet vil imidlertid bli beskyttet så godt som mulig i offentliggjøring av resultatene ved at identifiserbare karakteristika som navn, bosted og sengepost ikke vil fremkomme i publikasjonen, og du vil bli tildelt et pseudonym ved sitatgjengivelser. Det gjengis ikke sitater fra data innhentet fra ledere eller nøkkelpersoner, da dette anses som lett gjenkjennelige stillingsposisjoner. Data fra ledelse inngår som kontekstuell informasjon i publikasjonene.

Data fra fokusgruppene vil i tillegg til å inngå i vitenskapelige artikler også inngå i Marie Anbjørnsens spesialistoppgave i voksenpsykologi. Offentliggjøring av data i spesialistoppgaven følger samme prosedyrer for anonymisering som beskrevet ovenfor.

SHB har ansvar for den daglige driften av forskningsstudien og at opplysninger om deg blir behandlet på en sikker måte. Informasjon om deg vil slettet senest fem år etter prosjektslutt. Informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Du har rett til innsyn i hvilke opplysninger som er registrert om deg og rett til å få korrigert eventuelle feil i de opplysningene som er registrert.

UTDYPENDE FORKLARING AV HVA STUDIEN INNEBÆRER

Studien er finansiert av Helse-Vest-RHF, og inngår i Siv Hilde Bergs doktorgradsavhandling i risikostyring og samfunnssikkerhet. Siv Hilde Berg er ansatt ved Stavanger Universitetssykehus som psykolog, og har tidligere arbeidet med mennesker med ulike psykiske lidelser og selvmordsproblematikk. Hovedveileder er Karina Aase, som er professor i sikkerhet og leder for programområdet kvalitet og forskning og helsesystemer ved Universitetet i Stavanger. Metoden for studien er en kvalitativ case studie, som tar for seg fire sengeposter ved psykiatrisk divisjon (to spesialiserte sengeposter, og to sengeposter ved distriktpsykiatriske sentere). Intervjudata vil innhentes i 2016.

INFORMASJON OM UTFALLET AV STUDIEN

Du har rett på å få informasjon om utfallet av studien. Resultatet fra studien vil publiseres i artikler i internasjonale tidsskrifter og formidles på konferanser nasjonalt og internasjonalt. Ved å ta kontakt med SHB vil du kunne få dette materialet tilsendt når det foreligger.

GODKJENNING

Studien er godkjent av Regional komite for medisinsk og helsefaglig forskningsetikk, 2016/34 hos REK 22.02.2016

SAMTYKKE TIL DELTAKELSE I STUDIEN

JEG ER VILLIG TIL Å DELTA I STUDIEN

☐ Fokusgruppe intervju

☐ Individuelle intervju

☐ Samtale

Sted og dato   Deltakers signatur

Deltakers navn med trykte bokstaver

Jeg bekrefter å ha gitt informasjon om studien

Sted og dato   Signatur

Prosjektleder
Siv Hilde Berg