Sandford, David Martin (2023) *Understanding the factors associated with mental health practitioners' engagement in effective suicide prevention activities within an Improving Access to Psychological Therapies (IAPT) service*. PhD thesis

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Understanding the factors associated with mental health practitioners' engagement in effective suicide prevention activities within an Improving Access to Psychological Therapies (IAPT) service

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BSc Occupational Therapy, MSc Cognitive Behavioural Therapy

Thesis submitted in fulfilment of the requirements for the Degree of Doctor in Philosophy

Psychological Medicine

Mental Health and Wellbeing

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July 2022

Abstract

Background

This thesis comprises of a systematic review and three empirical studies. It developed from efforts to encourage a culture within a primary care mental health service which maintained a focus on suicide prevention, despite the relative rarity of suicide deaths in any individual clinical setting. The service aimed to improve the knowledge and confidence of practitioners in this vital area and recognised the importance of supporting practitioners in the event of them losing a patient to suicide.

Methods

Three areas for study were selected which may be associated with practitioners' engagement in suicide prevention efforts. A systematic review of the impact on mental health practitioners of losing a patient to suicide was followed by a qualitative study exploring the impact of such deaths on practitioners within an Improving Access to Psychological Therapies service. A survey of all staff in an NHS Mental Health Trust was conducted using the Attitudes to Suicide Prevention Scale (ASPS) and these data were used to perform a replication of the validation of the scale. A new scale was developed to measure practitioners' confidence in assessing, formulating and managing the risk of suicide. This was administered to mental health practitioners to assess the psychometric properties of the scale.

Results

The systematic review included qualitative and quantitative studies (n=54) and found that the most common personal reactions included guilt, shock, sadness, anger and fear of blame. Impact on professional practice included self-doubt and being more cautious and defensive in the management of suicide risk. As quantitative study methodologies were heterogeneous, it was difficult to make direct comparisons across studies. However, across 13 studies (total n = 717

practitioners) that utilised the Impact of Event Scale, between 12% and 53% of practitioners recorded clinically significant trauma scores. The need for training focused on the impact of suicides and the value placed upon informal support were often cited in these studies. The experience of losing a patient through suicide can have a significant impact on mental health professionals, both in terms of their personal reactions and subsequent changes to professional practice. The negative impact, however, may be moderated by cultural and organisational factors and by the nature of support available.

In Study one, survey data from all Trust staff were used to explore the psychometric properties of the Attitudes to Suicide Prevention Scale. Two items from the scale displayed poor item-scale correlation, therefore they were excluded from the factor analysis and a further item was also excluded as it used different anchor points. However, analyses of the remaining 11 items were not satisfactory, with no adequate factor structure emerging. Nonetheless, there were statistically significant differences in attitudes between specific staff groups (i.e., those with/with suicide awareness or prevention training, gender and by level of patient contact), but not between groups defined by age range. Generally, however, the scale indicated that there were positive attitudes across all Trust staff.

Study two, the development of a scale to measure practitioners’ confidence in assessing, formulating and managing risk of suicide, the analysis indicated a single-factor structure, good test–retest reliability and statistically significant increases in confidence between pre- and post-training and between pre-training and six-month follow-up. Cohen’s effect size values suggest a moderate to large effect.

In Study three, a qualitative study with IAPT practitioners (n=7), analysis of the transcripts identified a number of themes related to the impact on staff. Specifically, the analyses yielded four superordinate themes which were represented in the majority of cases: 1) feeling shocked and upset about the death of a patient; 2) attempting to understand the causes of the suicide; 3) learning from the tragic event; and 4) reflections on what helped in coping with the tragic event. IAPT practitioners reported initial emotional responses of shock, upset, guilt and fear of blame following the death through suicide of a patient. This is consistent with the findings of the systematic review and previous research with mental health practitioners more broadly.

Conclusion

The studies included in this thesis, improved our understanding of the impact on practitioners of the loss of a patient by suicide. This supported changes within our service to help better prepare and support practitioners for such an eventuality. All practitioners are made aware of the potential for the loss of a patient by suicide, of the likely impact of this and of the support available to them. In order to keep a focus on the prevention of suicide and to improve practitioners' confidence in this, training has been developed in risk assessment, formulation and management and further training into the psychological moderators of suicidal behaviour and into safety planning has been delivered.

Understanding staff attitudes could help identify potential barriers to effective engagement of practitioners in suicide prevention. The selection of the Attitudes to Suicide Prevention Scale for research purposes should be treated with caution and given the findings of Study one there is a sufficient rationale to develop a new measure. Effective engagement is also likely to be affected by practitioners' confidence in their ability to assess, formulate and manage suicide risk. A newly developed scale (Study two) displays promise as a measure for this purpose. The findings from Study three support the following recommendations from the systematic review.

Services and training providers should ensure that practitioners are prepared for the eventuality of a patient suicide and are adequately supported if they experience such a tragic event. The provision of regular suicide prevention training can help create a culture that supports engagement in this vital activity. Training should also; address any negative attitudes to suicide prevention, increase practitioners' confidence in the assessment, formulation and management of suicide risk, prepare staff for the potential experience of losing a patient through suicide and inform them of what to expect in such an event including the available support.

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Publications arising from this thesis

Sandford, D. M., Kirtley, O. J., Lafit, G., Thwaites, R., & O'Connor, R. C. (2020). An investigation into the factor structure of the Attitudes to Suicide Prevention Scale. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 41*(2), 97–104. https://doi.org/10.1027/0227-5910/a000608

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Acknowledgement

Thankfully the support, encouragement and guidance of so many was given open-heartedly and unconditionally, because I could never repay the debt I owe. Richard Thwaites, as the Clinical Director of the excellent Cumbrian NHS IAPT service, First Step, not only supported me through my clinical role for a rewarding ten years, he also enabled this to happen, from inspiration, sourcing of funding, contribution and everything in between.

Throughout my NHS career I have been blessed with excellent supervisors, managers and colleagues but I still could not have wished for better supervisors than Rory O’Connor and Olivia Kirtley. Their role in the international effort on suicide prevention is well known but how they made the time to be unfailing supportive and wise and patient and humorous in supervising me over the past 5 years I will never know. Richard, Rory and Olivia all have in common a commanding intellect which is somehow never threatening but used entirely for the benefit of others. They see potential in others and foster it.

A huge thanks to the participants in these studies. I know you are motivated to help others by communicating your own experiences and you deserve great credit for that. I hope in some way the publications arising from this thesis will help with your efforts.

A great joy has been being a member of the Suicidal Behaviour Research Lab. A collective of wonderful people. I have jokingly referred to myself as a semi-detached member of the team, given my full-time employment in Cumbria and the all too rare opportunities to visit wonderful Glasgow. However, I have been made to feel incredibly welcome and have received excellent support and friendship from you all. Seonaid Cleare, Karen Wetherall, Tiago Zortea, Heather McClelland, Cara Richardson, Jack Melrose; having my name appear alongside yours has been a huge

source of pride for me. Alison, Ruth, Ellen, Eve and Grace. Partner and daughters – this one’s all down to you – thank you.

Author's declaration

“I hereby declare that I am the sole author of this thesis, except where the assistance of others has been acknowledged. It has not been submitted in any form for another degree or professional qualification.”

David Sandford

August 2022

Chapter 1 Introduction

Background

This chapter describes the context of the thesis, presents the motivation for embarking on the research and provides a rationale for the selection of the studies.

Methods

This is approached by discussing the challenges of suicide prevention and suicide risk assessment and by introducing the risk formulation approach. The NHS mental health service, which was the host for the studies which comprise this thesis, is described. An overview of a social cognition model, the theory of planned behaviour, provides a framework to explain the relevance of the areas of focus.

Results

The theory of planned behaviour provides a rationale for the areas of study chosen for this thesis. The theory of planned behaviour has three components: attitudes, norms and perceived control. The behaviour in this instance is engagement in suicide prevention activities. The relevance of attitudes towards the desired behaviour highlighted by the model led naturally to employing a measure of attitudes to suicide prevention. Establishing a culture (or ‘norm’) within a service that suicide prevention is a priority can be achieved in different ways. It is argued that a service can foster positive norms by providing regular training in suicide prevention, engaging in research in this area, and by supporting practitioners in the challenging areas of suicide prevention and postvention. Finally, perceived control is important for practitioners and is reflected in their confidence in engaging in suicide prevention efforts.

Conclusions

This chapter ends by presenting the specific aims and structure of the current thesis. It describes the overarching purpose of the research, which is to investigate factors that may be associated with effective engagement in suicide prevention.

1.1 Context and background

This thesis emerged out of practice-based efforts focussed on suicide prevention. The introduction provides some context for the studies that arose from these efforts, detailing the NHS host service and the risk of suicide that such services should be prepared for. The introduction then provides a broader background related to other issues in suicide prevention, including the prevalence of suicide, models of suicide behaviour, the challenges faced in the assessment of suicide risk and the role of risk formulation in meeting these challenges. Some reflection is also offered on the motivation behind each of the studies included in this PhD thesis. Section 1.2 will then build on this context and background to justify the series of studies herein.

1.1.1 The Host Service

The primary care mental health service in which much of the data reported in this thesis was collected was established in response to the Improving Access to Psychological Therapies (IAPT) programme (Department of Health, 2008). This is an English NHS initiative designed to provide access to evidence-based psychological therapies for high volumes of patients in line with best clinical practice. Improving access to mental health services is recognised as a global challenge (WHO, 2019) and initiatives to tackle the problem include the integration of mental health services within general health settings, targeting populations affected by adversity, as well as the dissemination of scalable psychological interventions (Ghebreyesus, 2019). IAPT services were initially focussed on the later of these goals although more recently there has been an increased emphasis on working within physical health settings to provide psychological therapy for people with long term health conditions and with tackling health inequalities. The outcomes demonstrating the effectiveness of the IAPT programme are publicly available (NHS Digital, 2021). Over 600,0000 people each year receive psychological treatment for depression or anxiety with recovery rates that are generally in line with the expectations from the research literature (over 50% recovery) (Clark, 2018). There are initiatives worldwide based on IAPT, including programmes in New Zealand (Haarhoff &

Williams, 2017), Norway (Knapstad et al., 2018), Australia (Baigent et al., 2020), Canada (Naeem et al., 2017) and Japan (Kobori et al., 2014).

1.1.2 Suicide Risk within IAPT

IAPT services are designed to help people who are deemed appropriate for low intensity or high intensity psychological interventions, as defined by the stepped care model employed by NHS mental health services (National Institute for Health and Care Excellence (NICE), 2011). Individuals at significant risk of suicide would require a wider and more intensive package of care such as that provided by a multi-disciplinary team (NICE, 2011a). Nonetheless, risk assessment, formulation and the subsequent management of any identified suicide risk remains a key role for IAPT staff for several reasons. First, a key feature of IAPT services is self-referral and even with very clear communication around the role of IAPT services some individuals who receive an assessment will present with significant risk of suicide. Second, risk is dynamic, therefore, it can change during the course of treatment; an individual with depression may enter treatment with low risk, but this may fluctuate over the course of treatment, due to a wide range of potential factors. Third, a person may be reticent to discuss thoughts of suicide at initial and/or early stages of engagement, but such thoughts may be disclosed once a therapeutic relationship has been established. The sad reality is that, although IAPT was not designed for those at high risk of suicide, people under the care of IAPT services do die by suicide. While IAPT staff are not expected to provide therapy to acutely suicidal individuals or work directly on acute suicidal thoughts or behaviours, all staff have a role to play in being aware of suicide risk and potentially helping to reduce vulnerabilities, as part of their routine work.

The aforementioned considerations have a number of implications that are relevant to this thesis. Despite IAPT services being designed to work with people at minimal risk of suicide, practitioners need to be trained in the effective assessment and management of suicide risk and given the encouragement and support to engage in these activities. Although the loss of a patient by suicide is a rare event, it is one that practitioners are likely to experience at some stage along with the resultant internal investigations and inquest procedures. The possible impact on practitioners needs to be better understood so that postvention efforts are optimised.

1.1.3 Suicide Prevalence and Impact

Every year, worldwide, suicidal behaviour affects millions of people. Approximately 703,000 people die by suicide (World Health Organization [WHO], 2021), with around 20 times this number making suicide attempts (WHO, 2014). Beyond each individual tragedy it is estimated that each suicide affects 135 other people (Cerel et al., 2016), with up to 25 of these experiencing a major life disruption because of the suicide (Cerel & Sanford, 2016). Mental health practitioners are also among those affected by suicide and the experience is likely to evoke strong emotional distress (Feigelman et al., 2018). In the UK, where approximately 11 people per 100,000 die by suicide annually (Office for National Statistics, 2019), it is estimated that 27% of those who die by suicide are individuals who had been in contact with mental health services in the 12 months prior to death (National Confidential Inquiry into Suicide and Homicide in Mental Health [NICSH], 2017). Furthermore, it is estimated that 77% of those who die by suicide had attended their GP service in the previous 12 months (NICSH, 2016).

Between 2010 and 2018, 11603 people who had been in contact with mental health services in England (including 726 inpatients) died by suicide. Of these, 312 people had been in contact with IAPT services (NCISH, 2021). The host IAPT service, which is the focus of this thesis, serves a population of approximately 500,000 and receives approximately 16,000 referrals per year. A Psychological Wellbeing Practitioner (PWP; a Step 2 practitioner) working for 5 years may have seen upwards of 2000 patients. Consequently, many practitioners are likely to experience losing a patient through suicide at some point in their careers. What is unknown, however, is the number of suicides that are prevented. It is not uncommon for patient feedback to state the belief that the individual would no longer be alive but for their engagement with the mental health service (see Appendix K). Every clinical encounter is an opportunity to provide support and clearly mental health services have a central role in, and responsibility for, suicide prevention. This thesis focuses on suicide prevention within a primary care mental health service for people with common mental health problems, i.e., anxiety and depression, which is part of a UK mental health National Health Service (NHS) Trust.

1.1.4 Models of Suicidal Behaviour

In response to the global public health concern around the prevalence and impact of suicide, there has been increased research effort directed at understanding suicidal ideation and behaviour. The focus has shifted from deterministic, biomedical theories which viewed suicide as a direct consequence of psychiatric disorders to more complex pathways which describe suicide as a behaviour driven by biological, social and psychological factors. Theoretical models have been developed to guide this research effort, to generate testable hypotheses linking psychological factors with the development of suicidal ideation, intent and behaviour. The recent predominant models are described as ideation to action models and an example is the Integrated Motivational-Volitional (IMV) model of suicidal behaviour (O'Connor & Kirtley, 2018) which draws upon both Joiner's Interpersonal Theory (IPT) (Van Orden et al., 2010) and Williams' Cry of Pain model (Williams, 1997).The IMV model is a tripartite model (figure 1), comprised of pre-motivational, motivational and volitional stages, each detailing psychological moderators which may help explain the progression along a pathway to suicidal behaviour. The pre-motivational stage employs a diathesis-stress framework to describe potential predisposing vulnerability factors (e.g., environment, early experience and life events). Psychological factors including socially prescribed perfectionism explain how negative experiences (e.g., loss of employment, end of a relationship) may be met with a sense of defeat and humiliation (e.g., people expect more of me, they see me as a failure). Then in the motivational stage, cognitive processes such as impaired social problem-solving, memory biases (differential recall of previous losses) and rumination (dwelling on negative events) may contribute to feelings of entrapment (e.g., 'nothing is going to change, I will never find work/a partner'). An individual may not be able to envisage an escape from distressing emotions ('I can't stand this any longer') or from the circumstances that created them ('nothing or nobody can get me out of this mess'). Further moderators such as a sense of thwarted belonging ('no one cares, I am alone') and perceived burdensomeness ('they will be better off without me') may also contribute to the development of suicidal ideation ('I want to escape all this, I don't want to wake up in the morning') and intent. Crucially, in the volitional stage, eight factors are identified that may differentiate between those people who experience suicidal ideation and those who act upon those thoughts. These volitional moderators include access to means, previous suicidal behaviour, exposure to suicide, and ‘acquired capability’, a construct that comprises of fearlessness to death and pain tolerance.

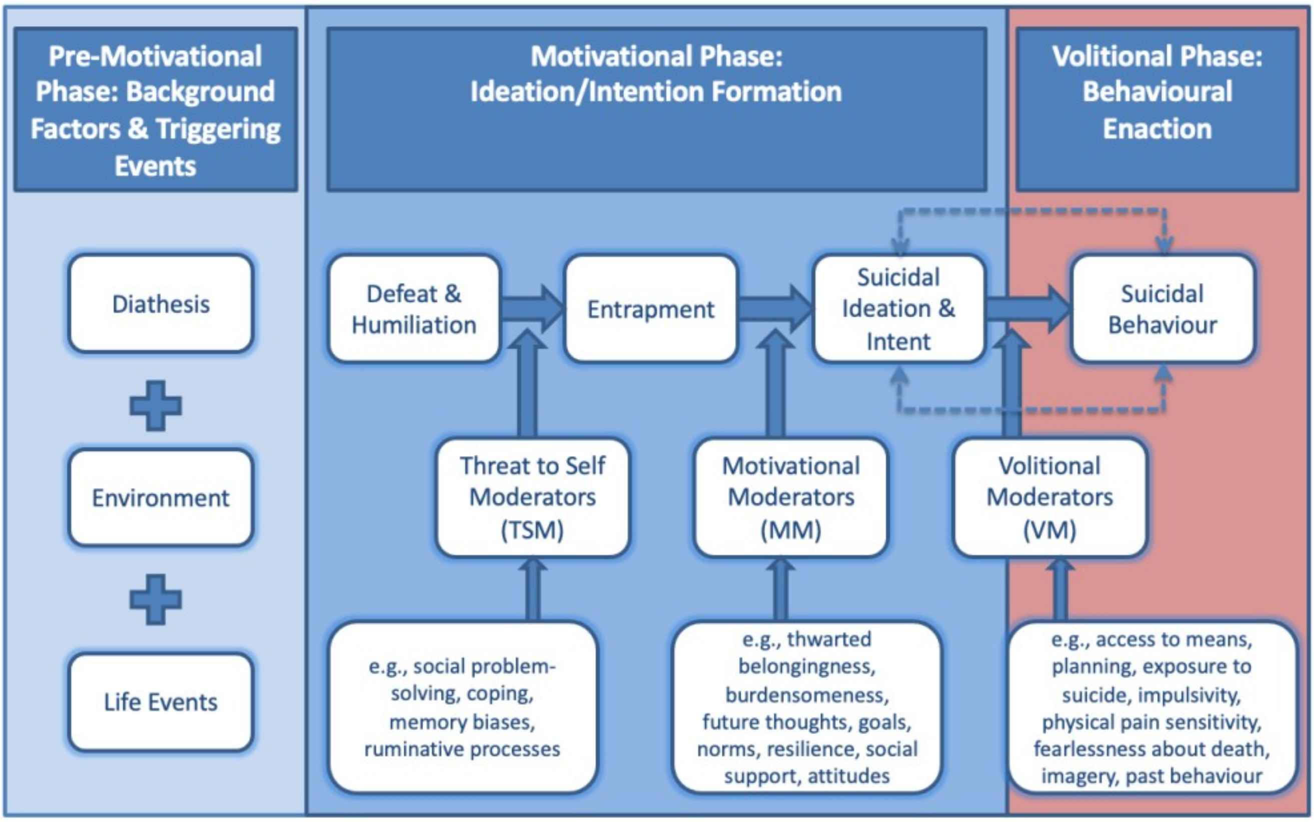

Figure 1 The integrated motivational volitional model

1.1.5 Suicide Prevention

Models such as the IMV model aim to understand the factors that can increase the risk of suicidal behaviour. Consequently, this knowledge can be used to guide suicide prevention efforts. Globally, a broad range of suicide prevention strategies have been implemented, and the effectiveness of these has been examined: Zalsman et al. (2016) assessed seven interventions: public and physician education, media strategies, screening, restricting access to suicide means, treatments, and internet or hotline support. In common with other reviews (Zortea et al., 2019, Mann et al., 2005; Turecki et al., 2019), it was found that whilst no single strategy was predominant, restricting access to lethal means displayed the best evidence of effectiveness. Broad public health initiatives have been put into place to restrict access to means such as gun control, detoxifying domestic gas supplies, control of analgesics, and banning of certain pesticides. Other specific actions include improved fencing to prevent access to railway lines and protecting ‘hot spots’ for jumping such as high bridges. Within health settings, more focused strategies for restricting access at the individual level include the use of safety planning (Stanley & Brown, 2012, Niuj et al., 2021). Safety planning can be incorporated into risk assessment for higher risk groups. For example, for people presenting at emergency departments following self-harm episodes (O’Connor et al., 2019) and for people in mental health services if they also have a history of suicidal behaviour.

1.1.6 Suicide Risk Assessment

Focussing suicide prevention strategies such as those above on specific individuals relies on accurate risk assessment. A key challenge in suicide prevention is, paradoxically, the statistical rarity of suicide deaths and the implications this has for the predictive power of risk assessment tools. Whilst much effort has focussed on risk assessment, over the past decade there has been growing acknowledgement that risk assessments tools do not accurately identify an individual’s suicide risk (Quinlivan et al., 2017; Steeg et al., 2018). We remain no better than chance at predicting death by suicide (Franklin et al., 2017). Such tools are dependent on known risk factors that are identified at the population level, but may not be relevant to an individual. Multiple suicide risk factors have been identified and have been categorised into demographic (e.g. male, low socioeconomic status), historical (history of self harm, family history of suicide), clinical (mental health diagnosis, recent discharge), psychological (hopelessness, impulsivity), and current context (suicidal ideation, availability of means) (Department of Health [DOH], 2007). Assessing risk by identifying the presence of known risk factors is referred to as the actuarial approach after the procedure followed by insurance brokers to calculate insurance premiums (Lewis & Doyle, 2009). Identifying someone as being in a higher risk group does little to inform the true level of risk in the context of any one individual. This is illustrated by the fact that the majority of people in Western countries who die by suicide have a diagnosable mental health disorder, yet the vast majority of those with a mental health disorder do not take their own lives (Inskip et al., 1998, Nordentoft et al., 2011). In the world of insurance, the algorithm calculates a (usually) higher insurance premium based on group characteristics, however applying such an approach to suicide prevention will lead to a high rate of false positives. Best clinical practice guidelines (DOH, 2007) clearly state that risk management decisions should not be made purely based on risk assessment measures.

A common clinical practice until recently has been the use of clinical contracts. The practitioner would ask the patient to enter into a verbal or written agreement that they would keep themselves safe until the next contact, or occasionally until the end of the intervention. The effectiveness of this approach is without empirical support (Turecki et al., 2019) with some evidence that it may be detrimental (Edwards and Sachmann, 2010) and, as a result, it is no longer recommended. Alternative approaches such as crisis response planning have been shown to be more effective at reducing suicide attempts, suicidal ideation and hopsitalisation (Bryan et al., 2017). In reality, the majority of people who were in contact with mental health services, but then went on to take their lives were categorised as low suicide risk at their last contact (NCISH, 2018). The use of risk assessment tools, in isolation, may serve to create false reassurance for practitioners rather than improve safety (National Confidential Inquiry into Suicide and Safety in Mental Health, 2018).

Ultimately the suicide prevention efforts of mental health services are dependent on those who are at risk seeking help, being able to disclose their suicidal ideation and intent, and being prepared to engage in treatment and safety planning. All efforts to reduce barriers to help seeking, to encourage disclosure of risk and to engage individuals in risk management will support suicide prevention. A widely cited barrier preventing those at risk of suicide from accessing mental health services is the fear of stigmatisation (Suicide Prevention Australia, 2010; Tadros & Jolley, 2001). If mental health services are to meet their responsibility of addressing stigma, they need to ensure that people accessing services are met with sensitivity and understanding. Stigmatisation itself is multifaceted, comprising of, for example, the anticipation or experience of being ridiculed, being shown a lack of understanding, and meeting judgmental, disrespectful professionals (Clement et al., 2015). Whilst fear of stigmatisation is a barrier to engaging with services, the actual experience of a negative reaction also contributes to disengagement and can contribute to reduced help-seeking again in the future. Best practice guidelines for the assessment and management of risk (Department of Health, 2007) recommend that mental health practitioners should receive regular training to ensure that they have the knowledge, skills and confidence to effectively engage in suicide prevention activities. A report into the assessment of clinical risk in mental health services concluded that there should be a focus on relationship building and practitioners should be comfortable asking about suicidal ideation and receive training in using a collaborative approach to assessing, formulating and managing risk (NCISH, 2018). The key role of the therapeutic relationship and a collaborative approach in suicide prevention is defined in what is known as the ‘Aeschi approach’ which emphasises the need for an empathic understanding of suicidal ideation and behaviours from the person’s own perspective (Michel and Jobes, 2011).

1.1.7 Historical Context

Reflecting on the history of societal attitudes to suicide can be helpful. This provides context to both the potential detrimental effect of suicide stigma on help seeking by those at risk and also on the impact on practitioners who experience the loss of a patient through suicide. Joiner (2011) has described suicide as the most stigmatised of all human behaviours, beyond that of even murder and slavery and one condemned by at least two major religions. A full and detailed accounted has been provided by Alvarez in his book The Savage God (Alvarez, 2002). In England suicide was a criminal offence punishable by a prison sentence until 1961, even more shockingly to modern sensibilities in the 19th century those who survived suicide could be condemned to death. For those who died by suicide their possessions could be seized by the courts and they would be denied Christian burial (Williams, 2014). All this may in some way explain enduring attitudes which contribute to the shock, guilt, shame and fear of blame experienced by those impacted by loss of life by suicide.

In summary, each death by suicide is a tragedy yet finding effective ways to identify those at greatest risk is elusive. Risk factors at a population level can readily be enumerated but assessing their relevance to an individual is key to risk formulation and management.

1.1.7 Risk Formulation

The use of risk assessment tools has been shown to have very poor predictive power (Quinlivan et al., 2017). Categorising suicide risk into bandings such as high, medium, or low risk is essentially meaningless (National Confidential Inquiry into Suicide and Safety in Mental Health, 2018). This highlights the need for an individualised approach that aims to interpret known risk factors in context, i.e., to identify both the presence of risk factors and their relevance in certain circumstances. The aim is to describe current risk, to identify potential situations where risk could escalate and put preventative measures in place. A response to this need has been the adoption of the structured professional judgment approach (Lewis & Doyle, 2009). Practitioners use problem formulation skills to guide the assessment and treatment of mental health disorders. A formulation describes the presenting difficulties and offers a hypothesis for the development of predisposition, triggering circumstances (original and potential), ongoing maintenance factors and any protective factors. This approach can be specifically applied to the understanding and management of risk. A judgment is made as to whether known general risk factors are present and relevant to a specific individual. A written formulation is created which is a narrative description of the interplay of predisposing, perpetuating, precipitating and protective factors. This formulation then guides the development of a proportionate safety plan (Lewis & Doyle, 2009).

Arguably, the role of risk assessment tools within this approach in a primary care mental health setting would be to identify those within higher risk groups and accept a higher number of false positives. Risk formulation would then be used to inform risk management that was collaborative and proportionate, leading to a co-developed safety plan. For some people it will be agreed that risk can be safely managed alongside ongoing treatment within an IAPT service. For this group it would be helpful if practitioners understood the psychological moderators of risk such as those highlighted in the IMV model. Addressing these moderators (e.g., poor problem solving, rumination, thwarted belongingness) will often be standard practice within CBT treatment models for depression and anxiety. However, for those people where risk is imminent or less stable, specialist treatment focussed on suicidality may be required. Treatment approaches for suicidality have been based on CBT, (Bryan et al., 2018; Wenzel et al., 2009) and the related therapy Dialectal Behaviour Therapy (DBT) (Linehan et al., 2015). One approach however, the Collaborative Assessment and Management of Suicidality (CAMS) (Jobes, 2016, Jobes, 2017) has been designed to be independent of an underlying therapeutic approach so that it can be delivered flexibly across a range of clinical settings. A recent meta-analysis indicated that the CAMS approach resulted in significantly lower suicidal ideation and general distress, significantly higher treatment acceptability, and significantly higher hope/lower hopelessness in comparison to alternative interventions (Swift et al., 2021). Although theses analyses concluded that although there were no significant differences for suicide attempts, self- harm, other suicide-related correlates (in large part, because the sample sizes were relatively small), they noted that the comparison interventions were equally effective in these outcomes. This supported the concept within CAMS that interventions should be targeted e.g. CAMS for the ‘upstream’ reduction in suicidal ideation (Jobes, 2019) and DBT for those with a history of suicidal behaviour.

A potential problem with the increased recognition of the poor predictive power of risk assessment tools is the possible impact on a practitioner’s confidence in, and effective engagement with, suicide prevention efforts. Risk assessment tools are helpful to guide mental health practitioners in gathering the relevant information and, particularly for less experienced staff, knowing what questions to ask. National best practice guidance (DOH, 2007) has for over a decade cautioned that decisions on risk management should not be based solely on the use of assessment tools but on the broader application of structured clinical judgment and risk formulation (DOH, 2007). As a result, the emphasis should have shifted from prediction to prevention; using a narrative account of what is known about the individual to develop a safety plan that promotes positive risk management. However, a report into the assessment of clinical risk in mental health services (NCISH, 2018) found evidence of risk assessment tools still being used as checklists to predict future behaviour and guide risk management, and of other problems, such as a lack of training. It concluded with recommendations to improve risk assessment; these included ensuring staff were comfortable asking about suicidal ideation and that they received training in the assessment, formulation and management of risk.

The Risk Assessment, Formulation and Management (RAFM) approach attempts to address some of the weaknesses of risk assessments that are based solely on the use of checklists. RAFM places particular emphasis on moving away from the unhelpful categorisation of levels of risk (e.g. ‘high’, ‘medium’, ‘low’) and the use of these levels to inform care. It is important that risk management within mental health services is strongly embedded in more holistic and ongoing psychosocial and clinical assessments (Zortea et al. 2019). This can be promoted by encouraging a culture within services that emphasises the importance of suicide prevention. This can be achieved by building practitioners’ skills and confidence, and also by supporting them to engage in ongoing suicide prevention efforts without fear of blame.

1.1.8 Reflection on the motivation for the studies in this thesis

The studies that comprise this thesis developed as a consequence of early experiences during my role as clinical lead in the IAPT service. First, there was an initiative by the host NHS Trust to roll out RAFM suicide prevention training for all practitioners using a ‘train the trainer’ approach. It was through discussions with my Clinical Director about a shared need to improve our own knowledge, as well as recognising the importance of the training to our own service, that led to us putting ourselves forward as trainers. This initiative offered an opportunity to raise practitioner skill levels and confidence in suicide prevention. Second, witnessing practitioners within our service experience the loss of a patient to suicide brought home the extent of the impact on staff and the recognition that the service’s ability to support them was hampered by our own lack of knowledge and preparedness. The motivation for much of the work in this thesis, therefore, was to improve engagement in suicide prevention activities within the service by raising awareness, increasing service specific training and providing better postvention support for practitioners.

1.1.9 Summary of background

Suicide is a global public health problem with wide ranging impact. Mental health practitioners are among those who are affected and more consideration of postvention support for practitioners is required. Mental health services face a number of challenges that hamper effective suicide prevention efforts. Although models of suicidal behaviour have been developed to inform suicide prevention strategies and treatments, they are often not incorporated into clinical practice. Indeed, as noted above, risk assessment tools, used in isolation, do not accurately predict suicidal behaviour and therefore do not direct prevention efforts effectively. Guidance therefore states that mental health practitioners should be trained in the RAFM approach. Priority in risk management should be given to safety planning that incorporates restriction in the access to means.

The impetus behind this thesis was to improve suicide prevention activities within a primary care mental health service. The main objectives of which were to ensure practitioners were trained in the RAFM approach and that they were given sufficient support to engage effectively in suicide prevention efforts. The next section provides further detail.

1.2 Relevance of studies

Although the studies in this thesis cover different aspects of suicide prevention, an overarching framework that binds them together is the Theory of Planned Behaviour (TPB) (Ajzen, 1989). The TPB has been applied to suicide prevention previously, for example, to inform the development of the Willingness to Intervene Questionnaire (Aldrich et al., 2014), to predict the willingness of students to intervene with potentially suicidal peers (Aldrich, 2015) and to predict suicidal behaviour (O’Connor et al., 2006). Furthermore, it has informed the development of a key model of suicidal behaviour, the Integrated Motivational-Volitional (IMV) model (O’Connor & Kirtley, 2018). In this thesis the TPB acts as an umbrella to cover the different areas of study that are important to support practitioners to effectively engage in suicide prevention. According to the TPB theory the intent to engage in any behaviour is influenced by three sets of beliefs:

- Attitudes: the evaluation by a person of the outcomes of a particular behaviour.
- Subjective norms: a person's beliefs about the importance that significant others place on them engaging in the behaviour.
- Perceived behavioural control: a person's perception of their ability to perform the behaviour to achieve the desired outcome.

This model has been applied to a wide range of health behaviours such as cancer screening (Abamecha et al., 2019) and infection control (Shubayr et al., 2020). However, in this thesis we have applied this theory to the behavioural tasks that comprise suicide prevention. In so doing, it helps to focus on the areas that may then facilitate effective engagement by practitioners in suicide prevention efforts. Attitudes to suicide prevention, particularly related to its effectiveness, beliefs implicit in the workplace culture about the importance of suicide prevention and an individual practitioner’s perception of their ability to engage in suicide prevention tasks are all areas of interest which require attention. Each of these three factors are elaborated on below and the links to the studies within this thesis are detailed.

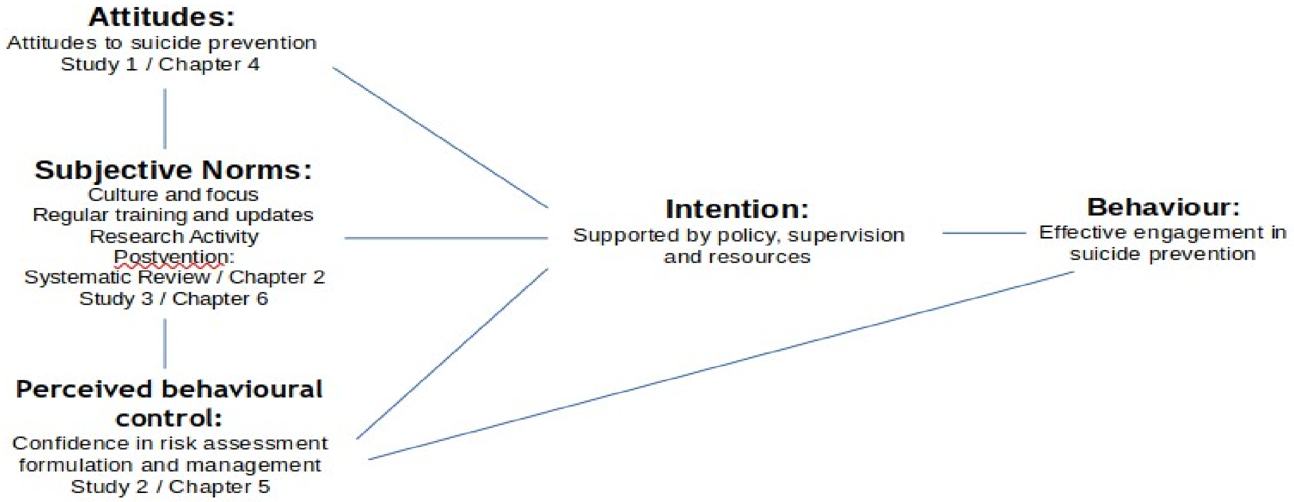

Figure 2: Theory of planned behaviour

1.2.1 Attitudes

Attitudes and beliefs held by staff about suicide prevention would be expected to influence effective engagement in suicide prevention efforts. This was highlighted by Jacobson et al. (2012):

> ‘Prior research also suggests that professionals who hold negative attitudes toward persons at risk for suicide can lead to challenges connecting empathically with clients at risk for suicide and intervening effectively to prevent suicide’

In *Preventing Suicide, A Global Imperative: Myths* (WHO, 2014) seven common misconceptions about suicide were listed. Examples included: that most suicides happen suddenly without warning; someone who is suicidal is determined to die and; talking about suicide can increase risk. If these views were held by staff then prevention efforts could be seriously compromised, and it would highlight a training need.

Practitioners are more likely to engage in effective suicide assessment and formulation if they believe in their ability to offer interventions to prevent or manage risk. Examples of management interventions include collaborative production of suicide safety plans and the ability of therapy itself to reduce risk. Some of the practitioner specific factors that influenced the outcomes of risk assessment were highlighted in the best practice guidelines produced by the Department of Health:

> ‘Decision-making by professionals involved in risk assessment and risk management is complex and is affected by many factors that are specific to the practitioner making the decision, such as their personal values, their own attitude toward risk, their workload, and the time they have available to address the matters in hand.’ (DOH, 2007).

Confidence and motivation are known to be key drivers to action (Dixon, 2008). Whilst training may be expected to increase confidence (Gask et al., 2008, LoParo et al., 2018), motivation to fully engage in an activity is also of primary importance. In turn, one factor that influences motivation is a person’s attitude towards the potential benefits of the behaviour (NICE, 2007). The starting point for this thesis, therefore, was to investigate the attitudes of Trust staff to suicide prevention in order to increase understanding of potential barriers to, and areas that may influence, practitioners' engagement in suicide prevention efforts. Furthermore, beliefs and attitudes can negatively impact on the effectiveness of suicide risk assessment and management (Herron et al., 2001; Valente, 2011). For example, health professionals' beliefs about the preventability of suicide is likely to influence how risk is assessed and managed (Ramberg et al., 2016). Attitudes towards responsibility are also likely to affect engagement with risk assessment, one's willingness to access training in risk management (Herron et al., 2001), or influence risk assessment and management skills (Brunero et al., 2008).

For the reasons outlined above, a Trust wide survey of staff attitudes to suicide prevention was conducted. To do so, we used the Attitudes to Suicide Prevention Scale (ASPS; Herron et al., 2001) as it was the only widely used measure we could find for this specific purpose. However, beyond its initial validation (Herron et al., 2001), the factor structure of the ASPS had yet to be replicated. The administration and validation of the ASPS, therefore, comprised a substantive section of this thesis (see Chapter 4).

1.2.2 Subjective Norms

Given the relative rarity of suicide, it is important to foster a culture that maintains a focus on suicide prevention, one that is supportive and communicates clear expectations of staff through guidelines, policies and regular training. To this end, Smith et al. (2015) described how the setting of these expectations is crucial in avoiding what they described as dysregulation in the health care system:

> 'In our view, staff appropriately engaged with a goal of mitigating suicide risk are more likely to be successful than staff confronted with the impossible task of eliminating risk altogether.'

Given the potential for patient death through suicide, it is, therefore, vital that staff feel they will be supported in the rare but tragic cases when a patient dies by suicide. In the absence of good support, particularly if there is a perception of a blame culture, there is increased potential that practitioners will adopt either an avoidant or an over defensive approach to risk assessment (Bleich et al., 2011; Oquendo & Bernanke, 2017). Understanding the impact on practitioners of the loss of a patient through suicide would guide the support required in such an event. The service could then work to protect practitioners from any negative reactions. This would communicate the expectations of the service or the ‘societal norm’ that suicide prevention was a central task and that practitioners would be supported in this.

It was acknowledged by the leadership team that the service managers needed to understand both the impact on practitioners of the loss of a patient to suicide and also the support that should be provided. The relative rarity of such an event was found to have contributed to a lack of preparedness both at the service and individual level. It was recognised that in the event of suicide, little was shared with the wider team and the subject more broadly was rarely discussed. To investigate what was known about the impact of suicide on practitioners a brief scoping search of the literature revealed that a full systematic review had not been completed and indicated that specific research into the impact on IAPT practitioners had not been undertaken. There was evidence, however, that experiencing the loss of a patient could impact on professional practice as well as on a personal level. Health professionals’ experiences of losing a patient to suicide could be expected to impact on suicide prevention activities. A number of studies have focused on the emotional impact of this and the negative consequences for professional practice related to suicide prevention, at both the level of the individual practitioner (Finlayson & Graetz Simmonds, 2016; Gaffney et al., 2009; Kleespies, 1993) and more broadly across health services (Smith et al., 2015; Takahashi, 1997).

In terms of setting norms within the host service, regular training would help to maintain a focus on suicide prevention and communicate best practice and expectations. Training informed by the findings of the studies outlined in this thesis would also provide practitioners with information on the potential impact of the loss of a patient and the support available in such an event. The overarching hope was that the research activity detailed in this thesis would encourage a service culture that emphasises suicide prevention efforts. This would be achieved by the activity itself helping to increase awareness of the problem, through participation by staff in the studies and in the dissemination of the research findings.

1.2.3 Perceived Behavioural Control

In this thesis, perceived behavioural control relates to the ability of practitioners to perform the skills required in risk assessment, formulation and management. This is in keeping with current recommended risk policies emphasising preventative efforts rather than predictive ability (Department of Health, 2007). Being able to gauge practitioners' confidence in their ability to assess, formulate and manage risk could help identify needs that could be addressed in supervision and training.

A practitioner who has confidence in their ability to work with a patient to co-manage their risk is more likely to be able to work safely and effectively (Delgadillo et al., 2014). They are more likely to question and probe sensitively, to receive information non-judgementally and to work collaboratively to formulate a contextual understanding of risk and how to mitigate against it. A compassionate and empathic encounter would have significant downstream consequences in terms of patients' willingness to seek help in the future, or to disclose suicidal thoughts to practitioners. If practitioners feel empowered by having sufficient knowledge of, and confidence in, their ability to manage risk by following recommended procedures, it may also help to ameliorate feelings of guilt and distress following the loss of a patient to suicide.

It is recognised that little work has been undertaken to evaluate training in the RAFM approach (Lewis and Doyle, 2009). A recently developed measure of practitioner's confidence in risk assessment and management was identified that had been used to evaluate risk training, however this did not cover the risk formulation approach. The decision was made to adapt (with the original developer's permission) this measure and to investigate the psychometric properties of the new scale. This newly developed scale could then be used to refine future training and supervision to enhance practitioners' perceived behavioural control - the perception of their ability of performing the behaviour to achieve the desired outcome, i.e. to assess and formulate suicide risk in order to work with people to manage their risk and increase their safety.

1.2.4 Summary of the rationale

The studies that comprise this thesis emerged out of discussions within the NHS Trust about the need to prioritise suicide prevention activities, as had been identified within the NHS more widely (The Mental Health Taskforce, 2016). Whilst the development of training in risk assessment, formulation and management tailored for the IAPT service was to be the initial focus of these efforts, these studies were intended to help more broadly in effective engagement in suicide prevention. There is some evidence that addressing factors such as practitioners' knowledge, attitudes or confidence can be effective in improving suicide prevention efforts:

> 'There are some indications for a link between improvements in intermediate outcomes (e.g., improved knowledge, attitudes and confidence) among health care and community-based professionals and primary outcomes (e.g., reduced suicide and self-harm rates) (BPS, 2017).

It was decided therefore to explore the attitudes of staff to suicide prevention, to complete an evaluation of training by developing a measure of confidence in RAFM and to explore the impact of loss of a patient on practitioners.

The outlined components of this thesis are intended to understand factors that influence IAPT practitioners' engagement in suicide prevention. This will lead to an exploration of how to positively mitigate these factors.

1.3 Research Questions

This thesis aims to address the following research questions:

1. What is the impact on mental health practitioners of losing a patient to suicide?

    -What is known already?

    -What is known specifically about the IAPT workforce?

-How can this knowledge inform services on how best to support practitioners?

2. Can the validation of the structure of the Attitudes to Suicide Prevention scale be replicated, and consequently can it be used to examine the attitudes of Trust staff to suicide prevention activities?

3. How can practitioners' confidence in their ability to assess, formulate and manage suicide risk be measured?

-What are the psychometric properties of a newly developed measure for this purpose?

1.4 Thesis structure

Chapter two describes a systematic review of studies exploring the personal and professional impact on mental health practitioners of losing a patient to suicide. Chapter three provides an overview of the methodologies employed in the studies that comprise the remainder of the thesis. The first of these studies is a factor analysis of an existing scale, the Attitudes to Suicide Prevention scale, following its administration to the staff of a UK NHS Trust (Chapter four). Chapter five details the development of a measure of practitioners' confidence in the use of the risk assessment, formulation and management approach to suicide prevention. A qualitative study of the impact on practitioners working in a primary care Improving Access to Psychological Therapies mental health service is presented in chapter six. The thesis concludes with a general discussion (Chapter seven).

Chapter 2 The impact on mental health practitioners of the death of a patient by suicide: a systematic review.

Background

There is a growing body of research investigating the impact on mental health professionals of losing a patient through suicide. However, the nature and extent of the impact is unclear. This systematic review synthesises both quantitative and qualitative studies in the area. The aim was to review the literature on the impact of losing a patient through suicide with respect to both personal and professional practice responses as well as the support received.

Method

A search of the major psychological and medical databases was conducted, using keywords including suicide, patient, practitioner and impact, which yielded 3942 records. 54 studies were included in the final narrative synthesis.

Results

Most common personal reactions in qualitative studies included guilt, shock, sadness, anger and blame. Impact on professional practice included self-doubt and being more cautious and defensive in the management of suicide risk. As quantitative study methodologies were heterogeneous, it was difficult to make direct comparisons across studies. However, 13 studies (total n = 717 practitioners) utilised the Impact of Event Scale, finding that between 12% and 53% of practitioners recorded clinically significant scores. The need for training that is focused on the impact of suicides and the value placed upon informal support were often cited.

Conclusion

The experience of losing a patient through suicide can have a significant impact on mental health professionals, both in terms of their personal reactions and subsequent changes to professional practice. The negative impact, however, may

be moderated by cultural and organisational factors and by the nature of support available.

This chapter has subsequently been published: Sandford, D. M., Kirtley, O. J., Thwaites, R., & O'Connor, R. C. (2020). The impact on mental health practitioners of the death of a patient by suicide: a systematic review. Clinical Psychology and Psychotherapy. *https://doi.org/10.1002/cpp.2515*

2.1 Introduction

Approximately 135 people, on average, are exposed to each death by suicide (Cerel et al., 2016), where exposure is defined as knowing the deceased, and it is estimated that 35% of the population experience moderate to extreme emotional distress as a consequence of a suicide death during their lifetimes (Feigelman et al., 2018). Bereavement by suicide is also a recognised risk factor for suicide attempts (Pitman et al. 2015). Among those exposed to loss of life by suicide are mental health practitioners. In the UK, it is estimated that 27% of those who take their own lives are individuals who had been in contact with mental health services in the 12 months prior to death (National Confidential Inquiry into Suicide and Homicide by People with Mental Illness [NCISH], 2014). For mental health practitioners, the tragedy of a patient’s suicide has been described as a rare event, although one that is likely to be experienced at some point in their careers (Foley & Kelly, 2007) and one that is likely to evoke strong emotional distress (Feigelman et al., 2018). One study found that 58% (n=704) of responding mental health practitioners working in institutions had experienced a patient suicide (Castelli Dransart et al., 2015a).

Recognising and understanding the impact of this is a necessary precursor to identifying how best to support health professionals who experience the suicide of a patient. This matters on a personal level, in order to ameliorate the level of distress and prevent long term effects, but also in terms of professional practice, i.e.

ensuring risk is effectively managed and at a service level, e.g. protecting against staff burn out and promoting staff retention. A growing body of studies has investigated the impact on mental health professionals of losing a patient through suicide, although the majority of these studies have investigated the effects on psychiatrists or psychologists (Foley & Kelly, 2007; Lafayette & Stern, 2004). In a previous literature review, Lafayette and Stern (2004) concluded that mental health professionals' reactions may be strong or overwhelming and may be similar to grief responses. They also highlighted that studies often differentiated between the impacts on personal life and those on professional practice. Foley and Kelly (2007) concluded that the impact on mental health professionals could be pronounced, prolonged and profound. They noted, amongst other reactions, signs of stress, guilt, symptoms of post-traumatic stress disorder, more defensive approaches to risk, and consideration of retirement. They also commented that the perceived risk of patient suicide as well as suicide itself contributed to exhaustion and depression amongst psychiatrists. The latest synthesis of evidence was a literature review of studies completed up to 2012 (Séguin et al., 2014), which focussed on studies that had employed a psychological wellbeing outcome measure and concluded - in contrast to other reviews - that stress reactions or affective-related symptomatology were minimal. There was, however, an impact on the way professionals conducted their clinical assessments and reached subsequent treatment decisions (Seguin et al., 2014).

To our knowledge there have been no systematic reviews of the research into the impact of losing a patient to suicide on mental health professionals more broadly. The (non-systematic) narrative reviews that have been published present mixed evidence for both the professional and personal consequences for mental health professionals of losing a patient through suicide, although the studies themselves do seem to converge on the idea that there is a notable effect on both areas. A thorough synthesis of all the evidence is important if organisations are to be encouraged to respond proportionately in supporting practitioners. We therefore undertook a systematic search of both quantitative and qualitative studies. Specifically, our three main aims were to synthesise the research evidence on: 1) the impact of a patient's suicide on both personal (emotional/coping) and professional practice (confidence/behaviour/attitude) responses; 2) the support received; and 3) the factors or interventions that help to minimise negative sequelae.

2.2 Method

2.2.1 Search strategy and screening of results

The protocol for this systematic review was registered on Prospero (registration number CRD42017052807). A keyword search of the major psychological and medical databases (Medline, PsychInfo, CINAHL, ERIC, and EMBASE) was conducted using the search terms detailed in Table 1. The screening process followed PRISMA guidelines (Moher, 2009) . See Figure 3. for flowchart.

Table 1: Search strategy

Eligibility:	Databases searched from inception to 2019, Search not limited by study design, Studies restricted to English language.		
Information Sources:	Medline via Web of Science.	CINAHL, ERIC, PsychInfo, Via EbscoHost.	EMBASE. Via Ovid.
Search terms:	TS=((Suicide AND (Patient OR Client OR Service	TX (suicid*) AND (TX patient* OR TX client*	(suicid*) AND (patient* OR client*

	User)) AND ((professional OR practitioner OR clinician OR nurse OR worker OR therapist OR psychologist OR psychiatrist OR counsellor OR OT OR GP) AND (reaction OR impact OR effect)))	OR TX service user*) AND TX (professional* OR practitioner* OR clinician* OR nurse* OR worker* OR therapist* OR psychologist* OR psychiatrist* OR counsellor* OR ot OR GP) AND TX (reaction* OR impact* OR effect*)	OR service user*) AND (professional* OR practitioner* OR clinician* OR nurse* OR worker* OR therapist* OR psychologist* OR psychiatrist* OR counsellor* OR ot OR GP) AND (reaction* OR impact* OR effect*)

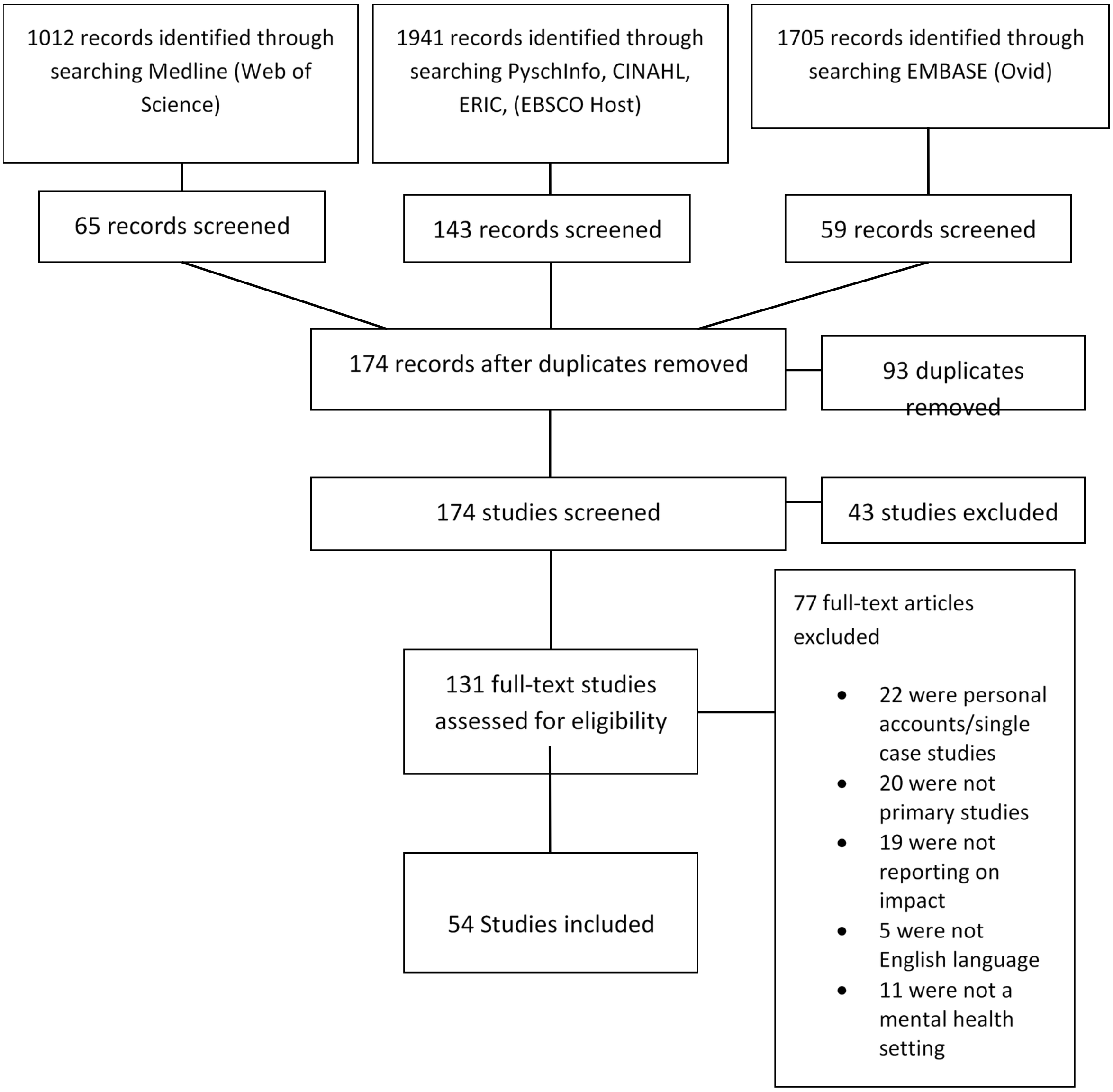

Figure 3: Procedure for identifying, screening and determining the eligibility of studies for inclusion in the review

2.2.2 Inclusion and Exclusion Criteria

The inclusion criteria were that (i) the study must be published primary research in the English language; and (ii) the studies must have reported on the impact on mental health professionals or teams of mental health professionals of having experienced the loss of a patient through suicide (either in active treatment or post-discharge). Studies were excluded if they were single case studies or personal accounts. To be comprehensive, we included both qualitative and quantitative studies.

2.2.3 Quality Assessment

A quality assessment was performed on the included studies and this was subsequently used to give a weighting to findings reported in the results section. A quality assessment framework was adapted from the Mixed Methods Appraisal Tool(see Figure 4; Pluye etal.; 2009).

The quality assessment was carried out and then 13 (25%) were independently assessed by a supervisor. There were discrepancies in rating 3 out of 92 (3%) individual assessment items which equated to 3 differences in assigned quality ratings and yielded an intra-class correlation of k = 0.71. This compares well with the estimation of correlation of 0.8 made following pilot testing of the appraisal tool (Pace et al., 2010). The disagreements were resolved through discussion .

Types of mixed methods study components or primary studies	Methodological quality criteria	Responses			
		Yes	No	Can’t tell	Comments
Screening questions (for all types)	Are there clear qualitative and quantitative research questions (or objectives*), or a clear mixed methods question (or objective*)?				
	Do the collected data address the research question (objective)? E.g., consider whether the follow-up period is long enough for the outcome to occur (for longitudinal studies or study components).				
	Further appraisal may be not feasible or appropriate when the answer is ‘No’ or ‘Can’t tell’ to one or both screening questions.				
1. Qualitative	1.1. Are the sources of qualitative data (archives, documents, informants, observations) relevant to address the research question (objective)?				
	1.2. Is the process for analysing qualitative data relevant to address the research question (objective)?				
	1.3. Is appropriate consideration given to how findings relate to the context, e.g., the setting, in which the data were collected?				
	1.4. Is appropriate consideration given to how findings relate to researchers’ influence, e.g., through their interactions with participants?				
2. Quantitative descriptive	2.1. Is the sampling strategy relevant to address the quantitative research question (quantitative aspect of the mixed methods question)?				
	2.2. Is the sample representative of the population understudy?				.
	2.3. Are measurements appropriate (clear origin, or validity known, or standard instrument)?				
	2.4. Is there an acceptable response rate (60% or above)?				
3. Mixed methods	3.1. Is the mixed methods research design relevant to address the qualitative and quantitative research questions (or objectives), or the qualitative and quantitative aspects of the mixed methods question (or objective)?				
	3.2. Is the integration of qualitative and quantitative data (or results*) relevant to address the research question (objective)?				
	3.3. Is appropriate consideration given to the limitations associated with this integration, e.g., the divergence of qualitative and quantitative data (or results*) in a triangulation design?				
	Criteria for the qualitative component (1.1 to 1.4), and criteria for the quantitative component (2.1 to 2.4), must be also applied.				

Figure 4: Mixed methods appraisal tool (Pluye et al., 2009)

2.3 Results

For the current synthesis we focused on the following areas: personal responses of practitioners, impact on professional practice, variables associated with the extent of the impact on practitioners, and support which helps minimise negative sequelae. Fifty-four studies were included (see Table 2), 21 were quantitative studies, 16 were qualitative studies, and a further 17 studies adopted a mixed-method design. The majority (15 studies) investigated the impact on psychiatrists, 13 studies focussed on psychologists or psychotherapists, with a further 6 studies including both psychiatrists and psychologists. Other professional groups represented within this review were social workers (5 studies), nurses (4 studies), GPs (3 studies) and counsellors (2 studies). Nine studies were based on a mixed group of mental health workers. In terms of geographical location, 23 studies recruited participants from North America, 9 from the UK, 7 from Ireland, 11 from elsewhere in Europe, 2 from Australia and one each from Thailand and China. Intervals between the death and the time of the study varied markedly both within and across studies, for example the range in Alexander et al. (2000) was between 1 month and 20 years (median 3 years).

Table 2: Studies included in the Review

Qualitative Studies n=16, DSP=Death by Suicide of a Patient

Study, Country, Quality Assessment (QA) rating	Design	Sample, Number, Setting	Results - Impact	Results – Factors related to impact and recovery
(Bowers et al., 2006) England QA rating = **	Semi structured Interview	• Ward managers (16) F grade MH nurses (17) OTs (14) Consultant Psychiatrists (9) • 56 • Ward	• Impact on Morale. • Ruminations, search for understanding. • Depression and demoralisation of ward team. • Upset, loss and grief. • Guilt and dismay. • Anxiety and worry – happen again, best efforts not enough. • Incidents though distant in time were still having an influence on practice in the present. • Impact across hospital (not just ward of occurrence). • Heightened alertness. • Attentiveness to risk assessment. • More rigorously pursued policies. • Greater use of	• Time patient known to staff. • Strength of relationship. • Availability or lack of support and aftercare directly after. • Perception of whether DSP could have been prevented. • Managerial responses. • Culture of blame. • Severity/outcome of incident. • Pressure of work preventing time to deal with feelings. • Shock – all the more devastating.

			containment methods.	
(Cotton et al., 1983) USA QA rating = **	Interviews	• Psychiatrists, psychiatric residents, social workers, nurses, and mental health workers • 23 • Psychiatric inpatient unit	• Working in shock (maximal vulnerability, minimal coping) • Emergence of overwhelming feelings, rage. Guilt, depression, anxiety • New growth around emotional scars	• Minimal contact • Staff who attended meetings, drew strength from peer supports, and talked easily with others recovered more quickly than did those who behaved in a more solitary way. • Previous medical experience with death
(Darden, 2009) USA QA rating = ***	17 Q semi structured interview	• Clinical Psychologists • 6 • University counselling, Private practice, State Hospital	• All met the criteria for prolonged grief. • None questioned their clinical skills after the suicide, citing client's choice outside of their control	• Male clinicians (in contrast to female respondents) reported no personal impact • Work settings significantly influenced the recovery process. • Understanding of the client's choice to suicide being outside of their control.
(Davidsen, 2011)	IPA semi structures interviews	• GPs • 13	• Guilt, failure and self-scrutiny	• Whether risk realized and explored • If difficulty with

Denmark QA rating = ***		- Primary Care		emotional contact with the patient - Especially shocked if treatment considered appropriate - No difference between GPs who joined supervision groups and expressed interest in mental disorder and those who expressed less interest - Not seem related to their overall propensity to talk about suicide ideation, their therapeutic mindedness, or their age or sex
(Dewar et al., 2000a) Scotland QA rating = **	Questionnaire	- Psychiatry trainees - 90 - In-patients	31% reported impact on personal lives: - Preoccupation about the suicide and how it could have been prevented. - Problems with anxiety, guilt, insomnia and loss of confidence. 39% reported impact on professional practice:	- If only experienced suicide - First suicide most distressing - If unexpected or not predicted Occurring when appearing to be improving or making plans for future

			• Increased anxiety and difficulty in making decisions, particularly when this involved patients with recognised increased risk of self-harm. • Management became over-cautious, specifically when deciding on observation levels, passes and discharge for in-patients. 9% reported: • Giving consideration to a change of career	• If feeling of blame • Young patient who had children • Knowing patient well • Disliking the patient • Method • Blame of relatives • Last to speak to patient
(Goldstein & Buongiorno, 1984) USA QA rating = **	Structured interviews	• Psychotherapists • 20 • Private • Hospital	• Shock, disbelief, anger, guilt, self-blame, loneliness • Grief, despair, loss of self-esteem and self confidence • More direct questioning re suicide risk • More explicit exploration of past suicide behaviour	• Chart reviews and psychological autopsies helpful to some but compounded doubt in others. • Discussion with colleagues helpful.
(Hendin et al., 2000) USA	Semi-structured questionnaire Case narratives,	• Psychotherapists (psychiatrists, psychologists, social worker)	• Shock, grief, guilt, fear of blame, self-doubt, shame, anger, and betrayal were the major	• Impact independent of the therapist’s age, years of experience, or

QA rating = **	Workshop	• 26 • Not noted	emotional reactions. • In 21 out of 26 cases, therapists identified at least one major change they would have made in their patients' treatments; most frequently mentioned were changes in medication, hospitalization of the patients, and consultation with the patients' previous therapists • Some of the therapists were reluctant to accept subsequent suicidal patients into their practices.	practice setting
(Hendin et al., 2004a) USA QA rating = **	Semi-structured questionnaire Case narratives, Workshop	• Psychiatrists, psychologists, psychiatric social worker • 34 • Private practice • Hospital	38% (N=17) categorised as severely distressed. Most prominent reactions: • Grief • Guilt • Anger • Shock	• Failure to hospitalize an imminently suicidal patient who then died • A treatment decision the therapist felt contributed to the suicide, • Negative reactions from the therapist's institution, • Fear of a lawsuit by the patient's

				relatives
(Kayton & Freed, 1967) USA QA rating = ***	Retrospective, cross sectional At time of DSP Questionnaire	• Nursing, Nursing Aides • 35 • Inpatient	• An almost compulsive urge to help the patients • Variable intensities of insecurity • Moderate shock and numbness • Anger, ambivalence and guilt • A residual sadness and sympathy for the victim	• Free expression of resentment helpful • Support swiftly mitigated stress • Reaction to the stress is milieu dependent • Group discussion is helpful in diluting the intensity of guilt.
(Kolodny et al., 1979) USA QA rating = **	Discussion in supervision group	• Trainee Psychiatrists • 4 • Inpatient	• Panic, doubt, anger, upset, worry sadness, disbelief, denial, shame embarrassment, defensive curiousness, loss, cautiousness, guilt grief, helplessness, loneliness, regret responsibility, stunned fear, tears, fondness.	• Peer support • Supervision
(Litman, 1965) USA QA rating = **	Unstructured interview	• Psychotherapists • 200+ • institutions/ private practice	• Grief, guilt, depression, denial, personal inadequacy, anger, accident proneness.	• Specifics of relationship
(Menninger, 1991a)	Questionnaire	• Psychotherapists • 41 • Psychotherapy clinic and other	• Shock, sadness, anger, guilt, worry and fear of criticism. 66% reported changes in	• Discussion with colleagues • Consultation

USA QA rating = **			practice. • More conservative treatment (especially at termination) • More careful listening to suicidal ideation • Greater vigilance to hopelessness or wishing to end it all • More clinical notes and consultation • Quicker to hospitalise and follow up • More accepting of suicide as a possibility	
(Robertson et al., 2010) Scotland QA rating = ****	Discourse analysis	• Psychiatric nurses • 2 • Acute psychiatric ward	• Self-blame	• Perception of accountability
(Sanders et al., 2005) USA QA rating = **	Questionnaires Thematic analysis	• Social workers • 145	• 78 Deep sadness and depression • 60 Trauma and Shock • 44 Feelings of professional failure • 25 Anger and irritability • 25 Self-blame • 11 Worries and fears • 20 Changes in practice	• Reactions persist over time

(Tillman, 2006) USA QA rating = **	Interviews	• Psychoanalysts • 12 • Institutions and private practice	• Traumatic loss and grief. • Numbness, shock, crying, sadness, anger, fear of reprisal	• Supervision • Psychoanalysis • Peer relationships – both source of support and of shame • Contact with patient's family – source of comfort for some, but painful for others.
(Wang et al., 2016)	Semi-structured interviews	• Nurses • 15 • Hospital inpatient	• Shock • Sense of fear • Self-accusation / Guilt • Frustration / Self doubt • Stress • Excessive vigilance • Burnt out	• Managers' comfort • Supervisors' understanding • Days off • Family and friends • Avoidance of suicide scene

Quantitative Studies n=21 DSP=Death by Suicide of a Patient

Study, Country, Quality Assessment (QA) rating	Design	Sample, Number included, Setting	Measures	Results - Impact	Results - Factors related to impact and recovery
(Castelli Dransart et al., 2014)	Retrospective, cross sectional	• Nurses, social workers, psychiatrists,	IES-R (Impact of Event Scale – revised) 5 pt. scale, AEIS (Acute	• Low emotional response on the AEIS (M = 2.08, SD = 0.59). 15.5% (n = 40) of	AEIS: • Feeling emotionally close to the patient, feeling responsible for the

Switzerland QA rating = ***	Most recent DSP within last 5 years Time point = during the month following DSP	educational psychologists • 258 • Psychiatric hospitals and outpatient psychiatric services, social and medical services, residential homes for people with mental health or addiction problems, care homes for elderly, and prisons	Emotional Impact Scale) 7 pt. scale from Kleespies, 1993	the respondents were above the cut-off. • Shock, helplessness and sadness however markedly higher. • Low impact (IES-R total score: M = 12.12, SD = 10.66, range 0-88), • One in ten respondents (12%, n = 31) had a score above the clinical cut-off (≥25)	patient’s care, receiving insufficient support, being 30-39 years old, and receiving professional counselling significantly predicted emotional response (higher scores). IES-R • Feeling emotionally close to their patient or received insufficient • support after the suicide reported significantly higher overall traumatic impact than others
(Castelli Dransart et al., 2015b) Switzerland QA rating = ***	Retrospective, cross sectional Most recent DSP within last 5 years	• Psychiatrists, nurses, nursing auxiliaries, psychologists, social educators and social workers	IES-R	Impact categorised into groups based on mean IES-R total score: • 55.8 %, low impact (=< 11.1), • 36.6 %, medium impact (= 16.0)	• Relationship to the patient • Exposure to suicide • Support and training Five profiles were identified: 3 low-impacted: • Anticipators with high

	Time point = during the month following DSP	- 666 - Psychiatric hospitals, outpatient psychiatric services, social and medical services, residential homes for persons with mental health or addiction disorders, homes for the elderly and prisons, - private practice		- 7.7% high impact (= 21.2).	support - Emotionally distant - No more contact at the time of death 1 medium impacted: - Emotional closeness to, and responsibility for the patient 1 highly impacted: - Emotionally close to the patient and lacked support
(Chemtob et al., 1989) (n.b. follow up to Chemtob et al. 1988 a and b	Retrospective, Time point = Two time points (2 weeks following DSP, 2 wks. prior to	- Psychiatrists, Psychologists - 431 - Private practice Psychiatric hospital Outpatients	IES, AIM (Affect Intensity Measure)	Significant acute impact on the professional and personal lives of a substantial number of therapists	- No therapist characteristics correlated with impact - Therapists who spent more time conducting therapy reported greater impact

with aim of analysis of predictor variables, but also adding in AIM scale so included in this review) USA QA rating = ***	survey)				
(Chemtob et al., 1988a) USA QA rating = ***	Retrospective, Two time points (2 weeks following DSP, 2 wks. prior to survey)	• Psychiatrists • 259 • Private practice Psychiatric hospital Outpatients	IES, 19 item impact on professional and person life 7pt likert scale	57% experienced post trauma symptoms comparable to those found in clinical groups. 13 of 19 items indicated moderate response. Psychiatrists reported • Feeling anger and	Older psychiatrists experienced lower levels of: • Guilt (r=0.24, df=123, p<0.01) • Social withdrawal (r=-0.19, df=123, p<0.05) More years of practice associated with smaller reactions in: • Guilt (r=0.30, df=117, p<O.OO1), • Social withdrawal (r=0.19,

				guilt • Experiencing loss of self-esteem, • Having intrusive thoughts about the suicide. • Increased focus on suicide cues • Increased attention to legal aspects • More conservative record keeping • Increased concern with death issues	df= 117, $p<O.OS$), • Loss of self-esteem ($r= -0.17$, df= 118, $p=0.05$), Disruption of relationships with friends ($r= -0.18$, df= 118, $p<5.05$).
(Chemtob, Hamada, Bauer, Torigoe, et al., 1988) USA QA rating = ****	Retrospective, Two time points (2 weeks following DSP, 2 wks. prior to survey)	• Psychologists • 81 • Not stated	IES, 19 item impact on professional and person life 7pt likert scale	49% reported intrusive symptoms of stress comparable with those of people for whom the impact of parental loss was severe enough to lead them to seek treatment • Increasing focus on cues related to suicide potential • Increasing collegial	No relationship was found between years of practice and impact Age significantly related to: • Increased conservatism in patient selection ($r = -.25$, $p < .03$).

				consultation • Increasing attention to legal-forensic matters • More conservative in charting and record keeping • Increasing peer consultation, • Increased concerns with issues of death and dying, • Intrusive thoughts of suicide, • Feeling anger and guilt	
(Cryan et al., 1995) Ireland QA rating = ****	Retrospective, Two time points (2 weeks following DSP, 2 wks. prior to survey) 1st DSP	• Psychiatrists • 146 • Not stated	IES, 5 item, 4pt scale effect on practice	Clinical levels of intrusion were reported by 36% and avoidance by 17.5%. • 15% Likelihood to admit patients to hospital • 31% Detailed record keeping • 25% Increased use of peer	• No sig difference between IES scores for in training and in practice • No sig difference between those who attended a review or not (but small numbers 20, 64)

				consultation • 25% Increased attention to the legal aspects of practice • 58% Increased focus on suicide	
(Finlayson & Graetz Simmonds, 2016) Australia QA rating = ***	Retrospective, cross sectional DSP with most impact Time point = at time of DSP	• Psychologists • 56 • Private • Community Hospital, Academic, Other	16 items impact on practice (y/n/na) 12 items, 5pt scale intensity of emotion 17, 5pt helpfulness of coping strategies	• Shock, anger, guilt, distress and sadness • 41% for 1 week to 1 month • 24% less than 1 week • 15% between 1 and 3 months • 7% between 3 and 6 months • 13% more than 6 months.	• Heightened feelings of responsibility for death associated with greater emotional and professional impacts. • Unexpected suicide that contradicts the psychologists' assessment of risk associated with increased shock and confusion
(Gulfi et al., 2010) Switzerland QA rating = ***	Retrospective, Most recent DSP First Month after DSP, and at time of survey.	• Psychiatrists, nurses psychologists social care professionals • 275 • Hospitals, residential homes, socio-	Long-term Emotional Impact Scale 9 items, 5pt scales. Professional Practices Impact Scale	Impact reaction personal: • Low to moderate impact on their professional reactions • Increased focus on suicide cues More anxious about working	Impact related to: • Location of the suicide, (Hospital > home) • Gender (>female) • Feelings of responsibility • Emotional attachment to the patient But not to: • Professionals' age,

		medical, prisons.	9 item, y/n.	with at-risk patients Impact on practice: For at least three of the nine items, 67.9% of respondents reported changes during the month following patient suicide, and 57.1% at the time of the survey. Most commonly reported changes were: • 65.1% Increased interest in suicide-related issues • 61.1% Greater tendency to hospitalize at-risk patients • 57.5% Greater tendency to consult colleagues • 53.1% Greater attention to legal	• Years of professional experience, • Number of suicides they experienced • work setting, • type of profession, • time that had elapsed • having seen or discovered the body • previous suicide attempts by the patient

				matters	
(Jacobson et al., 2004) USA QA rating = ***	Retrospective, cross sectional Most affecting DSP At time of the DSP.	• Mental health social workers • 230 • Not stated	IES	Mental health social workers who experience fatal client suicidal behaviour feel some degree of stress as a result of the experience.	Female social workers experienced higher levels of intrusion than males. Males reported more avoidance reactions
(Kleespies, 1993) USA QA rating = ****	Retrospective, Most distressing DSP Two time points (2 weeks following DSP, 2 wks. prior to survey)	• Predoctoral psychology interns • 33 • Various	IES	• Shock, disbelief, failure, sadness, self-blame, guilt, shame, and depression. • suicidal behaviours or ideation.	Interns or trainees as vulnerable, if not more vulnerable as are professional level clinicians. Impact (by IES) significantly reduces over time.

(Landers et al., 2010) Ireland QA rating = ****	Retrospective, cross sectional Most Recent and Most distressing DSP. At time of DSP.	- Psychiatrists - 143 - urban and rural settings	Questionnaire	Most recent: Effect on personal life: reported by 87%: - 84% Preoccupation with the suicide - 69% Guilt or blame was reported by - 27%Disturbed sleep - 21% Low mood Effect on professional life reported by 88%: - 87% Heightened awareness of risk - 52% Confidence was affected - 25% had altered their work practices: - 17% Increased nursing observation - 8% Detention under the Mental Health Act - 15% sense of	Factors which contributed to distress: - 21% either an in-patient or had been recently seen and assessed - 20% the effect on the patient's family, when the patient was a parent of young children. - 17% being unpredicted - 9% Negative reactions from the patient's family or health service executive staff and media publicity

				failure was Most distressing: 97% acknowledged an effect on their personal life • 97% preoccupation with the suicide, • 82% A sense of guilt or responsibility • 42% disturbed sleep • 36% low mood Effect on professional life: • 52% greater awareness of risk • 68% decreased confidence • 26% greater use of increased nursing observation • 11% reported increased use of the Mental Health Act;	
(McAdams & Foster, 2000a)	Retrospective,	• Counsellors • 89	Questionnaire	Means for 11 of 19 items on the questionnaire	Impact decreased with increased:

USA QA rating = ***	The week following the DSP, and the week prior to the survey.	• Various	IES	indicated a moderate to moderately high impact. • Loss of self esteem • Intrusive thoughts • Guilt • Anger • Attentiveness to legal aspects • Increased hospitalisation • Attentiveness to cues to suicide • Seeking consultation • More conservative recording	• Age • Years of practice • Time elapsed Impact not related to: • Gender • Work role • Work setting
(Midence K et al., 1996) Wales QA rating = ***	Retrospective, cross sectional At time of DSP	• Nurses • 23 • Inpatient	Questionnaire	Effect: • 74% Sad and helpless • 33% Shocked • 30% Guilty and angry • 11% Frightened • 22% No effect	Impact greater if: • Having nursed the patient Preferred Coping: • 85% Talk to colleagues or partner • 80% Team discussion • 75% Discussion with managers • 70% Support group

					• 67% Knowledge important to cope
(Pieters et al., 2003) Belgium QA rating = ****	Retrospective, cross sectional Most distressing DSP Current impact	• Psychiatry trainees • 79 • Not stated	IES, Questionnaire (after Dewar)	• 16% adverse effect on personal life • 18% adverse effect on professional life • 52% changes in clinical practice IES: • 7% clinically significant for avoidance • 12% clinically significant for intrusions	Apart from it being the only suicide experienced, several trainees felt that the first suicide was the most painful one. • Confrontation with the body or involvement in resuscitating the patient was traumatic. • A long and intense involvement with the patient or his/her family • A good doctor–patient relationship, • Particularly difficult therapeutic relationship. During time-off • Patient's young age, high intelligence and aspects of the family situation • Confrontation with family members • Absence of support Helpfulness of support: • 93% Other trainees • 83% Own partner or family • 80% Friend • 56% Discussion with

					patient's family - 52% Discussion with supervisor
(Ruskin, 2004) Canada QA rating = ***	Retrospective, cross sectional First DSP At time of DSP.		Questionnaire 25 item based on DSM for ASD + PTSD. IES. Social Relationship Scale.	69% considerable emotional impact, including shock, Following their first patient suicide: - 71% felt helpless - 55% recurrent feelings of horror - 44% substantial feelings of anxiety - 33% recurrent recollections - 79% felt professionally devalued and that they would henceforth not be respected professionally. - 22% met clinical criteria - for acute stress disorder (3 or	On almost every measure, the distress and symptom levels were significantly greater for those whose first experience of patient suicide occurred during training. Distress and symptom levels: - Training > post-graduation. - Less social integration to professional network > more. - Previous personal experience of suicide in their family or friends did not affect their scores on the acute stress disorder, PTSD, and IES.

				more criteria), - 20% met criteria for PTSD. IES: - 25% clinical impairment - 25% acute stress - 20% PTSD.	
(Takahashi et al., 2011) Japan QA rating = ****	Retrospective, cross sectional Any DSP	- Psychiatric nurses - 292 - Psychiatric hospitals	IES-R	- 13.7% PTSD ‘high risk’	15.8% reported availability of mental health care programmes for staff.
(Trimble et al., 2000) Australia QA rating = ***	Retrospective, cross sectional Any DSP At time of death	- Psychologists - 170	Questionnaire based on Chemtob	Personal impact: - 43% Guilt - 39% Anger - 24% Numbness - 21% Sleep problems - 15% Dream intensity - 14% Loss of self-esteem - 12% Intrusive thoughts - 10% Social	Helpful coping strategies: - 35% Recognised not responsible - 29% Talked with colleagues - 27% Increased acceptance of suicide as possible - 22% Talked with supervisor - 11% Talked with client’s family - 9% Tried to discover

				withdrawal - 9% Family relationships - 4% Friends relationships - 2% Colleagues relationships Professional impact: - 84% Increased focus on suicide cues - 72% Increased collegial consultation - 71% Increased peer consultation - 61% Increased attention to legal aspects - 42% More conservative record keeping - 33% Increased concern with death issues - 25% Increased tendency to hospitalise - 10% More conservative patient selection	reasons - 9% Talked with own family - 8% Attended funeral - 5% Psychological autopsy - 5% Worked - 3% Counselling - 2% Talked with friends - 1% Took a break - 1% Read about suicide - 1% Wrote a paper - 1% Knew I did best I could - 1% Ruminated
(Wurst et	Retrospectiv	- Therapists	Questionnaire	Mean rating of	- Psychiatrists in training

al., 2011) Germany QA rating = ***	e, Each DSP three time points: immediately after the suicide, 2 weeks later, and 6 months later	(psychiatry trainees, psychiatrists, psychologists, other • 121	Y/N and VAS (visual analogue scale)	distress 63 / 100. 29% suffer severe distress Mean scores on 100mm analogue scale: • 67 Sad • 32 Guilty • 19Angry • 1 Relieved • 81 Shocked • 10 Ashamed • 14 Unbelieving • 5 Offended • 24 Insufficient	felt more shocked immediately after suicide than their colleagues with longer professional experience. • No correlation between the overall distress and the age of the therapist or with years of professional experience.
(Wurst et al., 2013) Germany QA rating = ***	Retrospective, Each DSP three time points: immediately after the suicide, 2 weeks and 6 months later	• Therapists: psychiatry trainees, psychiatrists, psychologists other • 164	Questionnaire Y/N and VAS (visual analogue scale)	39.6% suffer severe distress Mean scores on 100mm analogue scale: • 66 Sad • 30 Guilty • 20 Angry • 1 Relieved • 80 Shocked • 10 Ashamed • 17 Unbelieving • 5 Offended	The global item “overall distress” can be used as an indicator to identify a subgroup of therapists that might need individualized postvention. No significant difference in overall distress experienced was observed between professional groups and at different levels of care. Highly distressed therapists were:

				• 25 Insufficient	• More likely to be female, • Felt less supported by their colleagues and institution, • Had a higher fear of lawsuit, • Were more afraid of reactions of the relatives, would make changes in treatment retrospectively, • Are more cautious now • Were not able to continue work as usual.
(Wurst et al., 2010) Germany QA rating = ***	Retrospective, Each DSP three time points: immediately after the suicide, 2 weeks after and 6 months later	• Therapists: psychiatry trainees, psychiatrists, psychologists • 61 • Not stated	Questionnaire Y/N and VAS (visual analogue scale)	34.5% suffered severe distress Mean scores on 100mm analogue scale: • 67 Sad • 27 Guilty • 27 Angry • 2 Relieved • 69 Shocked • 4 Ashamed • 17 Unbelieving • 17 Offended • 28 Insufficient	• Psychiatric therapists significantly more distressed than psychologists. • No difference with age or years of experience. • Significant correlation between age of patient at death and overall distress.
(Yousaf et al., 2002)	Retrospective,	• Psychiatry trainees • 23	IES Questionnaire	Initial reactions: • 83% Shock • 70% Self-blame /	None reported

England QA rating = ****	Two time points, immediately after DSP and at time of study	• Not stated	(Chemtob)	guilt • 39% Grief • 30% Fear of negligence • 13% Anger • 70% Difficult experience • 52% Useful learning • 9% Do not want to talk • 4% Earlier education would have been useful IES: • 52% clinically significant score	

Mixed Method Studies (n=17)

Study/Country/ Quality assessment rating	Design DSP = Death by suicide of patient	Sample: Profession/ Number/ Setting	Measures	Results - Impact	Results - Predictor Variables Identified Factors which exacerbated or modulated the effect
Alexander et al. (2000) Scotland QA rating = ***	Retrospective, cross sectional Most distressing DSP	• Psychiatrists • 167 • Various	Questionnaire designed for study	54 (33%) Personally affected: • Low mood, poor sleep, irritability, difficulties at home,	• Colleagues and family or friends were the best sources of help, and team and • critical incident

				preoccupation 69 (42%) Changes in professional practice: - A more structured approach to the management of risk - Increased use of mental health legislation. - More cautious and defensive approach and use of observation - Heightened awareness 24 (15%) - Considered taking early retirement	reviews were also useful - Of 56 consultants who had been aware of publicity in the media 27 found the publicity extremely or moderately distressing. - 33 of the 159 were extremely or moderately distressed at the prospect of litigation.
(Courtenay & Stephens, 2001a) UK QA rating = **	Retrospective, cross sectional. Any DSP	- Psychiatry trainees - 109 - teaching hospitals	Questionnaire designed for study	Impact categorised as: - Minimal 14% (absent or minimal response) - Moderate 51% (shorter term shock, guilt and self-blame) - Severe 24% (prolonged	Helpful: - All support appreciated - Ventilation of feelings, normalisation, dissipation of feelings of guilt, blame, isolation. - Strong positive and supportive consultant

				extreme guilt, anger and devastation) 68% reported impact on practice: • 77% beneficial, (learning, developed risk assessment skills) • 23% adverse, (afraid, felt isolated, disillusioned, vulnerable, loss of confidence, concerned for legal consequences)	supervision • Friends and peers Unhelpful: • Outside counsellors providing debriefing
(Draper et al., 2014a) Australia QA rating = **	Retrospective, cross sectional	• Psychiatrists, psychologists, mental health nurses, GPs and medical specialists, • 211, • Private Public Community	Semi-structured interviews	Personal Life: • Shock, sadness, anxiety, feeling upset, grief, anger and guilt, but these were mainly described as short-term effects. Professional life: • Increased vigilance and awareness of suicide risk • Being more	Factors most associated with an impact upon personal life: • Being female • The suicide occurring within a week of the last consultation • Receiving support or counselling after the death, particularly if it was not enough. Factors most

				proactive in assessment (e.g., asking about suicide ideation) and management (e.g., try harder to contact patient), • Increased caution and carefulness in aspects of management • Increased referral of patients to a psychiatrist • Further training to increase skills. Feelings of sadness at work, reduction of workload and loss of professional confidence impacting professional life.	associated with an impact upon professional life: • Being female • Less than 5 years professional experience • The suicide occurring within a week of the last consultation.
(Gaffney et al., 2009) Ireland QA rating = *	Retrospective, cross sectional	• Nursing and all Hospital staff, • 83 • Regional, community, and acute hospital	Questionnaire	• Anger, sadness, and guilt (43% of total responses) • Sleep loss, irritability, lack of concentration, and professional	• Men seemed more likely than women to report no effect on their functioning. • Loss of sleep, irritability, and

		services		self-doubt.	lack of concentration reported equally by men and women. • Professional self-doubt was expressed more often by women.
(Gibbons et al., 2019)	Retrospective,	• Psychiatrists • 140 • General Adult, Older Adult, CAMHS, Forensic, Other.	42 question web-based survey	Emotional effect: • 71% sadness • 33% worry, anxiety, fear • 31% guilt, self-blame • 20% regret • 19% anger • 13% shame • 12% shock • 3% blaming others Clinical duties: • 98% detrimental effect on clinical duties	What helped: • 48% (n=43) Support from colleagues • 18% (n=16) Engaging with families of deceased • 16% (n=14) Nothing What didn't help: • 19% (n=15) Serious incident process • 11% (n=9) Coroner's court • 5% (n=4) Families angry or taking legal action Effect on clinical duties F> M
(Grad et al., 1997a) Slovenia QA rating = **	Retrospective, cross sectional	• Psychiatrists and clinical psychologists	15 y/n items, 3 open	• Guilt, shame, grief, anguish, depression, loss	• Gender differences reported in 5

		• 62 • Inpatient and outpatient	ended questions	• Uncertainty, increased caution Increased consultation with colleagues, doubts in own professional knowledge	reactions: working as usual, shame, consolation needed, doubts in own professional knowledge, feeling guilt (Women>Men) • No difference based on seniority, vocation or work setting.
(Halligan & Corcoran, 2001a) Ireland QA rating = **	Retrospective, cross sectional. Last DSP. At time of DSP.	• GPs • 103 • GP practices	25 item questionnaire designed for study	> 80% reported no personal effects following patient suicide apart from feelings of guilt. • 35% reported feeling guilty • 24% disruption of relationship with the victim's family • 22% disturbed sleep • 54% increase in psychiatric referrals 50% more accurate record-keeping • 40% increase in antidepressant prescribing	Reasons for lower impact: • Not attending scene of suicide • Victim being an infrequent attender • Shared care with other professionals • High impulsivity of suicide

				- 36% increased use of colleague consultation	
(Kelleher & Campbell, 2011a) Ireland QA rating = ****	Retrospective, cross sectional	- Psychiatrists - 40 - Public and private service	Questionnaire (from Alexander et al)	11 (27.5%) personal lives affected: - Personal sadness, low mood and self-doubt. 13 (32.5 %) professional lives affected: - Sense of helplessness, making decisions, reluctant to discharge patients. 23 (57.5) future management: - More aware of risk assessment and the importance of meticulous documentation. - More anxious to establish links with a patient's family, to admit patients to the ward and to prescribe antidepressant medications	Rated 'very helpful' or 'helpful': - 34 (85%) family - 29 (73%) peers - 25 (62.5%) team support - 26 (65%) Team meetings - 10 (47.5%), Patient's family Also: - Other consultants whose patients had died by suicide helpful - Need to ensure no blame or scapegoats at team meetings - 15 (37.5%) aware of publicity in the media. However, the majority of consultants did not find this distressing.

(Kleespies et al., 1990) USA QA rating = ****	Retrospective, cross sectional At time of DSP and currently	• Predoctoral interns in clinical psychology • 8 • Veterans Administration Medical Center	IES Semi structured Interview	• Intrusion *(M =* 20.0) and Avoidance *(M =* 13.4) scores nearly equivalent to those of a patient sample with bereavement. • 6 (75%) described "shock" as their initial reaction. After shock, they mentioned (in order of frequency) guilt or shame, denial or disbelief, feelings of incompetence, anger, depression, a sense of being blamed, relief, and fear. • On a scale from 1 (none) to 5 very strong), the average rating of the severity of the emotional impact was 4.25(SD = 0.71).	• Stress levels equivalent to that found in patient samples with bereavement and higher than that found with professional clinicians.

				Longer term emotional effects. In order of frequency: • Feeling either competent in evaluating suicidal patients, • Considering larger numbers of patients as being at risk for suicide, • Heightened anxiety when evaluating such patients, • Sadness about the patient, • Acceptance of death/suicide, • Feelings of helplessness, guilt, • Repeated thoughts of the event, • Feeling humbled	
(Linke et al., 2002) England QA rating = **	Retrospective, cross sectional. Most distressing DSP	• Community Mental Health team • 38 • Community	Questionnaire (based on Alexander et al)	The majority reported significant adverse effects on personal and professional lives: • Grief, sadness, preoccupation with work	Most helpful sources of support: • 30 (79%) Team colleagues • 21 (55%) Family • 21 (55%) Friends • 18 (47%) Space to discuss reasons

				Avoiding clients who abuse alcohol and drugs, increased anxiety at work, irritability with employers, increased distance between self and clients and an increased desire to change jobs • A small number reported positive effects such as improved note keeping and an increased likelihood to seek support and peer supervision from colleagues. • 3 (7%) took time off work	why • 14 (37%) Regular Staff meeting • 12 (32%) Special Staff meeting • 12 (32%) Other colleagues
(Murphy et al., 2019)	Retrospective, cross sectional Most distressing DSP	Mental Health Professionals 83	Questionnaire (based on Landers et al., 2010)	Personal: • 80% Sadness • 75% Shock • 69% Surprise • 65% Guilt Professional: • 99% Heightened awareness • 67% Decreased	• Female and older MHPs reported greater levels of sadness. • No difference on impact based on gender of service user, site of suicide,

				confidence - 54% Fear of negative publicity	professional group.
(Pilkinton & Etkin, 2003) Canada QA rating = **	Retrospective, cross sectional	Psychiatric trainees 121		Greatest impact: - Emotional health - Assessment of patients - Medicolegal aspects - Admissions	- Impact unrelated to gender and postgraduate year Most commonly used supports: - Fellow residents - Friends - Supervisors
(Rothes et al., 2013) Belgium QA rating = **	Retrospective, cross sectional. Most distressing DSP, at time of death	Psychiatrists 98	Patient Suicide Experience Questionnaire	Feelings: - 47% Emotional suffering or distress - 26% Impotence, powerlessness - 24% Concerns, doubts, fear - 20% Guilt, self-blame, regret - 20% Failure or defeat - 20% Understanding, acceptance - 19% Surprise, shock - 15% Negative towards patient	Not related to years of practice or having had suicide training. Not related to gender apart from feelings of failure and defeat (females (31%), males (10%). Distress affected by: - Predictability and preventability expectations - Attitude of understanding and acceptance
(Saini et al., 2016) England QA rating = ***	Retrospective, cross sectional	GPs 198	Questionnaire and semi structured	- 66% Affected (Grief, guilt, self-scrutiny)	- Fewer years in practice perhaps more affected.

			interviews	• 7% Not affected • 27% Did not know.	• Supported from peers, colleagues, friends or family valued.
(Scocco, Toffol, et al., 2012) Italy QA rating = **	Retrospective, cross sectional Time of DSP and when completing questionnaire	Psychiatrists 11	Questionnaire designed for study	Most frequent: • 90% Sadness • 82% Self-Doubt • 73% Disbelief • 64% Guilt • 55% Shock • 55% Fear • 55% Helplessness	• Only disbelief showed significant reduction with time.
(Sherba et al., 2019)	Retrospective, cross sectional Most distressing DSP	Social Workers and Counsellors 121	Questionnaire and semi structured interviews	22% Aware of publicity with 92% of these reporting distress as a result 45% Distress at possibility of litigation. 15% considered early retirement 34% considered career change 10% took time off work	Helpful organisational response: • 78% Team meeting review • 58% Critical Incident review Helpful individual support: • 90% Team colleagues • 79% Family/partner • 84% Clinical colleagues • 76% Friends • 83% Other MHPs
(Thomyangkoon, 2008) Thailand QA rating = ***	Retrospective, cross sectional	Psychiatrists 94	Questionnaire	• >50% Sadness, depression, hopelessness, guilt. • 75% professional reactions e.g. Review of practice	• Working through with colleagues • Friends and family • Prayer

2.3.1 Personal responses to death of a patient by suicide

The most common personal reactions recorded across the studies were: guilt (22 studies), blame (16), shock (14), anger (12), sadness (12), anxiety (11), and grief (9).

Although the methodologies in the quantitative studies were heterogeneous, making comparisons difficult, 13 studies (total n = 717) utilised the Impact of Events Scale (IES or IES-R, Horowitz et al., 1979, Weiss & Marmar, 1996) and reported that between 12% and 53% of their samples recorded clinically significant scores in the time immediately following the suicide (see Table 3). Of the other quantitative and mixed-method studies, Finlayson and Graetz Simmonds (2016) included 12 items in their study questionnaire to capture intensity of emotions and reported that sadness was rated most highly, followed by shock, helplessness, anger and pain. Gulfi et al. (2010) used nine items from an adapted Long-term Emotional Impact Scale (Horn, 1995) and reported low to moderate impact overall, with increased sensitivity to signs of risk and increased anxiety when working with suicidal patients being the highest rated items. The most frequently endorsed emotional reactions by Midence et al.'s (1996) study of nursing staff were sadness and helplessness, followed by shock, and feeling guilty and angry. Ruskin (2004) employed a 25 item scale based on the DSM IV (American Psychiatric Association, 2013) criteria for acute stress or post-traumatic stress disorder to assess psychiatrists and psychiatry trainees and reported that 22% of their sample met criteria for acute stress disorder and 20% met criteria for post-traumatic stress disorder. Gibbons et al. (2019) found that the majority of their sample of psychiatrists (92%, n= 105) rated the effect on their emotional well-being above 50 on a 0 – 100 scale anchored at 0 = ‘no effect’, 50 = ‘some’ and 100 = ‘a very severe response’, with an average rating of 66. Finally Wurst et al. (2010, 2011, 2013) used a 100mm visual analogue scale to measure emotional responses in three studies. The items measured were grief, guilt, anger, relief, shock, shame, disbelief, feeling offended, feeling insufficient and an overall rating for total distress. Their three respective samples of therapists reported mean ratings of overall distress of 62 (Wurst et al., 2010) 63 (Wurst et al., 2011) and 63 (Wurst et al., 2013) with shock and sadness being the highest rated emotional responses.

Nine studies attempted to quantify the proportions of practitioners who were affected after the loss of a patient through suicide, although the thresholds used to define this were unclear and the estimates showed considerable variation. In one survey (Landes et al., 2010), 97% (n = 139) of psychiatrists reported some effect on personal life following their most distressing suicide loss and 87% (n= 124) reported some disturbance following their most recent suicide loss. Just 9.7% (n = 8) of the sample in Murphy et al.'s (2019) study reported no impact, with 55% (n = 46) describing some impact, 24% (n = 20) quite an impact, and 11% (n = 9) reporting a major impact. For Saini et al. (2016), 66% of their sample reported being affected in some way. With Courtenay et al. (2001) emotional impact was considered severe in 24% (n= 40), moderate in 51% (n = 85) and absent or minimal in 14% (n = 23) of the participants. In Alexander et al.'s (2000) study, 33% (n = 54) reported being personally affected (lowered mood, poor sleep, increased irritability), whilst Dewar et al. (2000) reported that for 31% (n = 15) of clinicians the suicide had an adverse impact on some aspect of their personal lives. Hendin et al., (2000) reported 38% (n = 13) as being severely distressed. In contrast to the above, Halligan and Corcoran (2001) found that more than 80% (n = 84) in their survey noted no personal effect other than for guilt feelings (35%, (n = 37) experiencing feelings of guilt) and in a further study (Pieters et al., 2003) 84% (n = 66) of the participants did not recall an adverse impact on personal life.

Table 3: Studies Utilising IES/IES-R

Study	Population	Number	Measure	Total Means (SD)	Weeks After DSP		Prior to Survey		Clinical significance initially: no reaching, % (cut off)
					Mean Intrusion (SD)	Mean Avoidance (SD)	Mean Intrusion (SD)	Mean Avoidance (SD)	
(Chemtob, Hamada, Bauer, Kinney, et al., 1988)	Psychiatrists	72	IES Two time points (2 weeks following DSP, 2 wks. prior to survey)	24.6	14.3 (9.1)	10.3 (9.3)	Not reported	Not reported	65, 53% (..)
(Chemtob, Hamada, Bauer, Torigoe, et al., 1988)	Psychologists	70	IES Two time points (2 weeks following DSP, 2 wks. prior to	22.2	13.3 (9.0)	8.9 (6.6)	Not reported	Not reported	Intrusion: 34, 49% (13) Avoidance: 19, 27% (13)

			survey)						
(Cryan et al., 1995)	Psychiatrists	86 (84)	IES Two time points (2 weeks following DSP, 2 wks. prior to survey) 1st DSP	16.6	10.8 (6.4)	5.8 (7.2)	2.0(4.4)	0.9(2.1)	Intrusion: 31,36% (12) Avoidance: 15, 17.5% (10)
(Jacobson et al., 2004)	Social Workers	209	IES Most affecting DSP At time of the DSP.	32.41	17.76 (5.67)	14.65 (4.31)	--	--	--
(Kleespies et al., 1990)	Psychology trainees	8	IES Two time points (2 weeks following DSP, 2 wks.	33.4	20 (10.3)	13.4 (6.7)	Not reported	Not reported	--

			prior to survey) Last DSP (or First-0ne only)						
(Kleespies, 1993)	Psychology trainees	32	IES Most distressing DSP Two time points (2 weeks following DSP, 2 wks. prior to survey)	28.8 (12.1) 8.0 (8.6)	16.7 (7.5)	12.1 (7.6)	3.8 (3.3)	4.2 (6.4)	--
(McAdams & Foster, 2000a)	Counsellors	97	IES The week following the DSP, and the week prior	30.2 (13.1)	16.3 (8.3)	13.9 (6.7)	DSP within 18 mths. (n=37) 11.5	10.7 (11.2) 4.81	--(19)

			to the survey.				(12.2) >18 mths. (n=52) 4.51 (7.0)	(7.1)	
(Pieters et al., 2003)	Psychiatric trainees	79	IES Most distressing DSP Current impact	--	n/a	n/a	--	--	-- Intrusion: 9,12 % (12) 5, 7% (10)
(Ruskin, 2004)	Psychiatrists and Psychiatry trainees	120	IES First DSP At time of DSP.	14	8 (6)	6 (5)	--	--	29, 24% (12) 28, 23% (10)
(Yousaf et al., 2002)	Psychiatric trainees	23 (21)	IES Two time points, immediately after DSP	21.6	11.9(8.5)	9.7(9.21)	‘no significant reductio	‘no significant reductio	11, 52% (20)

			and at time of study				n’ Median change = 0	n’ Median change = -2	
				24.86					
(Castelli Dransart et al., 2014)	Mental Health Professionals	258	IES-R Most recent DSP within last 5 years Time point = during the month following DSP	12.12 (10.66)	6.88 (5.38)	3.76 (4.50)	--	--	31, 12% (25)
(Castelli Dransart et al., 2015b)	Mental Health Professionals	666	IES-R Most recent DSP within last 5 years Time point = during the month	13.1 (11.7)	7.4 (5.8)	3.8 (4.5)	--	--	93, 14% (25)

			following DSP						
(Takahashi et al., 2011)	Psychiatric Nurses	292	IES-R	11.4	--	--	--	--	40, 13.7% (25)

2.3.2 Impact on professional practice

Thirty-four of the studies reported on the impact upon professional practice experienced by practitioners. As summarised below, practitioners reported a greater focus on risk assessment. They also became more cautious and adopted a more defensive management of suicide risk. Others also reported increased self-doubt related to their own judgement and decision-making.

Risk Assessment

Fourteen studies described changes that relate to risk assessment. Heightened awareness of risk was frequently cited (Alexander et al., 2000; Bowers L et al., 2006; Draper et al., 2014a; Kelleher & Campbell, 2011b; Landers et al., 2010; Murphy et al., 2019), as was attentiveness to risk assessment (Bowers et al., 2006; Pilkinton and Etkin, 2003) and increased attentiveness / focus on suicide cues (Chemtob et al., 1988; Cryan et al., 1995; Finlayson et al., 2016; Gulfi et al., 2010; McAdams and Foster, 2000; Trimble et al., 2000).

More cautious management

There were also a number of examples where more cautious management of those at potential risk of suicide were reported following the loss of a client to suicide: increased caution (Draper et al., 2014b; Finlayson & Graetz Simmonds, 2016; Grad et al., 1997a), excessive vigilance (Wang et al., 2016), more frequent risk assessments (Murphy et al., 2019) more referrals to psychiatry (Draper et al., 2014b; Halligan & Corcoran, 2001b), more anti-depressant prescribing (Halligan & Corcoran, 2001a; Kelleher & Campbell, 2011a) and an increase in the number of patients assessed as being at risk for suicide (Kleespies et al., 1990). Increased use of hospital admission or use of mental health legislation to detain those thought to be at risk (Alexander et al., 2000; Cryan et al., 1995; Gulfi et al., 2010; Kelleher & Campbell, 2011b; Landers et al., 2010; McAdams & Foster, 2000a; Menninger, 1991a; Pilkinton & Etkin, 2003; Trimble et al., 2000) was also frequently reported.

Some avoidance behaviours were highlighted. For instance, reluctance to accept suicidal patients (Hendin et al., 2000; Ting et al., 2006), more conservative patient selection (Trimble et al., 2000), avoidance of the scene of the suicide (Wang et al., 2016), change of role (Ting et al., 2006) or considering taking early retirement / change of career (Alexander et al., 2000; Dewar et al., 2000b; Gibbons et al., 2019; Kelleher & Campbell, 2011a; Sherba et al., 2019).

Nine studies detected more conservative record keeping (Chemtob et al., 1988; Finlayson et al., 2016; McAdams and Foster, 2000; Trimble et al., 2000), or more detailed record keeping, (Cryan et al., 1995; Halligan & Corcoran, 2001b; Kelleher & Campbell, 2011b; Linke et al., 2002; Menninger, 1991b). Greater attention to legal aspects were also regularly reported upon (Chemtob, Hamada, Bauer, Kinney, et al., 1988; Courtenay & Stephens, 2001b; Cryan et al., 1995; Gulfi et al., 2010; McAdams & Foster, 2000b; Pilkinton & Etkin, 2003; Trimble et al., 2000).

Acceptance

The experience of losing a patient to suicide resulted in some practitioners being more accepting of suicide as a possibility (Kleespies et al., 1990; Linke et al., 2002) or having an increased awareness of the limits of their professional ability to prevent suicide (Goldstein & Buongiorno, 1984; Gulfi et al., 2010; Ting et al., 2006). Other studies detected increased acceptance of suicide itself (Finlayson and Graetz, 2016) or feelings of understanding or acceptance of suicide as an option (Rothes et al., 2013; Ting et al., 2006).

Suicide risk (for staff)

One study concluded that the experience of a patient’s death may increase suicide risk for the practitioner, noting suicidal behaviours or ideation (Kleespies, 1993) as a consequence. Castelli et al. (2015) reported that 10% of the people in their study experienced their own suicidal ideation following the death by suicide of a patient, but no causal link was investigated.

Uncertainty or issues around confidence

An impact on confidence (Courtenay & Stephens, 2001a; Landers et al., 2010; Murphy et al., 2019) and professional self-doubt (Finlayson et al., 2016; Gaffney et al., 2009; Grad et al., 1997) were also reported. For example, some practitioners were anxious and expressed difficulty making decisions (Dewar et al., 2000b; Kleespies et al., 1990). Others reported uncertainty (Halligan and Corcoran, 2001;

Rothes et al., 2013), and an increase in consultation with colleagues and peers (Cryan et al., 1995; Grad et al., 1997b; Gulfi et al., 2010; Halligan & Corcoran, 2001a; Linke et al., 2002; McAdams & Foster, 2000b; Menninger, 1991b; Trimble et al., 2000).

Change over time

The quantitative and mixed method studies included in this review varied in the timeframes of reference when collecting the retrospective data on the impact of a patient's death by suicide. Most asked participants to report on their reaction immediately following hearing of the death whilst some also collected information about the impact at the time the study was conducted. The qualitative studies included in this review did not specify a time point and explored reactions more broadly across time. Findings from Sanders et al. (2005) and Bowers et al. (2006), for example, indicated that reactions persisted over time to the extent that those deaths which were some time in the past were still having an influence on practice in the present. Similarly, another study indicated that among a wide range of impacts only disbelief showed a significant reduction with time (Saini et al., 2016).

Of the thirteen quantitative studies that collected retrospective information on the period immediately following the incident and again at the time of the study, all indicated a reduction in the severity of impact over time, although Yousaf et al. (2002) reported that this reduction was not significant (Table 3).

Duration of impact

Ten studies collected data on the duration of the initial impact following the death by suicide of a patient although the manner of recording and reporting varied. For example, Kleespies et al., (1990) found that the duration of the initial emotional impact was reported to have lasted a week or less for 37% (n = 3) of practitioners, between 1-4 weeks for 50% (n = 4), and between 1-4 months for 13% (n = 1) of the practitioners. However, longer-term effects related to professional practice were reported as still being present at the time of the study in 88% (n = 7) of practitioners. In Alexander et al's., (2000) paper, 8% (n = 4) of psychiatrists stated that the effects had lasted up to a week, 31% (n = 15) up to one month, 31% (n =

15) up to three months, and 29% (n = 14) over three months. Gibbons et al., (2019) found that 39% (n = 45) reported a detrimental effect on professional duties which lasted between 1 week and 6 months, 21% (n = 18) felt that the effects lasted between 6 months and 2 years and 13% (n = 11) reporting having ongoing effects. Murphy et al., (2019) indicated that although the emotional impacts predominately lasted less than 6 months, for nearly 10% (n = 8) the impact lasted more than 12 months. Finlayson and Graetz Simmonds (2016) reported that for nearly a quarter of their sample, 24% (n= 13), the feelings lasted less than one week. However, for 41 % (n= 22) feelings lasted from between 1 week and 1 month, for 14.8% (n= 8) between 1 and 3 months, for 7 % (n= 4) between 3 and 6 months and 13% (n= 7) experienced the feelings for more than 6 months. (See Table 4).

Table 4: Duration of Impact

Study	Duration less than I Month %(n)		Duration greater than 3 Months %(n)	
	Personal	Professional	Personal	Professional
(Alexander et al., 2000)	39 (19)		29(14)	
(Finlayson & Graetz Simmonds, 2016)	65 (35)		20 (11)	
(Gibbons et al., 2019)				44 (29) *
(Kelleher & Campbell, 2011a)	81 (9)	62 (8)	9 (1)	15 (2)
(Kleespies, 1991)	88 (7)			88 (7)
(Landers et al., 2010)	62 (83)	42(41)	22(31)	67(85)
(Linke et al., 2002)	60 (23)	55 (21)		

(Murphy et al., 2019)			10(6) **	
(Rothes et al., 2013)	61 (52)		13 (11)	
(Ruskin, 2004)	36 (43)		7 (8)	29 (35)
			**Greater than 12 months	*Greater than 6 months

2.3.3 Variables associated with the extent of the impact on practitioners

The studies included in this review examined a wide range of factors that may account for variability in impact on practitioners. The most frequently identified factors are summarised under five broad themes: practitioner characteristics; the therapeutic relationship; patient characteristics; the response from others and fear of litigation and publicity.

Practitioner characteristics

Seven studies found that impact was not related to the age of the practitioner (Chemtob et al., 1989, Davidsen, 2011, Hendin et al., 2000, Gulfi et al., 2010, Rothes et al., 2013, Wurst et al., 2010, Wurst et al., 2011), and whilst four studies found that impact was independent of years of experience (Chemtob, 1988, Gulfi et al., 2010, Hendin, 2000, Pilkinton and Etkin, 2003), five studies concluded that greater number of years in practice had a protective influence on impact (Chemtob, 1988, Draper, 2014, Hendin, 2004, Saini et al., McAdams, 2000).

Findings related to the relationship between gender and impact were also mixed. Impact was found to be unrelated to gender by Castelli et al., (2014), Chemtob et al., (1989), Davidsen (2011), McAdams and Foster (2000) and Pilkinton and Etkin, (2003) and yet was found to be greater among females in the studies by Darden et al., (2011), Draper et al., (2014), Gulfi et al., (2010) and Wurst et al., (2013).

Although the studies covered a wide range of professions, as the majority focussed on single professional groups, it was difficult to make direct comparisons. Castelli et al., (2004), Gulfi et al., (2010), Grad et al., (1997) and McAdams and Foster (2000), however, reported that impact was unrelated to work role.

The practitioner's perception that they were in some general way accountable or responsible for the death, (Castell et al., 2014, Dewar et al., 2000, Finlayson and Graetz Simmonds, 2016, Gulfi et al., 2010, Robertson et al., 2010), or that a decision they had made had contributed to the death (Hendin et al., 2004) emerged as a factor that was associated with a negative impact. This was also the case with the perception that the death could have been prevented (Bowers et al., 2006, Landers et al, 2010, Rothes et al., 2013) or was unexpected (Davidsen, 2011, Finlayson, 2016). Two studies reported that for some practitioners reduced impact was associated with holding the belief that suicide was the client's choice and outside of the practitioner's control (Darden and Rutter, 2011, Draper, 2014, Rothes et al., 2013).

Linke et al. (2002) found that the majority of their sample had felt inadequately prepared for dealing with a suicide by their initial professional training, although they all felt trained in risk assessment. However, in another study, previous training in suicide risk assessment was associated with practitioners reporting a reduced sense of burnout (Murphy et al., 2019). Castelli et al. (2015) categorised the group within their respondents who reported low impact as 'anticipators with support' i.e. people who had been aware of the risk of losing a patient to suicide and were also well supported following the actual loss. Cotton et al. (1983) reported that professionals whose previous experience had been more likely to expose them to the death of patients, e.g. those with previous medical experience, suffered less than other disciplines such as mental health workers.

Therapeutic relationship

Elements of the therapeutic relationship were cited in various studies as being related to differential reactions after a death. Litman (1965) noted in general terms that the impact was dependent on specifics of the relationship but without indicating what these specifics were or the direction of the association. The relationship to the patient (Castelli et al., 2015), the length of time the patient was known to staff (Bowers et al., 2006), the strength of relationship (Bowers et al., 2006), emotional closeness or attachment, (Castelli et al., 2014, Gulfi et al., 2010), and either knowing the patient well or disliking the patient (Dewar, 2000), were all reported as increasing the negative impact of the death. Likewise, difficulty with emotional contact with the patient (Davidsen, 2011), a long and intense involvement with the patient or their family (Murphy et al., 2019; Pieters et al., 2003), or a particularly difficult therapeutic relationship (Pieters et al., 2003) were all linked to an increase in negative impact.

Patient characteristics

A small number of studies noted a link between characteristics of the person who died and the impact on the practitioner, finding that the impact was greater when the patients were younger (Dewar et al., 2000, Pieters et al., 2003, Murphy et al. 2019, Wurst et al., 2010) and when patients had young children (Dewar et al., 2000, Landers et al., 2010, Murphy et al., 2019). Chemtob et al., (1989) found that working with people with problems with substance abuse was associated with lower impact and, whilst recommending that this warranted further research, they questioned whether this may relate to practitioners being more prepared for the suicide with the knowledge that there was ready access to lethal means and to them believing that they had less influence over their patients.

Response of others

The fear of blame by relatives or fear of their reactions (Dewar et al., 2000, Landers et al., 2010, Wurst et al., 2011, Wurst et al., 2013) or the fear of blame more broadly (Alexander et al., 2000, Bowers et al., 2006, Dewar et al., 2000, Hendin et al., 2000, Kleespies et al., 1990, Landers et al., 2010) was associated with higher levels of distress. Furthermore, Pieters et al. (2003) and Gibbons et al., (2019) found that actual confrontation with family members contributed to increased adverse impact. Castelli et al., (2004), however, described that overall their sample experienced little blame (11% reporting blame from relatives) and they did not report any association with level of impact. Less specifically, managerial responses, (Bowers et al., 2006), negative reactions from health service executive staff (Landers et al, 2010) and negative reaction from the institution in which the practitioners worked (Gibbons et al., 2019; Hendin et al., 2004b) were cited as factors that increased the negative impact.

Fear of litigation and publicity

Alexander et al., (2000) found that 13% (n = 21) of practitioners were moderately distressed and a further 7% (n = 12) were extremely distressed at the prospect of litigation, and fear of litigation was similarly associated to increased impact in studies by Hendin, (2004) , Murphy et al., (2019), Tillman (2006), Wurst et al., (2011), and Wurst et al., (2013).

Five studies noted that publicity in the media contributed to the impact that practitioners experienced (Alexander et al., 2000; Dewar et al., 2000; Landers et al., 2010; Midence et al., 1996; Sherba et al., 2019), with all being in agreement that awareness of publicity heightened the distress experienced.

2.3.4 Support which helps minimise negative sequelae

The vast majority of the studies that reported on the support accessed following the death of a patient cited informal support through colleagues, peers, family or friends as having been the most helpful (e.g. Alexander et al., 2000; Cotton et al., 1983). In terms of more formal provision, supervision was also reported as offering valued support (Courtenay and Stephens, 2001; Kleespies et al., 1990; Ruskin, 2004; Trimble et al., 2000) but evidence for other formal procedures was more mixed. Team meetings were found helpful by some (Alexander et al., 2000, Courtenay and Stephens, 2001, Cotton, 1983, Pieters et al., 2003) but either unhelpful by others (Hendin et al., 2000) or the need for careful management of meetings was noted (Kelleher and Campbell, 2011, Linke et al., 2002). Some studies found that critical incident debriefs or case reviews were useful (Alexander et al., 2000; Kleespies, 1993; Kleespies et al., 1990; Landers et al., 2010; Pieters et al., 2003; Rothes et al., 2013; Sherba et al., 2019), but other studies described them as unhelpful (Bowers et al., 2006; Hendin et al., 2000), specifically if experienced as insensitive or persecutory (Gibbons et al., 2019). One study reported that the use of external reviewers to guide debriefing was unhelpful (Courtenay & Stephens, 2001).

More generally, Bowers et al., (2006) found that any support was received positively, and Castelli et al., (2014) found that receiving insufficient support significantly increased the overall impact in terms of emotional impact and trauma symptoms.

2.4 Discussion

This review had three main aims, to synthesise the evidence on: 1) the impact of a patient’s suicide on both personal and professional practice responses; 2) the support received by health professionals; and 3) which factors helped to minimise negative sequelae. Our key findings were that the death of a patient by suicide can have a considerable, and lasting, emotional impact (most often manifest as shock and/or guilt) on mental health professionals. This impact is comparable to that of other traumatic life events. There were notable impacts on their professional practice including self-doubt and being more cautious and defensive in the management of suicide risk. Informal support was highly valued, however more needs to be done to help to prepare and support practitioners for this rare but likely experience.

2.4.1 Impact on personal and professional practice

There is extensive evidence in the literature that the loss of a patient through suicide has considerable impact on many practitioners. The reported incidence and severity of this impact varied considerably across the studies included in this systematic review. Those studies that reported on change in reactions over time all concluded that there was a reduction in impact over time. This would be expected given what is known about the processes of grief and of recovery following trauma (Kleber, 2019; Zisook & Shear, 2009).

Many studies used a post-traumatic stress disorder (PTSD) outcome measure, the Impact of Event Scale (IES/IES-R), to assess the emotional impact of losing a patient to suicide. This seems reasonable given that such an experience would meet the event criteria of diagnostic guidelines for PTSD (American Psychiatric Association, 2013). A previous review of these studies (Séguin et al., 2014), concluded that, on the basis of the IES/ IES-R scores, overall emotional impact on practitioners was low. However, in the current systematic review, for the studies utilising the Impact of Event Scale (IES or IES-R) between 12% and 53% of their samples recorded clinically significant scores in the time following the suicide (see Table 3). To place these findings in context, although the majority (90%) of the general population will experience a traumatic event in their lifetimes, a relatively small proportion (8%) will develop PTSD (Kilpatrick et al., 2013). In light of this, it is fair to conclude that the emotional impact on practitioners of a loss of a patient to suicide is significant and comparable to the impact of other traumatic life events. Current guidelines for the prevention of PTSD (National Institute for Health and Care Excellence [NICE], 2018) recommend that individuals presenting with subthreshold symptoms (i.e. on a PTSD measure such as the IES-R) in the month following a traumatic event should be actively monitored and those with above threshold symptoms should be offered trauma focussed treatment within one month of the event. Psychological focussed debriefing is not recommended.

Although many of the studies included in this review reported the impact on their professional practice, often the studies did not differentiate between those changes that were beneficial (e.g. improved patient care, better risk management) or detrimental (e.g. defensive practice, avoidance) to patient safety and wellbeing. Some studies, however, did report positive changes as a consequence of the adversity of the experience, described in Cotton et al. (1983) as ‘new growth on emotional scars’. Some studies concluded that to achieve such growth requires a facilitative working environment that recognises the importance of learning through experience (Courtenay & Stephens, 2001; Gulfi et al., 2010; Kolodny et al., 1979).

2.4.2 Support received by health professionals

All studies concluded that further action is needed to prepare and to support practitioners and a number of studies recommended that efforts to prepare staff for the possibility of losing a patient to suicide could be beneficial (Bowers et al., 2006; Chemtob et al., 1989; Gibbons et al., 2019; Hendin et al., 2000; Jacobson et al., 2004; Sherba et al., 2019; Wang et al., 2016; Wurst et al., 2011). It is conceivable that suicide prevention training itself may not fulfil the function of preparing practitioners for the death of a patient unless specific information is included about the probability of experiencing the suicide of a patient at some stage in their career; the likely impact, the procedures to be followed and the support available. Increasing awareness of the incidence of suicide could improve risk management whilst also serving a protective function for the practitioner in the event of a death.

The majority of studies indicated that informal supports were most helpful, although it is not clear if this is partly due to an inadequacy of more formal supports or a preference for a more individualised approach. When formal support was reported, individual supervision appeared to be the most valued support whilst the responses to group procedures such as team meetings and debriefs were more mixed. However, generally not enough detail was provided to make meaningful comparisons between different group supports. Whilst the current evidence points most clearly towards a preference for individual support, either informally or through supervision, this should be treated with caution. Group procedures have the benefit of facilitating the sharing of learning and of heightening awareness of risk; therefore helping practitioners to be better prepared in the event of losing a patient through suicide. If the emphasis is on individual support, then other ways of achieving these functions would need to be found.

2.4.3 Factors that helped to minimise negative sequelae

There was no strong evidence that the demographic characteristics of practitioners (e.g. gender, age, profession, length of experience) were associated with the impact of a suicide. It is possible that further research could be warranted so that certain groups of practitioners could be targeted by interventions to help reduce impact, however it is more likely that such measures would best be directed to the whole workforce. The findings from this review support Castelli et al.'s (2014) conclusion that we need more research focussed on the relationship with the patient, rather than limiting our attention to the socio-demographic characteristics of the professionals and their patients. This association between the therapeutic relationship and impact is further supported by Cerel et al.'s (2016, 2017) research that indicated that perceived closeness to the deceased increased the chance of depression, anxiety and post-traumatic stress disorder and therefore that perception of closeness is a factor that could help predict those at greatest risk of adverse impact.

The finding that more negative impacts were associated with practitioners' perceptions that they were accountable or responsible (in some way) for the patient's death could be linked to the common personal reactions of guilt and fear of blame and the experience of reduced professional confidence and uncertainty. It would be beneficial to gain a better understanding of this relationship. For instance, is guilt exacerbated by reduced confidence in one's ability to assess and manage risk or inversely, is greater confidence in one's ability protective against ruminations such as 'did I miss something?' or 'I should have known'? Further research would also be beneficial to investigate the influence of blame (self-blame, fear of blame and actual experience of blame), and to investigate if blame is moderated by, for example, cultural factors, institutional factors, the frequency of suicide within an institution, attitudes towards suicide (e.g. if there is a more prevalent cultural belief that suicide is a valid option), and confidence in one's ability to assess and manage risk.

Castelli et al., (2014) suggested that a number of factors might have accounted for what they described as the relatively low impact of the death of a patient in their study. These included whether (i) the majority of their sample had experienced several patient suicides (with potential habituation effects), (ii) practitioners worked in team settings, (iii) they reported receiving sufficient support, and (iv) they worked in a socio-cultural setting in which they felt little sense of blame or fear of litigation.

2.4.4 Professional Implications

Feeling unprepared for the loss, also potentially related to the sense of shock, involved several different aspects. First, a general lack of awareness of the likelihood that the practitioner's profession may expose them to such an event. Second and more specifically, that the death by suicide of an individual patient in their care was unexpected, and finally uncertainty of the implications of the loss in terms of personal impact and service procedural requirements. Whilst awareness would be best raised during initial training, given the relative rarity of the event, sharing of learning following a death could help to maintain the level of awareness throughout a practitioner's career.

The evidence regarding the acceptability and benefits of formal support was mixed, however, several recurring themes were identified that could provide useful targets for additional focus when supporting health professionals who have lost a patient to suicide. Moderating the impact of guilt, a ubiquitous response across the studies included within this review and improving understanding of how services can create an environment that reduces the fear of blame and promotes and atmosphere of learning from adverse events, are both areas that could be improved.

Given the relative homogeneity of the responses reported in the studies, it is likely that the synthesis of these findings would generalise to a broader range of mental health practitioners than those already covered. However, further research is required to confirm this.

2.4.5 Strengths and limitations

The findings of the current review must be interpreted within the context of its limitations. Only English language publications were included and unpublished papers or research from the “grey literature” were excluded. Inclusion and exclusion criteria were deliberately set to cover a broad range of studies, but comparison of findings was challenging given the varied methodologies employed. The reference lists of all included studies were checked but no further studies meeting the criteria for this review were found. All included studies were retrospective cohort studies, based on self-report measures. Methodologies of the studies varied: some required participants to report on their reaction to their first, last or most distressing experience, whereas for other studies this was not specified at all. The time since the participants experienced the death of a patient also varied greatly. Furthermore, studies ranged in the time point at which participants were asked to report on their reactions, i.e. whether to retrospectively describe reactions immediately following the event and/or at the time of the study. Understandably, reports of impact were likely to be subject to recall bias (Spencer, Brassey, Mahtani., 2017).

Like most research of this kind, all studies had possible self-selection bias, since participation in the studies was voluntary. Practitioners with more or less severe stress reactions might have chosen not to participate in such studies because they anticipated taking part to be distressing or they may have thought that they had little to contribute. In terms of sampling frames, none of the studies reported information on those practitioners who had experienced a patient suicide but who did not take part in the study. As a result, it is not possible to comment on the representativeness of participants included within this systematic review. Nonetheless, the current review has many strengths. The review was systematic and included both quantitative and qualitative studies. We also used a validated quality assessment tool (Pace et al., 2010), which allowed the quality of both the qualitative and quantitative studies to be appraised. Additionally, the protocol for our systematic review was pre-registered on Prospero to facilitate transparency. A further strength of this review is that whereas other reviews e.g. Foley and Kelly(2007), Leaune et al., (2019) focused primarily on psychiatrists or psychologists, we included studies with a range of mental health professionals, broadening the potential utility of our findings.

2.5 Conclusion

The experience of losing a patient through suicide can have considerable impact on mental health professionals, both in terms of their personal reactions, which are typically characterised by feelings of guilt and shock, and subsequent changes to professional practice that may be potentially positive or negative. Demographic characteristics of practitioners did not appear to be associated with impact. The most significant risk factors for negative impact were a sense of fear or blame and feelings of self-blame. In a small but important proportion of practitioners, the personal impact met the DSM diagnostic criteria for PTSD and could be long lasting. This impact, however, may be moderated by tailored training (awareness of the occupational risk of loss through suicide), characteristics of the employing organisation (i.e. a non-blame seeking approach, a culture of learning through adverse events) and by the level and nature of support available (tailored to the individual, opportunities for informal support).

Chapter 3 Methodology

Background

An initiative within an NHS mental health Trust to improve suicide prevention efforts gave the background to the studies that comprise this thesis. Two main areas were the focus of the initiative; 1) the recognition that more was needed to be done to understand the impact on practitioners when suicide prevention efforts failed, with the aim that this knowledge could help improve the support offered in such circumstances, 2) that training in suicide prevention, specifically in the risk assessment, formulation and management (RAFM) approach needed to rolled out across the Trust.

Methods

Following a systematic review of the literature on the impact of suicide on mental health practitioners, a mixture of quantitative and qualitative approaches were used across three different studies. Study one was a factor analysis of an existing scale which had been developed to measure attitudes to suicide prevention. This was the first known effort at replicating the initial validation of that scale. Study two emerged from the desire to evaluate suicide prevention training. Since no specific measure to gauge confidence in RAFM was known to exist it was decided to adapt an existing measure for this purpose. Study two therefore is a factor analysis and initial validation of the newly developed scale. As discussed in the Systematic Review (chapter 2), to our knowledge no studies have been carried out on the impact on primary care mental health practitioners such as those working in Improving Access to Psychological Therapies (IAPT) services. Study three then was an attempt to explore if the impact was comparable with that found in different settings and with different professional groups. The results from this could inform efforts to improve support for practitioners and to mitigate the negative impacts.

Conclusion

The three studies included in this thesis comprise a follow up validation of an existing scale designed to assess attitudes to suicide prevention, the validation of a newly developed scale and a qualitative study using an IPA approach.

3.1 Introduction

Clinical experience within a primary care mental health service indicates that losing a patient to suicide has significant impact on practitioners. To our knowledge no studies have explored the impact of losing a patient by suicide on the relatively new work force that comprises IAPT services. Such a study could inform services on how best to prepare and support practitioners in such an event. Dissemination of the findings of such a study could, in itself, serve to increase awareness of this risk and therefore better prepare practitioners. Initially a systematic review was performed to establish the existing knowledge and to confirm that research had not been carried out already in IAPT-type services. Study one was a factor analysis of an existing scale for which the initial validation had not been replicated and study two was the development of a new scale, adapted from an existing measure. Study three, a qualitative study into the impact on IAPT practitioners, was informed by the findings of the systematic review.

3.2 Systematic Review.

The systematic review of studies into the impact on mental health practitioners of the death of a patient by suicide was registered prospectively on Prospero (registration number CRD42017052807), the international database for systematic reviews in health and social care. The review was carried out according to the PRISMA protocol (Moher, 2009) (see Appendix B). A quality assessment framework was adapted from the Mixed Methods Appraisal Tool (Pluye et al., 2009) and a data extract form was created (see Appendix A).

3.3 Ethical Considerations.

Studies one and two were planned as service audits and advice from the NHS Trust Research Department was that ethical approval was not required. For study three although ethical approval was not deemed to be obligatory, as no patients were involved and the participants were NHS employees, it was decided to still seek approval from the Health Research Authority (HRA) given the potentially sensitive nature of the subject area. Once HRA approval was received (see Appendix D), ethical approval was also gained from the University ethics committee (see Appendix E and F).

The following priorities were addressed:

1) Maintaining confidentiality of the NHS practitioners who were interviewed, given that loss of a patient is a relatively rare event.

- Recruitment was by inviting practitioners from across 8 NHS sites in the north of England.

- Any information included in the write up of the study was strictly anonymised. Any information that it was not feasible to anonymise and that could identify the participant was excluded from the write up.

- Information gathered at interview was stored securely electronically and was not linked to any identifier that could be linked to the participant.

2) Discussing the loss of a patient could potentially be distressing for the practitioner concerned even though there could be a significant time elapsed since the event.

- Informed consent was to be gained, with the clear indication that it was possible to withdraw consent or any involvement in the research at any time, including during the interviews.

- The potential for the material discussed to be upsetting or to cause distress was also discussed at the start of each interview. The practitioner participant was asked at the start how best they wished to be supported and by whom, in the event that they became upset during or after the interview.

- Full contact details of the lead researcher / interviewer were made available to each interviewee and they were invited to get in touch if they had any questions prior to the interview or if there was anything they wished to discuss post interview.

- Contact details and referral processes for the specific local arrangements at each site for NHS staff who wish to seek support, therapy or counselling was sought prior to the interviews.

3) Practitioners who themselves have experienced the death of a patient have described a therapeutic benefit of being given the opportunity to describe their experience and have this account listened to and witnessed. They have also expressed potential satisfaction in helping other people understand more about the potential impact and therefore be better prepared.

4) Vicarious emotional impact of hearing accounts of patient suicide and impact on practitioners.

3.4 Study One: Attitudes to Suicide Prevention Scale (ASPS)

3.4.1 Rationale for the exploring the psychometric properties of the ASPS

Although a number of scales exist to measure attitudes to suicide (for example, Suicide Behavior Attitude Questionnaire (SBAQ, Botega,et al., 2005), Scale of Public Attitudes About Suicide, (SPAS, Li XY et al.,2011), Attitudes Toward Suicide Scale, (ATTS, Renberg & Jacobsson, 2003)), only one scale has been developed to specifically explore attitudes to suicide prevention, namely the Attitudes to Suicide Prevention Scale (ASPS, Herron et al., 2001). For the purposes of an audit within an NHS Mental Health Trust it was decided by the management team that examining attitudes to suicide prevention was an important aspect of optimising the suicide prevention response within the NHS. As a result, the ASPS was selected to do so. The initial validation study and subsequent studies that had utilised the ASPS are shown in Table 5 As is evident in Table 5, the psychometric properties identified had not been replicated since the original publication, therefore this is the focus of Study One.

Table 5: Studies utilising the ASPS

Study	Region	Participants	Aim	Main ASPS Outcomes
Herron et al., 2001	UK	General practitioners, accident and emergency nurses, psychiatrists in training, and community psychiatric nurses.	Attitudes to Suicide Prevention Scale (ASPS) development	Scale shown to have satisfactory reliability and internal consistency. More positive attitudes were associated with mental health professionals, working in the community, and previous training in suicide risk assessment
Brunero et al., 2008	Australia	Health Professionals	Comparison based on attendance at training	Those that had attended suicide prevention education showed significantly more positive attitudes towards suicide prevention initiatives.
Cates et al., 2019	USA	Pharmacists	Attitudes of pharmacists to suicide prevention	Pharmacists who participated in the survey felt unprepared to be frontline clinicians in suicide prevention

				efforts
Coppens et al., 2018	Europe – Portugal, Germany, Hungary	GPs	Evaluation of training in suicide prevention	The training had a significant effect on GPs' attitudes towards suicide prevention. However, at follow-up, scale scores fell back to baseline level
Jacobson et al., 2012	USA	Social Work students	Evaluation of training.	No changes in attitudes were observed.
Kawashima et al., 2020	Japan	Medical personnel	Evaluation of the effect of an assertive-case-management training program.	Significant improvements between pre-training and post-training in the Attitudes to Suicide Prevention Scale.
Lau et al., 2015	Australia	Midwives and maternal child health nurses (MCHN),	Attitude of clinicians to suicide prevention.	MCHN have more positive attitudes towards suicide prevention than midwives, and younger participants have more positive attitudes to suicide prevention compared

				to older participants.
López-Narváez et al., 2020	Mexico	Nursing and Medical Students	Comparison of attitudes	Nursing students held more negative attitudes.
Nebhinani et al., 2013	India	Nursing students	Attitude of nursing students	Nearly half of the subjects had positive attitude toward working with suicidal patients.
Osteen et al., 2016	USA	Social Work students	Evaluation of training.	Post training improvements in attitudes

3.4.2 Factor analysis

Factor analysis is the analytic technique often used in scale development to determine the underlying structure of a set of variables and potentially reduce observable variables (i.e. the individual items of the scale) to one or more underlying latent constructs. The main forms of factor analysis are Exploratory Factor Analysis (EFA) and Confirmatory factor analysis (CFA) which serve different functions (Watkins, 2018). In CFA the number of factors is predetermined (either through sufficient theoretical evidence or prior research findings). With EFA, however, the number of factors is established by the analysis and typically this would then be verified through further research and the use of CFA (Yong & Pearce, 2013).

Ideally, factor analysis should be underpinned by theory, providing support for predictions about the structure of the data. A scale designed to measure a single construct would be expected to have one factor unless existing theory suggests that the construct itself was composed of a number of sub-constructs. In EFA three main areas need to be considered; extraction method, type of rotation and the number of factors to retain (Osborne, 2008). Best practice recommends maximum likelihood extraction (assuming the data are normally distributed, otherwise minimum residual extraction is preferred), oblique rotation (e.g. direct oblim, as this allows correlation between factors, as is more likely the case with psychological scales) and parallel analysis (in which eigenvalues from the data are compared with those from a generated random dataset of the same characteristics but in which the factors are not correlated). There are various recognised methods to determine the number of factors to retain in EFA. Historically, the method most frequently employed for deciding the number of factors has been the Kaiser criteria (i.e. retention of all factors with an eigenvalue of greater than one). This is often used in combination with a visual inspection of the scree diagram (the number of factors to the left of a clear change of gradient in the graph). However, more recently parallel analysis has been suggested as a more reliable method to determine the number of factors to retain (Wood et al., 2015). Factor rotation is a technique that improves the interpretation of the initial analysis by improving the degree to which variables load onto specific factors. The orthogonal rotation methods ensure that factors remain uncorrelated whilst the oblique rotation methods allow for some correlation between factors (as would be expected in data related to psychological phenomena).

In the original development of the ASPS (Herron et al., 2001) principal components analysis (PCA) with varimax (orthogonal) rotation was used for the purposes of data reduction. Although PCA is still frequently used for factor analysis there is now recognition that this is sub optimal (Osborne & Costello, 2009). It was therefore decided to complete a full factor analysis and that the sample size afforded the opportunity to split the sample in order to perform an EFA followed by a CFA.

3.5 Study Two: Adaptation of the Risk Assessment and Management Self Efficacy Scale (RAMSES)

3.5.1 Rationale for adaptation of the RAMSES scale

The currently recommended approach to suicide prevention within mental health services is Risk Assessment, Formulation and Management (RAFM). The NHS Trust in which the studies comprising this thesis took place was committed to rolling out RAFM training using a train the trainer method. The RAMSES (Delgadillo et al., 2014) scale had been developed to help evaluate suicide prevention training and this covered the areas of assessment and management but did not include questions specific to risk formulation. To date little has been done to evaluate the effectiveness of training in the RAFM approach and to our knowledge no specific measures exist to inform such evaluation. It was decided to develop a self-rating scale specifically to measure confidence in employing the RAFM approach and to adapt the already validated RAMSES as a basis for this development. Table 6 shows studies that have employed the RAMSES scale.

Table 6: RAMSES

Study	Region	Participants	Aim	Main RAMSES Outcomes
(Delgadillo et al., 2014)	U. K	Mental health and substance misuse practitioners	Scale development and validation, evaluation of training	Adequate factor structure, internal consistency and construct validity. Training group had a higher mean self-efficacy score than controls
(Maina et al.,	Kenya	Emergency	To investigate	Below average self-

2019)		care nurses	the perceived self-efficacy in suicide risk assessment, management and referral among nurses working in an emergency department within a lower income country.	efficacy in suicide assessment and management necessitating training
(Chongtham et al., 2015)	India	Mental Health Practitioners	Comparison of confidence across different mental health professional groups	Mental health professionals of different backgrounds with varying duration of experience reported reasonable degree of competence regarding risk assessment

3.5.2 Factor Analysis.

As this study was focussed on the development of new scale the most appropriate analysis to examine the structure of the scale was EFA. As described in 3.4.1 best practice indicated maximum likelihood extraction with oblim rotation and parallel analysis to guide the decision on the number of factors to retain. Further studies would be required to confirm these findings through CFA.

3.6 Study Three: Qualitative Study

3.6.1 Rationale for the adoption of an Interpretative Phenomenological Analysis approach

Interpretative phenomenological analysis is a qualitative research approach developed by Smith (2009). It is described as being rooted in three underlying theoretical principles; 1) phenomenology, with the aim of describing events as they are experienced by individuals 2) the double hermeneutic, where there is explicit acknowledgement that the account of the experience under study is the product of the researcher's interpretation of the participants own perception of their experience, and 3) ideography, an emphasis on focusing on the individual experience before attempting to generalise from this or seek common themes across participants. This theoretical underpinning provided an approach well matched to the aims and context of study three. The aim was to explore the impact on primary care mental health practitioners of the death of a patient by suicide. The recognition of the double hermeneutic was important given the role of the researcher as a practitioner within such a service whose previous research included performing a systematic review in the area of study. The researcher therefore had both direct and indirect experience that could bias data gathering, awareness and acknowledgement of this would help to reduce the impact of this whilst ensuring transparency in reporting.

3.6.2 Validity in qualitative studies

Demonstrating the validity of qualitative studies requires a different approach to the statistical methods employed in quantitative scientific research (Yardley, 2017). Yardley (2010) described four principles to help demonstrate quality (sensitivity to context, commitment and rigour, transparency and coherence and impact and importance) and Smith et al., (2009) elaborated on these in the context of IPA studies

Sensitivity to context

Smith et al. (2009) argue that sensitivity in IPA should be evidenced to the sociocultural setting in which the study is based, together with an awareness of the extant literature, and of the data collected. The fact that the researcher was also a practitioner within an IAPT service could indicate knowledge of context. This also helped the researcher gain access to participants with the necessary lived experience which Smith et al.(2009) stated can be difficult without an acquired sensitivity to context. Sensitivity to the extant literature in this case is demonstrated in the systematic review presented in Chapter 3 and sensitivity to data is supported through considerable verbatim extracts in the presented text. Furthermore, sensitivity is demonstrated when any ethical considerations are taken into account.

Commitment and rigour

Commitment and rigour are demonstrated by recruitment of participants with relevant experience and by the depth of analysis of the data. The presentation within the write up of sufficient evidence in the form of direct quotations to support the proposed themes helps support this. Thorough data collection and the depth and breadth of the analysis should be apparent in the study write up. To support the rigour with which the data were analysed the identification of themes was discussed with a third party until consensus was reached on themes and superordinate themes. On the basis of this feedback, further themes were identified, the names of superordinate themes were modified to make their meaning clearer and further examples of the themes were identified using quotes from the transcripts.

Transparency and coherence

Transparency and coherence are evidenced by clear presentation of methodology. The logic underpinning the interpretations of the experience of the participants should be understandable. This is enhanced by disclosure of the researcher's own experience that may influence the interpretation of the data and explanation of their motivations to engage in the subject. Audit is also a mechanism that can evidence validity by providing a check on the coherence of the findings. For this study, a third party audited the analysis by examining two full annotated transcripts. The purpose of this was to check that the interpretation and coding were credible, that the identified themes were supported by the data and to confirm a logical link through transcripts, themes and superordinate themes.

Impact and importance

The importance of the study is supported by the findings of the systematic review, i.e. that research into the impact of practitioners within IAPT type services had not been carried out to date. It is also supported by the findings of the study itself, that such an experience has considerable impact and that greater awareness of both the likelihood of having such an experience and of the potential impact could better prepare practitioners.

3.6.3 Method

This was a qualitative study using interpretative phenomenological analysis, which by its nature, utilises a small sample size. The nature of the study necessitated convenience sampling as only participants who were willing to share their experiences could be included. Seven practitioners were recruited from NHS IAPT services across the North of England. A quarter of an hour introduction, confirmation of meeting the criteria for the study, collection of demographic information, and discussion and recording of consent, was followed by a one hour audio recorded interview with the option of a further 15 minute debrief (including time to answer any questions that had arisen and to check on the emotional wellbeing of the participants). All interviews were carried out by the chief investigator, a senior psychotherapist from an IAPT service who is an accredited cognitive behavioural therapist. Interviews were in a semi structured format, i.e. a script of questions was used but these were expanded upon during the interview so that relevant information was not lost. Transcripts were made from the audio recordings and these were analysed using an approach called Interpretative Phenomenological Analysis. This approach acknowledges that the researcher’s own experiences and beliefs will influence how they interpret participants’ verbal accounts of their experiences. Transcripts were analysed for key themes and these were compared across the seven different accounts to see if themes were common or if new themes emerged.

Demographic data collected was restricted to ensure the member of staff could not be identified from it. Members of staff were only identified as working for an IAPT service in the north of England. Contact data of participants was kept separately from interview recordings and transcripts. Interview recordings and transcripts were identified only by unique identifiers and not linked to demographic or contact details.

Audio recordings of interviews with the NHS staff who participate were recorded on an encrypted recording device and stored on a password protected computer as were the transcripts of the recordings.

3.6.4 Self Reflection

My interest in embarking on study in the areas of suicide prevention and in the impact on practitioners who experienced the loss of a patient through suicide grew through my early experience of working as a clinical lead in an IAPT service. Discussions with my Clinical Director about a shared need to improve our knowledge led to us putting ourselves forward to our NHS Trust’s ‘train the trainer’ roll out of RAFM suicide prevention training for all practitioners. My knowledge deficit perhaps represented an avoidance which itself may have been a continuing manifestation of the taboo nature of suicide. The Trust initiative offered an opportunity to address this, to work to raise skill levels and confidence in suicide prevention and ultimately to improve the interactions between practitioners and patients which are at the heart of prevention efforts. Witnessing three practitioners within our service experience the loss of a patient to suicide brought home the extent of the impact on them and the fact that our ability as service leads to support them was hampered by our lack of knowledge and preparedness.

The opportunity to engage in a PhD, beyond the clear personal benefits of learning, professional development, and maintenance of enthusiasm and motivation, brought potential benefits for the host service. The intended initiatives could now draw on the wealth of knowledge and experience at the Suicidal Behaviour Research Lab at the University of Glasgow. The supervision and guidance from experts in the field brought greater rigour and precision to the design of the studies, enhancing the quality and validity of the research and enabling more effective dissemination of the findings. What had begun as a local initiative could now be placed within a global perspective, and this aspect was a repeated theme in supervision feedback, encouraging the practitioner-researcher to move from a more parochial outlook to considering the broader context.

Personally, I found the comparison between the studies carried out under the auspices of the university and the approach more often taken in our service to be of interest. At one extreme are the practice changes, intended to improve patient care, which are made based on clinical experience and judgment. These have the benefit of fast implementation, but their effectiveness can be impossible to gauge due to the lack of time or resource to plan a robust evaluation. At the other extreme it is estimated that it can take 17 years for research findings to be adopted in practice settings (Morris et al., 2011). Collaborations between practice based clinicians and university researchers in what are described as Practice Research Networks are an attempt to bridge this gap (Audin, et al., 2001) and on a smaller scale it is hoped that the studies that comprise this thesis are an example of such an undertaking. Other benefits for the service which were beyond the scope of this thesis have included the introduction of safety planning into practice, the improvement and development of existing suicide prevention training, and encouraging a culture that maintains awareness of suicide risk and is more supportive of practitioners.

3.7 Transparency and Reproducibility

The open science movement aims to increase the credibility of scientific research (Vazire et al., 2021), by facilitating openness, transparency, and reproducibility (Armeni et al., 2021). Credibility of research can be increased by preregistration of studies (Nosek et al., 2018), by making data and code openly available to enable reproducibility, and by performing replication studies (Nosek et al., 2015). However, use of open science practices in suicide research is still the exception rather than the rule (Kirtley, Janssens, & Kaurin, in press).

The systematic review presented in Chapter Two was preregistered on Prospero (registration number CRD42017052807), the international database for systematic reviews in health and social care.

Study 1 is the first replication of the validation of an established scale, The Attitudes to Suicide Prevention Scale (ASPS). The R markdown code used for analysing the data from this study is publicly available on the Open Science Framework (https://osf.io/zd67q/). Analysis code for Study 2, is also available on the Open Science Framework (OSF) project page for the study (https://osf.io/9erbt/). Sharing de-identified data for Study 2 was not possible due to the nature of informed consent obtained in the original study. However, following Kirtley, Hussey and Marzano (2021) and Quintana (2020) we created a synthetic dataset using the R package, synthpop (Nowok et al., 2020), and made this available for the purposes of analytic reproducibility. The questionnaire used in the study is also available on the OSF.

3.8 Summary

The three studies included in this thesis comprise a follow up validation of an existing scale designed to assess attitudes to suicide prevention, the initial validation of a newly developed scale and a qualitative study utilising an IPA approach into the impact on practitioners of the death by suicide of a patient.

Chapter 4 An investigation into the factor structure of the Attitudes to suicide prevention scale.

Background

Following the initial validation of the Attitudes to Suicide Prevention Scale (ASPS) scale by Herron et al. (2001), only one subsequent study has sought to replicate the original findings of the internal validity of the scale (Brunero et al., 2008), but to our knowledge, no studies have attempted to investigate the factor structure of the ASPS. Thus, despite its frequent use, the psychometric soundness of the ASPS has received little attention. This study aimed to investigate the factor structure of the Attitudes to Suicide Prevention Scale (ASPS).

Method

The ASPS was distributed to all staff in a UK National Health Service Trust (N=957). We conducted an exploratory factor analysis followed by a confirmatory factor analysis by splitting the data 60/40 into training and testing subsets. A multiple regression analysis was carried out to investigate whether the overall scale score varied as a function of professional role, age, gender and whether respondents had completed suicide prevention training or not.

Results

Two items displaying poor item-scale correlation were excluded from the factor analysis and a further item was excluded as it was based on different anchor points. For the remaining 11 items no adequate factor structure emerged. The scale total did demonstrate statistically significant differences in attitudes between staff groups (defined by attendance at suicide awareness or prevention training, gender and by level of patient contact), but not between groups defined by age range. Generally, however, there were positive attitudes across all Trust staff.

Conclusion

Our findings found no satisfactory factor structure for the ASPS. Further scale development would be beneficial.

This chapter has subsequently been published: An investigation into the factor structure of the Attitudes to Suicide Prevention scale. Sandford, D. M., Kirtley, O. J., Lafit, G., Thwaites, R., & O'Connor, R. C. (2020). An investigation into the factor structure of the Attitudes to Suicide Prevention Scale. Crisis: The Journal of Crisis Intervention and Suicide Prevention, 41(2), 97–104. https://doi.org/10.1027/0227-5910/a000608

4.1 Introduction

Approximately 700,000 people die by suicide each year (World Health Organisation, 2021). A third of those who are lost to suicide are individuals who had been in contact with mental health services in the 12 months prior to death (Luoma, Martin, & Pearson, 2002). Every clinical encounter is an opportunity to potentially prevent a suicide and clearly, mental health services have a central role and responsibility in suicide prevention.

The opportunity to identify those at risk of suicide does of course extend beyond contact with mental health services. For example, an estimated 77% of those who die by suicide had attended their GP service in the 12 months prior to death (NCISH, 2016). Identification of risk can itself be problematic. A recent study highlighted the high rates of misclassification between suicidal behaviours and non-suicidal self-directed violence and the potential impact of this on risk assessment, management and interventions (Cwik & Teismann, 2017). They found that rates of misclassification were largely independent of length of professional experience among psychologists but they identified particular biases when classifying the behaviour of female patients and those with a diagnosis of borderline personality disorder (for example, suicidal behaviour of female patients was significantly more often interpreted as non-suicidal self-directed violence (30.5%) compared to male patients (52.6%)).

The response of all health professionals to people at risk of suicide is of vital importance and it is likely to be influenced by their attitudes towards suicide and more specifically, towards suicide prevention. Furthermore, beliefs and attitudes can negatively impact upon the effectiveness of suicide risk assessment and management (Herron et al., 2001; Valente, 2011), for example, health professionals’ beliefs about the preventability of suicide is likely to influence how risk is assessed and managed (Ramberg, Di Lucca, & Hadlaczky, 2016). Attitudes towards responsibility are also likely to affect engagement with assessing risk, willingness to access training in risk management (Herron, Ticehurst, Appleby, Perry, & Cordingley, 2001), or influence risk assessment and management skills (Brunero, Smith, Bates, & Fairbrother, 2008).

Numerous studies have investigated the attitudes of health care staff towards suicide prevention (Brunero et al., 2008; Herron et al., 2001; Nebhinani, Gaikwad, & Tamphasana, 2013), often using the Attitudes to Suicide Prevention scale (ASPS) developed by Herron and colleagues (2001). In the original design of the scale, factor analysis was performed on 28 items which were reduced to 14 when items with poor factor loadings were dropped. Following validation of the scale by Herron et al. (2001), only one subsequent study has sought to replicate the original findings of the internal validity of the scale (Brunero et al., 2008), but to our knowledge, no studies have attempted to investigate the factor structure of the ASPS. Thus, despite its frequent use, the psychometric soundness of the ASPS has received little attention.

Herron et al. (2001) found that attitudes towards suicide prevention differed significantly between the four groups of health professionals they investigated: general practitioners, accident and emergency nurses, psychiatrists in training, and community psychiatric nurses. They concluded that more positive attitudes were associated with being a mental health professional, working in the community, and having had previous training in suicide risk assessment. Herron et al. (2001) suggested that some negative attitudes could result in the underestimation of risk and recommended that negative attitudes should be assessed and targeted in training designed to improve the management of suicide risk. More recently, Nebhinani et al. (2013) used the ASPS to study the attitudes of 308 nursing students. Whilst nearly half of their sample had positive attitudes toward working with suicidal patients, half also considered suicide prevention efforts to be ineffectual. Nebhinani et al. (2013) concluded that this highlighted the need for further training in suicide prevention, recommending regular educational and training programmes on suicide assessment, risk reduction and prevention of suicide, supervision, and ongoing support for new staff and student nurses. Previous studies have investigated the impact of training on attitudes to suicide prevention although sample sizes have been small (Appleby et al., 2000; Brunero et al., 2008b;

Ramberg et al., 2016) and therefore larger scale research in this area would be beneficial.

4.1.1 The current study

This study emerged out of discussions within a UK NHS Trust about the need to prioritise suicide prevention, as has been identified within the NHS more widely (The Mental Health Taskforce, 2016). As part of this effort a survey of attitudes of Trust staff to suicide prevention was conducted. Whilst previous studies using the ASPS had focussed upon health professionals, in this study we investigated attitudes across the entirety of trust staff, consistent with local and national policy initiatives that highlight suicide prevention as everybody’s business (Mathieson & Twiselton, 2014; Public Health England, 2016).

In sum, this study has the following three aims: (i) to investigate the internal consistency of the ASPS and its factor structure; (ii) to investigate whether differences in attitudes to suicide prevention existed between staff members with different vocational roles (as defined by their contact with patients) or as a function of age or gender; and (iii) to explore whether there was an association between attendance at training in suicide awareness or prevention, and attitudes to suicide prevention.

4.2 Method

4.2.1 Participant recruitment and procedure

The NHS Trust studied provides community and mental health services to a population of half a million people and employs around 4000 staff. The clinical services are divided into four Care Groups; Mental Health (Community Mental Health Teams, Crisis Teams and Primary Care Psychological Therapy), Community Services (e.g. District Nursing, Occupational Therapy, Physiotherapy, Cardiac Rehabilitation), Children and Families (e.g. Health Visiting, School Nursing, Child and Adolescent Mental Health), and Specialist Services (e.g. Learning Disability, Specialist Dentistry, Neurology, Diabetes) with a fifth group covering Corporate Services.

An anonymous online questionnaire was distributed in December 2016 to all Trust employees (n≈4000) via the Trust newsletter, which was delivered electronically to all employees. Links to the questionnaire where also distributed via emails through the communication channels of each Care Group within the Trust. As this was designed as service audit, NHS ethical approval was not required. As part of the introduction to the questionnaire participants were advised of the subject matter to be addressed, that they would not be identifiable, and they were asked to contact the Suicide Prevention Project Lead for the Trust if they had any questions or concerns.

4.2.2 Measures

Demographics

All participants were asked to respond with; age, gender, suicide prevention or awareness training attended, Care Group, geographical work base, and level of patient contact offered by vocational role. Level of patient contact was defined by three categories: ‘clinical staff with patient contact’ (e.g. those employed in clinical roles); ‘non-clinical staff with some patient contact‘ (e.g. estates, facilities and administration); and those staff with ‘no patient contact’ (e.g. support services, governance, IT, non-executive directors).

Attitudes to suicide prevention

The Attitudes to Suicide Prevention scale (ASPS) (Herron et al., 2001), is a fourteen item questionnaire (see Table 8) which asks people to rate their attitudes on a five point Likert scale from 1 to 5 anchored at Strongly Disagree, Disagree, Uncertain, Agree, and Strongly Agree. Two Items (items 4 and 14) are reverse scored and one item (Item 14) is anchored at None, Few, Many, Most, All. A lower score on the ASPS indicates more positive attitudes towards suicide prevention.

4.2.3 Statistical Analyses

Originally, we conducted an exploratory factor analysis (EFA) in SPSS v22 using minimum residual extraction with an oblimin rotation and applied the Kaiser-Guttman criteria (eigenvalues> 1) for retaining items. Following initial reviewer comments and further discussion within the research team, several issues arose. First, the original validation paper for the ASPS does not in fact report the factor structure nor item loadings resulting from their principal components analysis (PCA) of the scale. The first author (DS) contacted the corresponding author of the original Herron et al (2001) paper to make enquiries regarding the results of the original PCA of the ASPS, however details beyond those included in the paper were unfortunately no longer available (Appleby, personal communication). The use of a total score for the ASPS (Brunero et al., 2008; Herron et al., 2001) does appear to assume a single-factor solution, as had we, however there is no published record of such a structure having been validated. Furthermore, a single-factor structure may be somewhat surprising, given that the initial pool of items generated by Herron et al. (2001) prior to PCA, could be grouped into six themes: the accuracy of suicide risk assessment in clinical practice; the interpretation of expressions of suicidal intent; the responsibility of a clinician in preventing suicide; the practicality of preventing suicide in clinical practice; the preventability of suicide in general; and the impact of non-clinical factors on suicide rates. Additionally, Herron et al.’s (2001) original validation of the ASPS was carried out using PCA which, whilst frequently used interchangeably with EFA, has different objectives and results in different outcomes from EFA (Osborne & Costello, 2009). In the absence of a validated factor structure to confirm, we decided to first use EFA to investigate the factor structure of the ASPS, then validate the factor structure that emerged from our EFA using confirmatory factor analysis (CFA) in a subset of the sample. Data were randomly divided into training and testing subset samples, comprising 60% and 40% of the dataset, respectively. EFA was conducted using the Psych package (Revelle, 2018) in R, with a minimum residual extraction method and oblimin rotation, to allow for correlation between factors. As data are ordinal and not continuous, we used polychoric correlations instead of Pearson’s correlations to reduce the likelihood of overfitting, as recommended by Van der Eijk & Rose (2015) and Watkins, (2018). First, parallel analysis (PA) was conducted on the training sample in order to obtain a recommendation of the number of factors to retain. PA indicated that two factors should be retained and consequently, we conducted an EFA specifying two factors. Visual inspection of data using histograms of responses to individual items showed the data were not normally distributed, therefore the EFA was conducted upon the covariance matrix instead of the correlation matrix, as this is less affected by issues of dispersion and violations of multivariate normality (Tinsley & Tinsley, 1987; Yong & Pearce, 2013). Items with loadings below .3 were suppressed. Inspection of inter-item correlations demonstrated that items 7 (“It is easy for people not involved in clinical practice to make judgements about suicide prevention”) and 9 (“People have the right to take their own lives”) did not correlate well with any of the other items in the scale, so they were removed. Item 14 (“What proportion of suicides do you consider preventable?”) was also removed prior to factor analysis, as this item is not on the same scale as the other items. The ratio of participants to items was approximately 50:1 for the EFA and 37:1 for the CFA (ratios of greater than 10:1 are considered acceptable, with greater than 30:1 desirable (Yong & Pearce, 2013)). RMarkdown of analysis code is available from the author. Internal consistency for the ASPS was calculated (Cronbach’s alpha and McDonald’s omega). A multiple linear regression was performed with the total score for the scale as the dependent variable and attendance at training, gender, work role and age range as the independent variables. The regression was conducted using SPSS 22 for Windows. The α value for all tests was .05.

4.3 Results

4.3.1 Participants

1012 staff members returned the questionnaire, giving an approximate 25% response rate. 55 respondents failed to complete the ASPS and were excluded from the analysis. This left 957 respondents (Table 7) who completed the ASPS (Herron et al., 2001) yielding a final response rate of approximately 24%. Table 7 provides a breakdown of respondents by vocational role and by care group.

Table 7: Number of respondents by care group and vocational role

	Vocational Role			
Care Group	Number of Clinical Staff (%)	Number of Non-Clinical Staff but with some Patient Contact (%)	Number of Staff with no Patient Contact (%)	Total number of Staff (%)
Specialist Services	82 (9)	15 (2)	10 (1)	107 (11)
Mental Health	292 (31)	38 (4)	15 (2)	345 (36)
Community Health	209 (29)	21 (2)	8 (1)	238 (25)
Corporate Services	5 (1)	19 (2)	130	154 (16)
Children and Families	88 (9)	15 (2)	10 (1)	113 (12)
Totals (%)	676 (71)	108 (11)	173 (18)	957 (100)

Of the 1012 respondents, 797 identified as female, 154 as male, 5 preferred not to state their gender and 1 identified as transgender. The means and standard deviations for individual items of the ASPS are summarised in Table 8.

Table 8: Mean scores per item

Item	Mean	Std. Deviation
Q1. I resent being asked to do more about suicide	1.69	0.798
Q2. Suicide prevention is not my responsibility	1.66	0.823
Q3. Making more funds available to the appropriate health services would make no difference to the suicide rate	2.11	1.010
Q4. Working with suicidal patients is rewarding (R)	2.63	0.750
Q5. If people are serious about ending their life by suicide, they don't tell anyone	2.65	1.011
Q6. I feel defensive when people offer advice about suicide prevention	1.88	0.758
Q7. It is easy for people not involved in clinical practice to make judgments about suicide prevention	3.26	0.948
Q8. If a person survives a suicide attempt, then this was a ploy for attention	1.76	0.796
Q9. People have the right to take their own lives	3.23	0.862
Q10. Since unemployment and poverty are the main causes of suicide, there is little that an individual can do to prevent it	1.80	0.663
Q11. I don't feel comfortable assessing someone for suicide risk	2.95	1.289

Q12. Suicide prevention measures are a drain on resources, which would be more useful elsewhere	1.66	0.697
Q13. There is no way of knowing who is going to end their life by suicide	2.82	1.012
Q14. What proportion of suicides do you consider preventable? (R)	2.86	0.779
Total	32.96	0.198

4.3.2 Factor Analysis

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.879, and Bartlett's Test of Sphericity was significant (2312, df =55, p<0.001), both indicating that the 11 items were suitable for factor analysis.

4.3.3 Internal Consistency

Cronbach’s alpha for the fourteen item ASPS for this study was 0.76. This compares with 0.77 reported in the validation study by Herron et al. (2001) and 0.76 reported by Brunero et al. (2008). With items Q7, Q9 and Q14 removed, Cronbach’s alpha for the remaining 11 items was 0.79. McDonald’s omega was calculated as 0.79 for the original fourteen items and 0.81 with Q7, Q9 and Q14 removed.

4.3.4 EFA results

Parallel analysis

Examination of the loadings matrix for a two-factor solution, as suggested by parallel analysis, indicated that items 4 (“Working with suicidal patients is rewarding”) and 8 (“If a person survives a suicide attempt, then this was a ploy for attention”) did not load. The BIC and RMSEA model fit indices suggested that the two-factor model was an acceptable fit, RMSEA= .064 (90% CI: 051 - .077), values below .07 are classed as acceptable (Steiger, 2007), BIC= -104.6. The Tucker-Lewis index was .94. The Chi-square test was highly significant and therefore did not indicate a good fit χ2(34)= 109.68, p<.001, however when sample size is large, Chi-square tests can reject even correctly fitted factor models (Bentler & Bonett, 1980; Jöreskog & Sörbom, 1996).

One-factor model

As previous work has assumed a single factor structure for the ASPS, we also fitted a one-factor model and compared this to the two-factor model suggested by parallel analysis, using an ANOVA. There was a statistically significant difference between the one- and two-factor models, p<.001, and examination of the BIC model fit statistics indicated that the one-factor model was a better fit (two-factor BIC: -104.60 vs one factor BIC: -114.16). The RMSEA for the one-factor model was not acceptable, RMSEA = .071 (90% CI: 0.059 - 0.082) and the Tucker-Lewis index was .92. The Chi-square test was significant, indicating poor fit: χ2(44) = 163.15, p=<.001. Given the six themes involved in initial item generation by Herron et al (2001), a one-factor model would be conceptually surprising, as qualitatively different items are then grouped together on a single factor.

4.3.5 CFA results

What we can conclude from these analyses is that there is no factor structure that satisfies the requirements of both statistical and conceptual fit, for the current set of items. Neither model is a good statistical fit on any of the fit indices.

We have two “competing” models: the conceptual fit model (2 factors) and the statistical fit model (1 factor). We used the testing sample to estimate both of these models in a new, independent sample, using CFA, to see if support for either of the competing factor solutions could be found. CFA was conducted using the Lavaan package (Rosseel, 2012) for R. Diagonal Weighted Least Squares (DWLS) was used to estimate the factor structure, as this is less biased for ordinal data (Li, 2016).

One-factor Model

The RMSEA for the one-factor model was not acceptable, RMSEA = .075 (90% CI: 0.061 - 0.088) and the Tucker-Lewis index was .96. The Chi-square test was significant, indicating poor fit: $\chi 2(44) = 144.65$, p=<.001.

Two-factor Model

The RMSEA for the two-factor model was not acceptable, RMSEA = .080 (90% CI: 0.063 - 0.098) and the Tucker-Lewis index was .96. The Chi-square test was significant, indicating poor fit: $\chi 2(26) = 94.08$, p=<.001.

It should be noted however that the cut-off that we used of .07 for the acceptability of model fit is purposefully stringent (Steiger, 2007). (MacCallum et al., 1996) have suggested a graded approach whereby <.05 indicates close fit, .05-.08 indicates fair fit, .08-.10 indicates mediocre fit and values above 0.10 indicate poor fit. By these criteria our CFA RMSEA values for both models could be considered to indicate a fair fit.

4.3.6 Multiple Linear Regression

A multiple linear regression was run to predict total scale score (of the 11 item ASPS) from gender, attendance at training, age range, and role. Given the limited support for the unidimensionality of the scale these results need to be treated with caution.

There was linearity as assessed by partial regression plots and a plot of studentised residuals against the predicted values. There was homoscedasticity, as assessed by visual inspection of a plot of studentised residuals versus unstandardised predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. There were two outliers with studentised deleted residuals greater than ±3 standard deviations, however there were no leverage values greater than 0.2, and no values for Cook's distance above 1. As the results did not differ substantially with these outliers removed, they were included in the analysis. The assumption of normality of the residuals was met, as assessed by a Q-Q Plot.

The multiple regression model statistically significantly predicted scale total, *F* (9, 941) = 32.537, *p* < .0001, adj. *R2* = .230. However, this would indicate a small effect size (Cohen, 1988). Prior attendance at suicide awareness or suicide risk training, gender and work role based on level of patient contact all added statistically significantly to the prediction (*p* < .05). However, age range only became significant from the age range 55-64 and above. Regression coefficients and standard errors can be found in Table 9.

Table 9: Summary of multiple regression analysis

Variable	***B***	**SE$_\beta$**	**β**	***p***
Constant	24.804	.972	-	<.0005
Gender (Female, Male)	-1.087	.438	-.072	.013
Training attendance (No, Yes)	-4.883	.353	-.419	<.0005
Age Range: 18-24 v 25-34	.455	.895	.030	.611 (ns)
Age Range: 18-24 v 35-44	1.330	.870	.102	.127 (ns)
Age Range: 18-24 v 45-54	1.357	.852	.116	.112(ns)
Age Range: 18-24 v 55-64	2.219	.885	.156	.012
Age Range: 18-24 v 65-75	3.207	1.535	.069	.037
Work Role: Clinical v No contact	1.283	.518	.073	.013
Work Role: Clinical v Non-Clinical, some contact	1.515	.442	.105	.001

4.4 Discussion

The use of the scale total, both in this study and in previous studies should be treated with caution given that we were unable to verify a factor structure for the ASPS. This study did support the findings of previous studies (Brunero et al., 2008; Herron et al., 2001), that the ASPS demonstrates good internal consistency.

However, data from this study indicate that the internal reliability of the scale would be improved by removing two of the fourteen questions; namely Q7 (‘It is easy for people not involved in clinical practice to make judgments about suicide prevention’) and Q9 (‘People have the right to take their own lives’). This fits with informal feedback from participants in the survey that the meaning of Q7 is not clear and that a negative response to this question would not necessarily imply a negative attitude to suicide prevention. Question 9 may also be confounded given the debate surrounding voluntary euthanasia versus suicide prevention.

It noteworthy that a method of factor extraction that has been frequently used for the validation of Likert scale measures has been to use the Kaiser criteria (eigenvalues greater than one) supplemented by visual inspection of the scree plot of eigenvalues. Applying this approach to the dataset from the current study would indicate a one factor solution. This would be misleading and would not be supported by either a theoretical construct or by the more appropriate factor analysis procedure detailed herein. This should serve as a note of caution when selecting previously validated scales for research purposes and also supports the growing call for replication studies into scale validation.

Attitudes were found to be more positive among those who had attended suicide awareness or prevention training compared with those who had not attended training. It is important to note that this was a cross-sectional study and furthermore it is possible that those staff with a more positive attitude to suicide prevention would be more likely to seek out and attend training. Therefore, these findings do not provide evidence that training promotes a positive change in attitude, however other studies (Appleby et al., 2000; Brunero et al., 2008; Ramberg et al., 2016) have specifically investigated this link and provide some limited evidence that this may be the case.

The findings from the present study suggest that attitudes to suicide prevention were more positive (i.e. scores on the ASP scale are lower) among staff groups with greater patient contact. It should be stressed however, that overall attitudes were positive, in that none of the three staff groupings reported mean total scores higher than the midpoint for the scale (which would indicate more negative attitudes).

Males in this sample were found to have significantly more positive attitudes than females. This was contrary to previous findings from Brunero et al. (2008) who reported no difference on total score of the ASPS based on gender.

Herron et al. (2001) and Brunero et al. (2008) found no significant association between ASPS total and age. Nebhinani et al. (2013) also found no significant difference in attitudes between different age ranges although they did note that in the population they studied, the overall age range was quite narrow. The current study found that the mean total scale scores for the 5 age ranges increased through the age bandings, suggesting a more negative attitude with increasing age. However, age range only became significantly predictive of total ASPS score with a negative correlation from the 45 – 54 age range onwards. Age bandings were used in this study as another means of ensuring confidentiality, however if actual age in years had been collected the results may have been more illustrative.

As Herron et al. (2001) made clear when developing the ASPS, attitudes deemed more negative (and therefore with higher scores on the scale) are not implied to be incorrect. However, they hypothesised that responses deemed more negative to suicide prevention may be indicators of behaviours which are less effective in managing those at risk of suicide. They gave examples from their findings of a group which was most likely to believe that people who are serious about dying by suicide will not tell anyone; and a group who reported most agreement that nonfatal self-harm is a ‘ploy for attention’, and made the suggestion that such attitudes could result in the underestimation of risk in people with suicidal ideas or recent self-harm. However future research may also wish to investigate the extent to which all of the items (e.g., “I don't feel comfortable assessing someone for suicide risk") are actually measuring attitudes towards suicide prevention.

4.4.1 Limitations

Although our sample size was large, it is important to note that the response rate was low (24%), therefore, it is possible that people with more negative attitudes did not complete the survey. Furthermore, the response rate itself is only an estimate as, due to the method of recruitment, it is not known exactly how many people from the total staff employed by the Trust received the invitation to complete the survey. Unfortunately, we do not have data on the non-responders so were not able to explore how representative our sample was of the total workforce. Our sample differed from that of the original scale development study. Our sample includes all NHS Trust staff rather than just health professionals so it is possible that this has introduced measurement variance, i.e. the scale may not be reflecting the same construct across the different samples (Hussey and Hughes, 2018). The majority of responders (79%) were female and this may need to be taken into account before generalising the results. The cross-sectional nature of this study limits the conclusions that can be drawn, so no inferences can be made about how the attitudes reported in the survey affect the interactions between staff and those at risk of suicide. The scope of this study limited the investigation of the validity of the scale. For instance, convergent and test – retest validity were not examined.

4.5 Conclusion

This study did not yield a satisfactory factor structure for the ASPS and as the unidimensionality of the scale has not been confirmed, use of the scale total should be treated with caution. Further attention to scale development would be beneficial, to ensure statistical and conceptual fit in the factor structure. Researchers and evaluators might wish to consider using alternative existing scales to assess attitudes towards suicide prevention; including scales which focus on attitudes and knowledge more broadly (e.g. (Kodaka et al., 2011), (Batterham et al., 2013), (Scocco, Castriotta, et al., 2012), (Kishi et al., 2011). It could be hypothesised that there are benefits to an organisation in the act itself of carrying out a survey of this type. Enquiring about attitudes to suicide prevention could help individuals reflect on their own beliefs in a beneficial way and help strengthen the message that it is important that all staff is aware of suicide risk and that suicide prevention is indeed everyone’s business.

Chapter 5 The Adaptation of a Measure of Confidence in Assessing, Formulating, and Managing Suicide Risk.

Background

This study aimed to develop a scale to measure confidence in suicide risk assessment, formulation and management (RAFM) and to investigate the psychometric properties of the scale.

Method

128 mental health practitioners from an NHS Trust completed the scale. 85 from an Improving Access to Psychological Therapies service did so prior to, and after training in RAFM. 28 practitioners from the Older Adults service also completed the measure. For test–retest analysis, a further 15 completed the scale again one week after baseline without attending any training. 52 of the training group (61%) completed the measure at six-month follow-up.

Results

Analysis indicated a single-factor structure, good test–retest reliability and statistically significant increases in confidence between pre- and post-training and between pre-training and six-month follow-up. Cohen's effect size values suggest a moderate to large effect.

Conclusion

This measure could be useful in gauging practitioners' confidence in the RAFM approach and in evaluating and developing training.

This chapter has subsequently been published: Sandford, D. M., Kirtley, O. J., Thwaites, R., Dagnan, D., & O'Connor, R. C. (2021). The Adaptation of a Measure of Confidence in Assessing, Formulating, and Managing Suicide Risk. Crisis: The Journal of Crisis Intervention and Suicide Prevention. Advance online publication. https://doi.org/10.1027/0227-5910/a000830

5.1 Introduction.

Every year, worldwide, approximately 700,000 people die by suicide (World Health Organization, 2021), with around 20 times this number making suicide attempts (World Health Organization, 2014). Each suicide is a personal tragedy. It is estimated that each loss affects 135 other people (Cerel et al., 2016) with up to 25 of these experiencing a major life disruption (Cerel J & Sanford R, 2016) whilst the economic cost of each death by suicide of someone of working age is estimated to be £1.67 million (Public Health England, 2016). A broad range of suicide prevention strategies have been implemented, from the wider public health initiatives such as restricting access to means to the more focussed efforts of risk assessment within higher risk groups. The present study concentrates on risk assessment for people with common mental health problems within a primary care psychological therapy service.

Best practice guidance on managing risk recommends training in, and application of, structured clinical judgement and risk formulation (Department of Health, 2007), however to date little has been published on attempts to evaluate the impact of training into this approach (Doyle et al., 2003). One established method of evaluating risk training is to use the RAMSES scale designed to assess practitioners' levels of perceived confidence in risk assessment and management (Delgadillo et al., 2014). Within the current study, we report on the adaptation of this scale originally developed by Delgadillo et al. (Delgadillo et al., 2014), expanded to incorporate questions specific to the risk formulation approach. Such a scale would aid in gauging the effectiveness of risk formulation training and potentially guide the design of future training by identifying areas requiring improvement or further emphasis.

In short, this study aimed to investigate the utility of this new measure by exploring the following questions:

1. What is the underlying factor structure of the measure?
2. What are the internal consistency and test–retest properties of the measure?
3. Is this measure sensitive to change in confidence following the delivery of training?

5.2 Method

5.2.1 Participants.

In total, 128 practitioners from within an NHS Trust took part in this study. 85 practitioners from the Improving Access to Psychological Therapies (IAPT) service within the Trust completed the measure prior to (pre-training), and after (post-training) attending training on risk assessment, management and formulation and in the use of the GRiST (Vail et al., 2012) risk assessment tool (Galatean Risk and Safety Technology). For test–retest analysis, a further 15 IAPT practitioners completed the measure and then repeated it following a one week interval without undergoing any further training in the interim period. A convenience sample of a further 28 mental health practitioners from the Older Adults service also completed the measure to give a total of 128 completed measures for the factor analysis (see appendix 1). 52 of the IAPT training group (61%) also completed the measure at six-month follow up (follow-up group).

The training group (n=85) had a mean age of 42 years (SD [standard deviation] = 11.3) and there were 66 (78 %) women and 19 (22%) men. 40 (47%) were high intensity cognitive behavioural therapists, 25 (29%) psychological wellbeing practitioners, 6 (7%) counsellors, 8 (9%) screening and assessment practitioners, 4 (5%) team leaders and 2 (2%) were senior psychotherapists.

5.2.2 Measures

Demographics. All practitioners were asked to complete a demographics questionnaire recording; gender, age, current role, years of experience in mental healthcare, experience of working with people at risk of suicide.

Therapist confidence in suicide risk assessment formulation and management. The confidence in suicide risk assessment, formulation and safety planning scale was developed from an existing measure of practitioners' confidence in assessment and management of risk, the Risk Assessment and Management Self-Efficacy Scale, RAMSES (Delgadillo et al., 2014) with the authors' permission. The original scale is comprised of 18 items (rated 0-10) covering three subscales of Assessment, Case Management and Intervention. The scale was revised to ensure that it captured all of the core elements of risk formulation and subsequent actions, including four items adapted from the RAMSES Assessment subscale and two items adapted from the Interventions scale. One item from the Case Management sub-scale was used with the original wording. The other six items on assessment and formulation were developed specifically for this scale.

The new scale was therefore comprised of thirteen items covering risk assessment, formulation and safety planning (see Table 11). There was no intention to create subscales within this measure. It was intended to capture confidence in the overall skills required for the assessment, formulation and management of the risk of suicide. It includes questions on identifying predisposing, precipitating, perpetuating and protective factors, developing a risk management plan (“How confident are you that you can use the information from your formulation to develop an individual risk management plan?”), developing rapport and referring on to an appropriate service if level of risk indicates this. The measure asks people to rate their confidence on a five point Likert-type scale (reduced from the ten-point scale used on RAMSES for ease of use and evidence that scales beyond 6 points confer no psychometric advantage (Simms et al., 2019)) anchored at ‘not confident’, slightly confident’, moderately confident’, ‘confident’ and ‘highly confident’.

Therapist general confidence in clinical self-efficacy.   The General Clinical Efficacy Scale (GCES) (Dagnan et al., 2015) is a measure of general clinical efficacy. The GCES was adapted (Dagnan et al., 2015) from the General Self-efficacy Scale (Schwarzer & Jerusalem, 2013) and comprises 5 questions on perceived efficacy such as ‘I can always manage to solve difficult clinical problems if I try hard enough’. Items are rated on a five-point Likert-type scale anchored at ‘strongly agree’, ‘agree’, ‘don’t know’, ‘disagree’, ‘strongly disagree’. The scale was used to provide a measure of general clinical efficacy against which to compare the new scale developed to specifically measure confidence in suicide risk assessment, formulation and management.

5.2.3 Statistical Analyses

Internal consistency of the new scale and of the GCES was examined using McDonald’s omega.

An exploratory factor analysis (EFA) was conducted on the new scale responses (n = 128). EFA was conducted using the Psych package (Revelle, 2018) in R (*R: The R Project for Statistical Computing*, 2019) with a maximum likelihood extraction method and oblimin rotation, to allow for correlation between factors. The sample size yielded a measure to item ratio of 9.8:1. As data are ordinal and not continuous, we used polychoric correlations instead of Pearson's correlations to reduce the likelihood of overfitting (Holgado–Tello et al., 2010; Watkins, 2018). We first conducted parallel analysis (PA) in order to obtain a recommendation of the number of factors to retain. PA indicated that one factor should be retained and consequently we conducted an EFA specifying a single factor. Visual inspection of data using histograms of responses to individual items showed the data were relatively normally distributed, therefore the EFA was conducted upon the correlation matrix (Watkins, 2018). Items with loadings below .3 were suppressed (Osborne & Costello, 2009). Inspection of inter-item correlations demonstrated that item 1 ("How confident are you that you can use GRiST to assess risk of suicide?") did not correlate well with any of the other items in the scale, so it was removed prior to factor analysis.

R markdown code is available on the Open Science Framework (OSF) project page for the study (https://osf.io/9erbt/?view_only= a56845fb45f44403969da038e3561fc0). Sharing de-identified data is not possible due to the nature of informed consent obtained in the original study, however following Kirtley, Hussey and Marzano (Kirtley et al., 2020) and Quintana (17) we have created a synthetic dataset using the synthpop package (Nowok et al., 2020) and made this available for the purposes of analytic reproducibility. Synthetic datasets mimic the original dataset's distributions and covariance matrix. They can be used to verify that the code for the original analysis runs correctly and will produce similar (but not identical) results. The synthetic dataset was screened for "replicated uniques", i.e. values from the real dataset that were replicated in the synthetic dataset by chance and any such values were removed (Nowok et al., 2019). The questionnaire used in the study is also available on the OSF.

Differences between mean scores at baseline were examined either by independent samples t – test (gender) or by one-way analysis of variance (age, role, experience) with post hoc Bonferroni corrections applied.

Differences between mean scores before and after training and at 6 month follow up were examined by repeated measures one-way analysis of variance. The data were normally distributed, as assessed by Normal Q-Q Plot. Mauchly's test of sphericity was employed, and the Greenhouse-Geisser correction was applied if the assumption of sphericity was violated. These analyses were conducted using Jamovi 1.6 (*The Jamovi Project*, 2020). The α value for all tests was .05.

5.3 Results

5.3.1 Factor Analysis

Initial calculations of correlations suggested the exclusion of item 1 from the scale. The item-total correlation for item 1 was 0.48 compared with a range of 0.69 to 0.84 for the remaining 12 items. Inter-item correlations for items 2 to 13 were all above 0.4 (range 0.44 to 0.82), however correlations between item 1 and items 2 to 13 were between 0.12 and 0.38. Item 1 was therefore excluded from the questionnaire and a factor analysis was performed on items 2 – 13 (n=128). Bartlett's test of Sphericity (Chi-square = 1174, df = 66, $p < 0.001$) and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (0.92) for the measures (n=128) both indicated that the data were suitable for factor analysis. The item questions, means, standard deviations and the correlation for each item with the scale total for the scales completed by 128 practitioners are shown in Table 11. The breakdown of the 128 practitioners by occupational group with descriptives is provided for reference in Table 10.

Table 10 Participants

Table 10: Participants by occupational group (N=128).

	N (%)	Mean	Standard deviation	Minimum	Maximum
High Intensity Cognitive Behavioural Therapist	45(35)	32.36	6.87	19	48
Psychological Wellbeing	34(27)	27.74	7.33	10	37

Practitioner					
Counsellor	7(5)	29.14	4.14	24	34
Team Leader	4(3)	37.25	2.22	34	39
Assessment and Triage Practitioner	8(6)	30.25	12.16	18	51
Senior Psychotherapist	2(2)	36.50	14.85	26	47
Older Adult Mental Health	28(22)	30.61	8.58	6	40

The parallel analysis indicated a one-factor structure. The single factor accounted for 59% of the variance in the measure and all unrotated factor loadings were greater than 0.6. Factor loadings and corrected item-total correlations for the scale are presented in Table 11. As only one factor was extracted no factor rotation could be performed.

Table 11 Scale Factor Loadings

Table 11: *Scale Factor Loadings (n = 128)*

	Item How confident are you that you can….	Item mean	Standard Deviation (SD)	Corrected Item-total correlation	Factor Loadings
1	Use GRiST to assess risk of suicide?	1.14	1.14	0.48*	n/a*
2	Use your clinical skills to gather suicide risk information from patients?	2.74	0.66	0.72	0.774
3	Identify a person who presents a risk of suicide?	2.66	0.70	0.75	0.804
4	Communicate a suicide risk management plan to appropriate	2.39	0.87	0.84	0.903

	colleagues and services?				
5	Identify relevant historic predisposing factors?	2.45	0.77	0.82	0.887
6	Identify relevant precipitating (current and future) factors?	2.53	0.70	0.83	0.914
7	Identify relevant perpetuating factors?	2.38	0.73	0.82	0.896
8	Identify relevant protective factors?	2.72	0.65	0.78	0.837
9	Combine general and individual risk factors into a suicide risk formulation?	2.12	0.85	0.81	0.811
10	Use the information from your formulation to develop an individual risk management plan?	2.16	0.94	0.84	0.851
11	Identify an appropriate service to refer someone to on the basis of risk?	2.45	0.82	0.74	0.736
12	Develop rapport with people who present significant risk of suicide?	2.64	0.81	0.69	0.725
13	Help people to minimise the risk of suicide?	2.27	0.84	0.77	0.790

*item excluded from scale.

Note. 'Maximum Likelihood' extraction method was used in combination with an 'oblimin' rotation for factor analysis

5.3.2 Reliability

McDonald’s omega for the 12-item scale was 0.95 indicating a high level of internal consistency for this scale. For the GCSE scale McDonald’s omega was 0.90, again indicating high internal consistency.

Comparison between scores on the new scale and the General Clinical Self-Efficacy scale for 85 practitioners completed at pre-training indicated that the scores were positively correlated ($r = .40$, $p < 0.001$).

5.3.3 Test–retest

Correlation between the test and re-test total score was estimated using Pearson's correlation co-efficient ($r\ (13) = .95$, $p < 0.001$) which indicates good test–retest reliability.

5.3.4 Comparisons of confidence scores at baseline (pre-training).

At baseline there was no statistically significant difference in the mean confidence scores reported between females (28.70; SD: ± 7.73) and males (31.37; SD: ± 6.09), $t\ (83) = 1.386$, $p = 0.170$. *Although visual inspection suggests that the mean confidence score increased with age there were no statistically significant differences between the age ranges ($F\ (3) = 2.303$, $p = 0.083$).* Analyses for years of experience working in mental health yielded a *statistically significant difference* $F(3) = 12.901$, $p < 0.01$ between year ranges, although post hoc testing showed that the significant difference was between the group with most experience (> 16 years) and each of the other groups, whilst all other comparisons were not significant. Similarly, analyses for experience of working with people at some risk of suicide suggested a statistically significant difference between groups, $F\ (3) = 10.15$, $p < 0.001$. However, post hoc Bonferroni tests showed that the significant differences were between the group with most exposure and the other three groups, whilst all other comparisons were not significant.

5.3.5 Change in confidence ratings following training.

Fifty-two participants completed questionnaires at pre-training, post-training and at 6-month follow-up. The mean confidence measure scores for these are shown in Table 12.

Table 12 Mean Scores

Table 12: *Training group mean scores*

	Risk Confidence	GCSE
n = 52	Mean (SD)	Mean (SD)
Pre-training	29.21(7.73)	12.71(1.89)
Post-training	34.12(5.80)	13.53(2.10)
Follow-up	33.15(5.78)	13.16(2.81)

A repeated measures analysis of variance determined that mean confidence scores differed statistically significantly across the three time points (pre-training, post-training, 6 month follow up) ($F(1, 13) = 28.490$, $p < 0.001$). Post hoc Bonferroni analyses revealed a statistically significant increase in confidence between pre- and post- training ($t = 7.12$, $p < 0.001$) and between pre-training and 6 month follow up ($t = 5.73$, $p < 0.001$). Cohen's effect size values ($d = 0.718$, $d = 0.577$) suggested a moderate to high significance in both cases. No significant change was evident between post-training and 6 month follow up ($d = 0.168$, $t = 1.40$, $p = 0.359$).

Next, change over time in broader confidence levels as measured by the General Clinical Efficacy Scale was examined. A repeated measures analysis of variance determined that mean confidence scores did not differ statistically significantly between the three time points (pre-training, post-training, 6 month follow up) ($F(1, 47) = 1.805$, p = ns).

5.4 Discussion

This paper reports on the adaptation of an existing scale to develop a measure of practitioners' confidence in the assessment, formulation and management of suicide risk. The main aims were to investigate the factor structure, internal and test-retest consistency of the measure, and to explore if it appeared sensitive to change following training. Factor analysis supports the one factor structure of this new measure. In terms of psychometric properties, it displays good internal consistency and good test–retest reliability. The new measure appears sensitive to change in confidence following the delivery of training.

Currently around a third of people who die by suicide have been in contact with specialist mental health services in the year before their death, and two-thirds have seen their GP (Department of Health, 2017). A range of risk assessment tools is employed in these settings however such tools are poor at predicting which people will engage in self-harm or suicidal behaviour (Quinlivan et al., 2017; Steeg et al., 2018). Indeed, national best practice guidance has, for over a decade, cautioned that decisions on risk management should not be based solely on the use of assessment tools but on the broader application of structured clinical judgement and risk formulation (Department of Health, 2007). As a result, the emphasis has shifted from prediction to prevention; using a narrative account of what is known about the individual to develop a safety plan that promotes positive risk management. However, ten years on from the publication of the best practice guidance, a report into the assessment of clinical risk in mental health services found evidence of inconsistent use of risk assessment tools, of them still being used as checklists to predict future behaviour and guide risk management, and of other problems such as lack of training (NCISH, National Confidential Inquiry into Suicide and Safety in Mental Health, 2018). The report concluded with recommendations to improve risk assessment; these included ensuring staff were comfortable asking about suicidal ideation and that they received training in the assessment, formulation and management of risk. To this end, an initiative within a northern English NHS Mental Health Trust involved the use of a train-the-trainer approach to support individual services to deliver training on risk assessment, formulation and management (RAFM). With risk formulation the presence and relevance of risk factors (the predisposing factors) are considered alongside details of the individual's current situation (the perpetuating factors) and any potential imminent experiences (the precipitating factors) and these are balanced against known strengths and resources (the protective factors). This narrative approach is an effective way to communicate risk and it should result in the development of a proportionate and jointly prepared safety plan (Lewis & Doyle, 2009).

The new measure developed for this study was designed to monitor the training on the RAFM approach. It includes questions related to the assessment, formulation and management of suicide risk; including specific items on risk formulation (Predisposing, Perpetuating, Precipitating and Protective factors). Further questions assess confidence in establishing rapport and identifying appropriate services. Despite the breadth of questions, the measure appears to coalesce around a one factor structure, representing the construct of confidence in applying the risk formulation approach.

The measure displayed some ability to discriminate between groups based on mental health experience and experience of working with people who were suicidal. This makes intuitive sense, as it might be expected that confidence would increase with experience. The new measure was able to detect increases in confidence following training and that this was maintained at 6 month follow up. The General Clinical Efficacy Scale for the same time points did not indicate any significant changes and this may support the hypothesis that increase in confidence in risk assessment, formulation and management was related to the training rather than a more global increase in clinical efficacy over time.

Following training it is debatable whether a good outcome would be maintenance of confidence or whether it might be expected that the participants' confidence would continue to grow with practice. There are a number of possibilities that may explain this finding. This could be attributed to characteristics of the measure itself, i.e. a poor ability to discriminate change over time and it is possible that the pre to post change was due to an expectancy bias. Alternatively it could indicate that more frequent training (than the recommendation of three year intervals (Department of Health, 2017) would be required to further develop practitioner's confidence, that the scale demonstrated some form of ceiling effect or that due to the nature of the clinical work carried out by the sample and the extent of their exposure to people at risk, there had been limited opportunity during that time to implement learning and develop further increases in confidence.

Conceptually it made sense to exclude item 1 for two reasons. First, this item had been added to the questionnaire to specifically ask about confidence in using a particular risk assessment tool, namely the GRiST (Vail et al., 2012). As this was the first time most people in the training group had been introduced to this tool it was likely that the impact of the training would be more pronounced as measured by item one as compared to the remaining items. This may therefore have exaggerated the sensitivity of the questionnaire in measuring change in confidence in the more generic risk assessment, formulation and management skills that it was being developed to assess. Second, the aim was to develop a measure that could be used generally to track changes in confidence and not to be specific to one particular assessment tool.

It may be of interest to note that the highest rated item at baseline was confidence in identifying protective factors, despite that fact that it is acknowledged that we know the least about this risk factor (Nock et al., 2013). It would be important to explore why this is the case. Could this be related to professional practice beliefs or attitudes of the practitioners? It may be reassuring and indeed desirable to be able to highlight protective factors, but could confidence in the ability to do so be misplaced?

5.4.1 Clinical Implications

To our knowledge this is the first scale to specifically measure confidence in the RAFM approach and the only scale developed specifically to study the impact of training on using this approach. Clinicians have highlighted the need for, and importance of, training in risk formulation, and the benefit of improving staff confidence in the use of risk tools, recording of information and managing identified risk (Graney et al., 2020). Improving practitioners' confidence in their ability to implement a risk formulation approach to suicide may help them to more effectively engage in suicide prevention. Ultimately, if training can improve practitioners' confidence in RAFM, this has the potential to improve their therapeutic effectiveness (Vail et al., 2012). This would help services meet one of the recommendations of the NCISH report, to ensure practitioners are comfortable in asking about suicidal ideation. Additionally, it is important to guard against the inconsistent use of risk assessment tools or their use as checklists aimed at predicting future behaviour and guiding risk management. We feel that using this newly developed measure could contribute to these goals by focussing on the RAFM approach. Further it may assist in the refinement and appraisal of training in order to best meet the identified problems with lack of training (Graney et al., 2020; NCISH, National Confidential Inquiry into Suicide and Safety in Mental Health, 2018).

5.4.2 Limitations

Although this study reports on the development of a measure of confidence, it should be noted that this does not measure knowledge, or quality, of risk assessment, formulation and management. Ideally a measure of these skills would also be utilised to get a more complete indication of performance in this important area of practice.

The sample size for the number of completed measures was relatively low, yielding a measure to item ratio of just 9.8:1, rising slightly to 10:1 following the omission of one item. Although there is no clear consensus on the acceptable ratio of participants to items for factor analysis, this could be considered to be the minimum requirement, with ratios of greater than 10:1 considered acceptable and greater than 30:1 as desirable ((Yong & Pearce, 2013). The sample size for the impact of training analysis was also small, with a further reduction at follow-up. This low follow-up response rate (61%) may reflect the fact that follow-up contact was made by email rather than face to face, and also that some practitioners had since left the service. This study should therefore be considered a preliminary investigation of a new measure, which warrants further replication.

5.5 Conclusion

Analyses of this measure yielded a single factor structure for this sample. The measure appears to have good psychometric properties, although this finding requires replication, and the scale appeared sensitive to change in confidence following the delivery of training. This measure could be clinically useful in evaluating and developing training focussed on the currently recommended RAFM approach to the assessment, formulation and management of suicide risk.

Chapter 6 The impact on IAPT practitioners of the death of a patient by suicide, an IPA study.

Background There have been numerous qualitative studies into the impact of the death of a patient by suicide on clinicians, but the majority of studies have focussed on psychiatrists and psychologists, primarily in inpatient or secondary care settings. To date, little has been done to explore the impact of such deaths on other mental health practitioners working in primary care such as those working in Improving Access to Psychological Therapies (IAPT) services.

Method

This qualitative study used purposive sampling and adopted an interpretative phenomenological analysis (IPA) methodology. All participants had experienced the death of a patient in their role as a practitioner in an IAPT service. Seven practitioners were recruited from services across the north of England. Semi-structured, one hour telephone interviews were audio recorded and then transcribed verbatim.

Results

Analysis of the transcripts identified a number of themes which were represented in the majority of cases. Specifically, the analyses yielded four superordinate themes: 1. Initial emotional responses, 2. Adaptation, 3. Learning from the tragic event, and 4. Reflections on what helped in coping with the tragic event. The emotional responses of shock, upset, guilt and fear of blame by IAPT practitioners following the death through suicide of a patient is consistent with that found in studies of mental health practitioners more broadly.

Limitations

Although the study design afforded an in-depth exploration of the experiences of losing a patient to suicide, similar to other related studies, the sample and therefore the wider interpretation, may be affected by selection bias.

Conclusions

It is hoped that the current study will help raise awareness amongst primary care mental health practitioners, services and training centres of the impact of the death of a patient, and encourage them to consider how best to prepare and support practitioners in this eventuality. Recommendations include raising awareness of the potential for suicide in primary care services and providing clarity on the individualised support available and on the requirements of investigations.

This chapter has subsequently been published: Sandford, D. M., Kirtley, O. J., Thwaites, R., & O'Connor, R. C. (2022). Exploring the impact on primary care mental health practitioners of the death of a patient by suicide: an IPA study. Psychology and Psychotherapy: Theory, Research and Practice. https://DOI.org/10.1111/papt.12426

6.1 Introduction.

It is estimated that 135 people are impacted to some degree by each suicide death (Cerel et al., 2016). Approximately one third of people who die by suicide have been in contact with mental health services in the preceding 12 months (National Confidential Inquiry into Suicide and & Homicide by People with Mental Illness, 2014) and clearly, mental health practitioners working in these services will be among those affected when an individual dies by suicide.

Problems with access to appropriate mental health care are recognised worldwide (World Health Organization, 2019). There have been many attempts to address this, including the integration of mental health services within general healthcare settings, that target populations affected by adversity, and the dissemination of scalable psychological interventions (Ghebreyesus, 2019). The English Improving Access to Psychological therapies (IAPT; Clark, 2011) services are part of an initiative to increase access to mental health care, which has informed programmes in New Zealand (Haarhoff & Williams, 2017), Norway (Knapstad et al., 2018), Australia (Baigent et al., 2020), Canada (Naeem et al., 2017), and Japan (Kobori et al., 2014). IAPT services are characterised by a stepped care structure to deliver evidence-based interventions at scale (Wakefield et al., 2021). This has seen the development of a new mental health workforce to support people experiencing common mental health problems such as depression or anxiety disorders. The workforce comprises of Psychological Wellbeing Practitioners (PWPs), trained to deliver guided self-help based on cognitive behavioural therapy (CBT) approaches and High Intensity practitioners who are largely trained CBT therapists.

Individuals identified as being at significant risk of suicide would require a wider and more intensive package of care such as that provided by a multi-disciplinary team (NICE, 2011). However IAPT staff will have contact with people at risk of suicide, given that access to IAPT services can be by self-referral, risk is dynamic and can change during the course of treatment, and risk may only be identified once a therapeutic relationship has been established. Although there are no national data on the numbers of suicides of patients in contact with IAPT services, the sad reality is that patient suicides occur. These result in internal investigations and inquest procedures, which have an impact on staff.

There have been numerous investigations into the impact of losing a patient to suicide on mental health practitioners, but the majority have focussed on psychiatrists and psychologists (Alexander et al., 2000, Foley & Kelly, 2007, Lafayette & Stern, 2004, Sandford et al,. 2020), primarily in inpatient or secondary care settings. Studies have often reported on both the personal and professional impact (Lafayette & Stern, 2004). Quantitative studies have employed the Impact of Events Scale (IES or IES-R, Horowitz et al., 1979, Weiss and Marmar, 1996) and reported clinically significant scores (e,g, Chemtob et al., 1988; Ruskin, 2004; Yousaf et al., 2002). Common responses to losing a patient to suicide described in qualitative studies include stress, guilt, symptoms of post-traumatic stress disorder, fear of litigation and retribution, and a more defensive approach to managing risk (Foley & Kelly, 2007). The reaction has been characterised as one of prolonged grief (Darden & Rutter, 2011), with a sense of failure and self-scrutiny also having been highlighted (Davidsen, 2011). Qualitative studies have explored the impact on psychiatrists (Cotton et al., 1983), psychiatry trainees (Dewar et al., 2000), psychologists (Darden & Rutter, 2011), psychotherapists (Goldstein & Buongiorno, 1984), nurses (Kayton & Freed, 1967), social workers (Sanders et al., 2005), and general practitioners (Davidsen, 2011). To date however, there have been few attempts to explore the impact on other practitioners delivering psychological therapy within primary care. Despite the rapid expansion of the IAPT programme in England - currently there are estimated to be over 10,500 practitioners and more than 1.6 million people access the services each year - to our knowledge, no studies have investigated the impact on IAPT practitioners of losing a patient to suicide. Given that the IAPT service model is being implemented in multiple countries worldwide (Baigent et al., 2020; Haarhoff & Williams, 2017; Knapstad et al., 2018; Kobori et al., 2014; Naeem et al., 2017), this question is also of international relevance.

6.1.1 The current study

We investigated the impact on practitioners within IAPT services of the death of a patient through suicide. Specifically, we aimed to explore both the personal and professional impact, the experience of available support, and what helped or might have helped to prepare the practitioner for such an event.

6.2 Method

6.2.1 Sample selection

We adopted a cross-sectional qualitative design using purposive sampling and an interpretative phenomenological analysis (IPA) methodology (Smith, Flowers and Larkin, 2009). We recruited participants from IAPT services across the north of England. Service leads distributed an invitation to participate amongst their practitioners. Similar to other IPA studies (e.g. Smith & Osborn, 2007; Taylor et al., 2015), our aim was to recruit 6 – 8 participants. This is consistent with guidelines for sample sizes in IPA studies, acknowledging the doctrine that ‘less is more’, and resisting the pressure to include higher numbers (Hefferon & Gil-Rodriguez, 2011). To be eligible for the study, participants must have experienced the death of a patient that they had worked with in their role as practitioner in an IAPT service, where the suicide had occurred either during treatment or within 12 months of discharge. Practitioners were asked not to volunteer if the death was subject to an ongoing investigation or a future Coroner’s hearing, or if they were engaged in active support or therapy subsequent to the experience.

6.2.2 Participants

All seven participants were female. Four were working as PWPs at the time of the suicide and three as CBT therapists. The length of time in their role at the time of the suicide ranged from 1 to 5 years (mean = 3, standard deviation (SD) = 1.2). The length of time since the death ranged between 2 and 8 years (mean = 5 years, SD = 2.0). For all seven participants this was the first and only experience of patient suicide in their current role, although two participants had worked in multidisciplinary teams and had been previously exposed to patient suicide in these settings. Three practitioners were required to attend a Coroner’s inquest, and all were required to produce formal reports either for the Coroner or as part of their host organisation’s serious incident investigation procedure. For three practitioners, the suicide occurred during treatment, for a further three it was following discharge, and for the remaining practitioner, the death was after referral to secondary mental health services.

6.2.3 Procedure

The semi-structured telephone interviews were planned to last approximately one hour and were audio recorded and then transcribed verbatim. Interviewees received a participant information sheet, a consent form and a copy of the proposed interview schedule (see appendix J). Participants were advised that the interview schedule was only a guide and was not intended to be prescriptive. The study was approved by the NHS Health Research Authority (IRAS ID 249864) and ethical approval was granted by a University ethics committee in the UK.

6.2.4 Analysis

We analysed the transcriptions using an IPA approach. IPA is strongly rooted in the lived experience of the participants and strives to understand how an individual makes sense of major life experiences (Smith, 2019). It explicitly acknowledges the 'double hermeneutic' of the researcher offering an interpretation of the participant's own account of the significant event which is the subject of study (Smith, 2011). This explicit acknowledgement was important as the researcher was immersed in a similar work environment to the participants and had previous research experience in the area of study.

The author (DS) carried out the initial analysis , and it followed six stages: 1) multiple reading of the transcripts; 2) initial noting and attention to the semantic content; 3) development of emergent themes; 4) searching for connections across emergent themes to create an initial list of themes; 5) moving to the next transcript and repeating the first four stages; and 6) searching for patterns across all transcripts, the identification of recurrence of themes across multiple participants and finally the grouping of themes into superordinate themes (Smith, 2011).

To improve rigour and coherence, a supervisor audited the analysis (Smith et al., 2009) by examining two fully-annotated transcripts. This was to check that the interpretation and coding were credible, that the identified themes were supported by the data, and to confirm a logical link through transcripts, themes and superordinate themes. On the basis of feedback from the audit and names of superordinate themes were clarified and further examples of the themes were identified with illustrative quotes added to the text. The thesis supervisors (OJK and ROC) then agreed the logic of the analysis through discussion with DS following review of the tables of quotes (Table 14).

6.2.5 Reflexivity

The author (DS) conducted the interviews. He is a cognitive behavioural therapist (CBT) who has worked in an IAPT service for 10 years and is concurrently a part-time PhD student. He has previously carried out a systematic review of the impact on mental health practitioners of the loss of a patient by suicide. He has not experienced the loss of patient, friend or relative by suicide, although he has witnessed the impact of such deaths on fellow practitioners.

6.2.6 Complementarity between IPA and CBT

An IPA approach aims to go beyond the descriptive. Further to the identification of descriptive themes it should develop a deeper interpretative analysis. This is the double hermeneutic mentioned previously. For the current study the description of the participants’ personal and professional reactions was important in order that these could be compared to the reactions evidenced in studies of the impact on other mental health practitioners. The IPA approach, however, was employed to gain a better understanding of these reactions with the hope that this could guide improvements in the preparation and support made available to practitioners. DS' CBT background is perhaps relevant here. Core to CBT is the principle that it is not events alone, but rather the idiographic meaning placed on the events, that explain emotional and behavioural reactions. An individual's pre-existing beliefs, based on their experiential learning, are theorised as offering an explanation for the derivation of meanings of events. Formulating emotional difficulties from a CBT perspective involves understanding how and possibly why an individual interprets events as they do. This mirrors the hermeneutic efforts of IPA, with the researcher presenting an interpretation of the participant's expressed understanding of their experience.

6.3 Results

Analysis of the individual interview transcripts identified a number of emergent themes. Related emergent themes were subsumed (for example 'perfectionism' was subsumed into 'recognition of personal traits') to establish a list of twelve themes. The identified themes were found to be represented in the majority of the transcripts (see Table 13).

Table 13: Ubiquity of themes

Theme	**Participant one** **"Amy"**	**Two** **"Beth"**	**Three** **"Cath"**	**Four** **"Donna"**	**Five** **"Erica"**	**Six** **"Fran"**	**Seven** **"Gina"**	**Present in Majority**
Fear of Blame	yes	yes	yes	yes	yes	yes	no	Yes
Sense of shock	no	no	yes	yes	yes	yes	yes	Yes
Upset	no	yes	yes	yes	yes	yes	yes	yes
Sense of guilt	no	yes	yes	yes	no	no	yes	Yes
Self-questioning – doubt	no	yes	yes	yes	yes	yes	yes	Yes
Impact on practice	no	yes	yes	yes	yes	yes	yes	Yes
Search for understanding	yes	yes	yes	yes	yes	yes	yes	Yes
Recognition of personal trait	yes	yes	yes	yes	no	no	no	Yes
Benefit of official enquiry	yes	no	yes	yes	no	no	yes	Yes
Growth and learning	yes	yes	yes	yes	no	yes	yes	Yes
Identification of systemic problems	yes	yes	yes	yes	yes	yes	yes	Yes
Preparation	Yes	yes	no	yes	yes	no	no	Yes
Support	yes	yes	yes	yes	yes	yes	yes	Yes

Table 14: Themes

Superordinate themes	**Incorporated themes**	**Sample quotations related to theme**
Feeling shocked and upset at the death of a patient	Sense of shock	P3 There's the shock and the upset… P4 I was in shock and then I just started crying. Like with any traumatic event that you experience it feels like it was only yesterday. I can remember exactly the day I found out. P5 It was a real shock I found it really upsetting, more than I expected to be upset by… I remember feeling really kind of shaky, I felt physically sick. P6 …and it was such a shock that it happened, when I was delivering guided self-help with somebody P7 To say that I was shocked, is an understatement.
	Upset	P3 There is the upset and sadness as well P4 ...and it was him who could see how upset I was and said to me, take some time off. P5 I just…yeah, I found it really really upsetting, more than I expected to be upset by it. P6 I remember getting upset about it
	Sense of guilt	P7 I was just in shock and a guilt, I suppose. I did feel guilt. P3 I remember knowing that that worry that I had done

		something wrong was a natural response, but I still really worried about it. Worry that this is my fault and I've done something wrong. P2 …dread feeling that you've done something wrong. I'm in trouble for something. P4, it made me feel like it was my fault. P3 I was the only person who had contact with him. That, you know, if there were a couple of people involved in it, whether that would feel different. P5 …but the big difference, we were all a team, we managed the case load as a team, so I didn't have that level of responsibility as such of being the only person that's the point of contact… …this was my case, and he was my patient, and it was just me and I thought this is...I'm responsible for this young lad I did feel a strong sense of responsibility for this young man.
	Fear/anxiety of potential blame	P2, it felt like there was a black marker against my name, that this suicide has happened, you're blacklisted, kind of feeling to it. Immediately after the event I think I went through phases of being hypervigilant to it ... to the avoidance side of it … I was so burnt out I couldn't kind of deal with it and if I don't ask I don't know and I don't have to do anything about it I suppose. P1 …some doubts creeping in because it went quiet...are people wondering certain things aren't right? It's actually having a lot of trust that your management will

		do the right thing. That they're not...they're not out to blame or to, yes, pick apart things. P3 This is all on me. Worried that I would be judged and criticised for the decisions that I made. P4 …did make me feel like I was responsible, even though I know I wasn't you do feel like you're on trial. P5 Oh my God, it's going to be awful, they're going to hold me responsible and rip me to pieces. P6 They are looking to blame. That's how it felt, they want to blame someone or a fault I was standing up there for the service. P7 Fear that my practice would be questioned.

Attempting to understand the causes of the suicide	Self-questioning and doubt	P2: What did I miss? Why didn't I know that that was going to happen? Why didn't I sense, I suppose, that that's how he was feeling and that's what he was thinking? …you know, toothcomb all your notes What's the point anyway, because he scored zeros, he told me there was no risk and yet that happened… P6: …it all came back then, is there something more I could have done? Just lots of questions. P3 …is that on the surface? Was there stuff there? Should I have done something better? Maybe this is my fault? P4 Running everything through, you know, what happened, what did I do, what could I have done differently? And thinking, was it my fault, did I let him down, did I let him down, did I let his family down? P5 …and just panicking that you've done everything right …is it something I've done or something I've not done? P7 I thought, gosh, have I…is it me? Have I done…? You know, maybe if he hadn't come in for therapy, if we hadn't discussed…you know the way you do question, sort of, just questioning your practice but…
	Search for understanding	P1: …so my reaction over the next few days and week, I guess, I …it was obviously kind of, like sense making in my head, I suppose. P1 If they are going to do this, they're not going to tell you like and you can't, you're not psychic

		P2 … generally, more accepting of just the yeah, there’s only so much that I can do, and I’m okay…. more okay with that. P3 It is unfortunately something that does happen. We all do everything we can to try to help people, but it does happen, and I guess, that really, has really stuck in my mind I mean people have free will. As good as risk assessments and support that we give, some people are going to end their lives and that is …and I guess that, telling us that we can only do what we can do. P4 We can never know all the circumstances, we can never prevent it from it completely happening. I know that I could not have stopped him doing it. P5 …too good to be true that it’s not happened since, you know what I mean? It’s like you think the volume of people that we work with and the amount of telephone assessments that we do, and you just… It sometimes can feel quite overwhelming, that, that you think that it’s a vast amount of people that you are coming into contact with, and the odds are that it’s going to happen again and it’s just a matter of when not if. P6 I do feel that at times people make a decision and nothing is going to stop them… but I do feel there are a handful of people where you could change that. P7 …oh my God, what’s the reason? There was a reason why, and the reason was..

	Impact of official enquiry	P1 I was just absolutely up for having conversations with people about what had happened, where necessary……with somebody where they were doing a bit of an investigation. P3 When I've looked through all the notes I know that I had and I am confident in that decision-making, my supervisors are. I was absolutely dreading having to go, but there was an element that, kind of, I don't know if closure is the right word, but just to….help me process it P4 (the serious incident report) made me feel like I was responsible for his death, even though I know I wasn't. But when it came out, when we did do the coroner's court, there was no way I could have done anything, I could not have prevented that man doing what he did. ….the serious-incident report, and she'd come to talk to me about it – me and X – and I think the whole way she talked, or the emails, I think she sent me a couple of emails, and the way she spoke to me kind of upset me. P7 The whole process of having to do a report for the coroner was very painful as well. As hard as it was, yes. I remember thinking, you know what, I actually…. I did the best I could.
	Identification of systemic problems	P4 What inevitably happens is that some of the people who might have been slightly more risky than you'd like might

		have been better suited in a different team. You felt there was pressure because people couldn’t be accommodated in those other mental health services. …all of us as therapists are pressured to see more and more people P6 …have such a high case load, you see so many people … I soon learned it wasn’t what they said it was at Uni and it was more moderate to severe rather than mild P5 I was told that really wasn’t the way I should’ve been informed – someone should’ve spoken to me properly P4 You know let’s not have people jumping down your neck straightaway about reports and the blame culture P7 Why was it right that I’ve had an email? Why didn’t …? You know when you can work through a process, why didn’t somebody have the decency to ring me and say? There didn’t seem to be any transparency, it was that well, this has happened, and it’s only happened to you, whereas obviously this has happened to other people….

Learning from the tragic event	Growth through adverse event	P2 I learnt lot about myself as a result of that. …less pressure on myself, I'm a lot more compassionate to myself. I guess more accepting around the nature of things rather than taking 100% of the responsibility I definitely have become more confident in managing risk. P4 …but kind of very clear, even quite soon afterwards, a drive to try and learn from the experience, and crucially to try and help others around you. P6 So I feel that I've learnt a lot from that and I have supported people who have had to go to court themselves. P1 …it just gives me more confidence to, kind of, say this… can this happen please? it's like, well, I don't know, with experience….I don't know, would I dig a little bit more, but…I don't know. I'm not sure.
	Impact on practice	P5 you do feel very tentative about discharging people… …and just being a bit more risk averse than you might normally be. I've always been very thorough in my notes and everything and all my risk assessments have always been, you know quite thorough, but perhaps just tightening it up more. perhaps a bit more direct about the way you ask questions to people and talk about it. Overcautious P6 I am very thorough in risk assessments and when it comes to notes.

		I do share the experience with clinicians P7…it’s difficult to positively risk-take when you’ve got that in your background. …if anybody had a little bit of risk, I’d really jump on it. But I think I’ve definitely got that balance back. Yes, so your history of contact with clients definitely does change how you approach risk with other clients.
Reflections on what helped in coping with the tragic event	Recognition of personal traits	P2 …that’s all kind of bringing out obviously my own negative kind of beliefs about myself that doesn’t fit a perfectionist’s kind of world. P3 I always have that with everything in life, just generally there in the background that if something goes wrong then it’s probably my fault. P4 I’m the kind of person who tends to try and push through things……it probably took someone else to tell me to take time off.
	Preparation	P1 If you expect that this is never going to happen you’re living with a false reality aren’t you because it will, it will P2 Bizarrely felt quite naive to the actual possibility of that happening. P4 But it is one of those things I think everybody who works in the field, mental health, dreads. So why not address it before, rather than wait for it to happen, or worry about it happening, why not prepare people a bit more.

		P5 …just to maybe have people more prepared for the impact of what, you know, possibly...what to expect about, you know, and just perhaps somebody that’s had the experience just to talk a little bit about it. P6 …if there were more training and people came in and talked of their own experiences, people could use that knowledge and reflect and make them more aware in sessions maybe. P7 I just think there is such an importance on making people aware a, that it can happen and what to expect if you go to court because that’s quite scary. P7 I think we could do probably do with a little more risk training as well. I think that might be helpful. P1…really direct stuff about this in training.
	Helpful support	P5 …I suppose, the supervisory relationship has been very helpful with that [sense of responsibility]. ‘and I remember P2 ...talking about it quite a lot in supervision as well… P3 Everybody is incredibly open about everything that we go through and everyone kind of leans on each other and we don’t feel there is any hierarchy amongst colleagues and therapists. So, it is a very supportive team in that respect. P6 …just checking in, not just, oh you’ve written a report let’s forget about it.

		P1 There was a couple of days at least, I think, two or three days where it went a bit quiet… and I remember there just little … some little doubts creeping in because it went quiet. P6 …some training around writing a report would have been really helpful. P1 We should, probably, be asking how each individual would want… [to be kept informed] P4 A procedure written down for people to follow and say, first of all, does that person need to take time off, or what does that person need? P5 having something like that as an actual procedure where it would just happen without you having to ask. *Importance of validation of response:* P3 Yeah, or appreciate that this might be a bit upsetting for me to do. P5 Well it was just nice to have somebody to kind of just validate what I was feeling about it really, that was the main thing. P7 It’s like having bad news in a hospital, you just need to sit with the person and validate their experience and I suppose be empathetic and all that kind of compassion focussed stuff and as you know.

Following this, we grouped the themes together to create four superordinate themes: 1) feeling shocked and upset about the death of a patient; 2) attempting to understand the causes of the suicide; 3) learning from the tragic event; and 4) reflections on what helped in coping with the tragic event. The themes were incorporated into each of the four superordinate themes and representative quotes are shown in Table 14.

6.3.1 Feeling shocked and upset about the death of the patient.

The four main emotional reactions described by the participants were shock, upset, fear of blame, and guilt.

Sense of shock

Five practitioners described a sense of shock when they were informed of the death. For example Donna:

> ‘I was in shock and then I just started crying…’

and Fran:

> ‘…and it was such a shock that it happened, when I was delivering guided self-help with somebody.’

Notice the emphasis here on the treatment type ‘guided self-help’ (an intervention for relatively mild to moderate presentations of anxiety or depression). This may have been to communicate the practitioner’s expectation that risk would be proportionately low in their patient group. We elaborate further on this in the examples we provide later in the subsection describing preparation and support.

In contrast, one practitioner, Amy described managing the initial impact:

> ‘I remember feeling lots of things in one go, but, also, how can I say it? It wasn’t overwhelming…’ …. ‘I remember it was…feeling quite a big reaction, but not that it was overwhelming really.’

Amy acknowledges the extent of her initial reaction but is also careful to repeat an expression of her ability to cope. This ability to not feel overwhelmed is interesting and was despite this practitioner also stressing the unpredictability of the suicide:

> ‘….there was no clear indicator. There was no indicator that… that’s what had happened really or was going to happen.’ …. ‘…and had been consistently better and he was scoring zero to risk questions…’

Amy communicates clearly that the problem was an absence of warning signs rather than a lack of diligence on her part and this understanding would appear important in coping adaptively. Amy went on to reflect on her own tendency to act quickly:

> ‘…my nature to be a bit, kind of, like, okay, action stations, this is something…yes, this is something to, kind of… this is something to face and deal with…’ ‘…wow this is a new thing. This has never happened before. This is something new to try and manage.’

It could also be due to confidence in having followed the service risk protocol:

> ‘…but what helped me to be fine with it was that I knew I had done the best I could and the right things that I needed to do at the time…’

> ‘I think because I knew I had done what I had supposed to do that made it possible for me to manage the situation’.

Amy’s account appears to communicate that she has a clear understanding of her role and responsibilities. For her this entails knowledge of the correct protocols combined with a professionalism that strives to fulfil that role but also copes with and learns from adversity. We might speculate that this was protective against the self questioning, doubt and fear of blame experienced by other practitioners. However we will describe later how this was undermined for Amy as a consequence of lack of communication.

Upset

All the practitioners apart from Amy described being upset. For most this was described as part of the initial reaction, as with Gina:

> ‘It was both shocking and upsetting in equal measure...’

whilst for others this upset was reported later as a consequence of the enquiry.

In comparison, It is notable that Erica described her feelings of shock and upset being greater than she had expected.

> ‘ I found it really upsetting, more than I expected to be upset ‘

This indicates prior contemplation of the possibility of losing a patient to suicide and therefore an awareness of this risk. This is understandable in this context as Erica had previous experience in a multi-disciplinary secondary care team who worked with individuals presenting with high levels of suicide risk.

Fear of blame

Fear of blame was cited by all of the participants apart from Gina, although there were variations in the ascribed source of this. For some, this appears to have been predominantly self-generated, related to a reflective process or characteristic trait as described by Cath:

> ‘This is all on me.’….’Worried that I would be judged and criticised for the decisions that I made.’

> ‘I always have that with everything in life, just generally there in the background that if something goes wrong then it’s probably my fault.’

Notice that whilst Cath had the awareness of her own propensity to self blame, this insight did not protect her from the presumption of being at fault and fearing that she would be held to account.

For others the source of the fear of blame was seen as more external and as a consequence of the work environment or processes of investigation. One practitioner (Amy) found that lack of communication from her managers during the time that the death was being investigated had contributed to rising fear of blame:

> ‘…some little doubts creeping in because it went a bit quiet…’

> ‘…are people wondering certain things that aren’t right, that I’m not aware of?’

and this was despite her early and ongoing confidence that she behaved correctly and professionally as noted earlier. Amy’s account can also be viewed as highlighting the difference between feelings of guilt, i.e. linked to an interpretation that an event was caused by personal acts of commission or omission and of a fear of blame i.e. that the cause will be attributed to you despite your actions. Both the ubiquity of fear of blame and the way that it was expressed could be interpreted as indicators of what is often perceived as a 'blame culture' within organisations.

This can be heard from Beth for whom the response from the service had also increased the fear,

> 'It felt like there was a black marker against my name, that this suicide has happened, you're blacklisted, kind of feeling to it.'

> 'Oh my God, it's going to be awful, they're going to hold me responsible and rip me to pieces'

Both these examples indicate the uncertainty felt in the time following the death and how clinicians attributed this to lack of communication or insufficient support. Gina, the only participant not to describe fear of blame, said that her former experience in leadership had equipped her with knowledge of the correct procedures that should be followed subsequent to a death. When Gina perceived that these had not been followed, her initial shock and upset changed to feelings of anger and of having been let down, particularly in how she had been informed of the death:

> 'I actually put an email into the service lead about the process and said that I found it really distressing and hopefully people could learn.'

In some cases however the fear of blame was compounded by examples of actually feeling blamed e.g. through the internal investigation or as a consequence of the management of the Coroner's hearing, despite the participants referencing evidence of the injustice of this.

> 'They are looking to blame. That's how it felt, they want to blame someone or a fault….. I was standing up there for the service.' (Fran)

> 'Like with any traumatic event that you experience it feels like it was only yesterday. I can remember exactly the day I found out.' …. 'it did make me feel like I was responsible, even though I know I wasn't, you do feel like you're on trial.' (Donna)

These accounts suggest that practitioners felt confident in their professional competence. However, feelings of doubt and fear of being blamed could still be raised as a consequence of their experiences subsequent to the death.

Sense of guilt

The majority of participants in this study described feelings of guilt. These could be categorised in three areas; (i) concerns over potential acts of omission, (ii) acts of commission:

> 'is it something I've done or something I've not done?' (Erica)

Or (iii) as with Amy, thoughts related to their emotional reaction:

> 'it was all about them… and it's me, kind of, talking about my stuff' .

Two practitioners described how the nature of their role as sole practitioner led to a heightened sense of responsibility contributing to feelings of guilt.

> ‘I was the only person who had contact with him that you know, if there were a couple of people involved in it whether that would feel different.’ (Cath)

Erica explained the change in sense of responsibility from her former role within a different mental health service:

> ‘we were all a team…we managed the caseload as a team…so I didn’t have that level of responsibility as such of being the only person that’s the point of contact for patients.’

Given the rarity of suicide and the caring role that the practitioners fulfil it is understandable that they would experience shock and upset. However, listening to their accounts makes it clear that the impact was deeper and more prolonged than a natural empathetic response.

6.3.2 Attempting to understand the causes of the suicide

This superordinate theme represents a process that all practitioners described in their attempts to resolve their reaction to this novel and distressing experience. Themes within this were self-questioning and doubt, searching for understanding, identification of systemic service problems, and the impact of the formal enquiry.

Self-questioning and doubt

Self-questioning and doubt could be viewed as related to the previous theme of guilt and self-blame:

> ‘…so I was really blaming myself, I suppose, for missing something beforehand.’ (Beth)

However, the examples included within this theme represented the need to understand what had been a shocking and therefore unexpected event:

> ‘That confused me more….so what did I miss, what ….yeah, how did I not know that it was as bad as that?’ (Beth).

Notice here the dilemma expressed by Beth and mirrored by other practitioners. Either they had not followed risk assessment protocols effectively or the risk assessments themselves were fallible. Cath explained how she had resolved this:

‘As good as risk assessments and support that we give, some people are going to end their lives and that is ...and I guess that, telling us that we can only do what we can do.’

Search for understanding

Practitioners described further attempts to both understand the cause of the suicide and how the level of risk had not been detected through assessment and treatment. Descriptions were offered of attempts to understand what had happened from the perspective of the person who had died, although the specific circumstances differed. One practitioner, Gina, for whom the person had been discharged many months previously, described the need to understand the factors that had contributed to the suicide and whether these related to therapy:

> ‘I just felt very, very sad for him. I felt very, very sad and also relieved that it was nothing….well as far as I know, it was nothing to do with the therapy that I’d done with him.’

For Gina, the access to further information relating to the circumstances of the death had enabled her to resolve fear of being at fault or in any way responsible.

For Erica, the suicide had occurred after the individual’s care had been transferred to secondary services due to suicidal behaviour. Therefore, the level of risk had already been identified and understood:

> ‘I wasn’t actually surprised that he did go on to complete suicide after a period of time.’

Although Erica’s former role had exposed her to the death of patients by suicide, that experience had been in a team context rather than as the sole practitioner in contact with the person who died.

> ‘...in that team you used to just be relieved if you weren’t the last person, and I know it sounds awful but as long as you weren’t the last one to have seen the person, you used to have this sense of relief….’

and given that the patient had been recently discharged:

> ‘And it was that kind of feeling that I knew he’d been seen by one of the mental health liaison nurses prior to the end…after I finished my input with him, but it’s still….yeah, it was really upsetting.’

Here again, arriving at the understanding that she was not responsible had brought relief from fear of blame and enabled her to focus on the sense of loss and upset.

Five practitioners commented more generally regarding their beliefs about the efficacy of suicide prevention efforts, and although it was not always clear if these indicated a change in attitude following the experience of loss, there were examples of these helping the practitioners resolve what had happened.

> 'We can never know all the circumstances, we can never prevent it from it completely happening.' ….
> 'I know that I could not have stopped him doing it.' (Donna)

Identification of systemic problems

Respondents highlighted problems with the service or the wider organisation as compounding factors. It is possible that identifying these wider factors helped to mitigate the sense of guilt and fear of blame. These included the level of complexity of the presenting problems of the people they worked with, the associated risk, the lack of more appropriate services, and the volume of workload.

> '… I soon learned it wasn't what they said it was at Uni and it was more moderate to severe rather than mild' (Fran)

A clear indication from Fran of her expectations to be working with people experiencing less complex mental health problems and, by association, lower levels of risk.

Impact of the official enquiry

Five participants described the formal review process as helpful in clarifying that they had carried out their duties correctly and in processing the event. Cath, for instance, explained:

> 'When I've looked through all the notes I know that I had and I am confident in that decision-making, my supervisors are...
> I was absolutely dreading having to go, but there was an element that, kind of, I don't know if closure is the right word, but just to….help me process it '

However, there were notable exceptions to the benefits of a formal review as three participants described how the investigations had significant negative impacts:

> ‘It kind of felt a little bit like being ...kind of put… being put at the stocks in a sense.’...
>
> ...‘You’re taken to court and you’re kind of punished for it. ‘ ,,,
>
> ‘…and so it very much didn’t feel like it was what it was supposed to be in terms of actually finding out the facts of what happened and don’t feel like really we got any further clarity.’ (Beth)

All practitioners described their attempts to understand the loss of life through suicide. This helped find some resolution of the emotional impact however this was either helped or hindered by formal reviews.

6.6.3 Learning from the tragic event

Growth through adversity

This theme incorporates the themes of growth through an adverse event:

> ‘…but kind of very clear, even quite soon afterwards, a drive to try and learn from the experience, and crucially to try and help others around you’ (Donna)

This determination to use the experience to support others was mirrored by Fran, whilst Beth described a sense of personal growth:

> ‘ I learnt lot about myself as a result of that’.

Impact on practice

Practitioners described some positive influence on risk management:

> ‘I am very thorough in risk assessments and when it comes to notes.’ (Erica)

> '…and as the years have gone on, I'm not so anxious, I am just more aware.' (Fran)

Two practitioners mentioned that they observed learning and improvements at the service level although it was not clear whether these changes had been a consequence of their experience or not:

> '…but I don't feel like it was as clear necessarily as it would be today and I imagine that it would be handled a little bit differently…' '…but I wonder if now, just again through the experience over the years, I suspect, that maybe now it would be this is what happens…'
>
> '….systems, protocols, procedures have developed.' (Amy)

Examples of impact on practice were in some cases short-term:

> 'Just distraction. Because I was so focussed on making sure I got a thorough risk assessment, I perhaps wasn't doing as much therapeutic work.' (Fran)

> 'Immediately after the event I think I went through phases of being hyper-vigilant to it ... to the avoidance side of it … I was so burnt out I couldn't kind of deal with it and if I don't ask I don't know and I don't have to do anything about it I suppose.' (Beth)

This also indicates a loss in confidence in dealing with risk, and in the process of risk assessment itself:

> 'What's the point anyway? He told me no risk and yet that happened'

For Beth however this was also temporary:

> 'I definitely have become more confident in managing risk'.

In summary, although some practitioners described negative changes in their management of risk, these were temporary, and all reported deriving learning from the tragic event.

6.3.4 Participants’ reflections on what helped in coping with the tragic event

This encompasses three themes: recognition of personal traits, preparedness, and helpful support.

Recognition of personal traits

Examples of personal traits that were seen as contributing negatively to the impact were perfectionism, pre-existing negative self-beliefs, a tendency to self-blame, and an attitude of fortitude that interfered with self-care and help seeking (see Table 13).

Preparation

Participants offered suggestions that might have helped them be better prepared for a patient suicide, some of which they were able to put into practice to help others in the future. These included increasing awareness of the potential for patient suicide, and more openness and communication about serious incidents,

> ‘Just knowing that it does happen… because I always felt like I was the only one because it wasn’t really talked about’ (Fran)

Practitioners also cited the importance of being confident in following the correct procedure for risk assessment and management .

Support

All practitioners described benefiting from the informal support of their direct team and colleagues:

> '...and getting loads of support, a lot of things, from other members of the team and stuff like that.' (Erica)

> 'I would say it has always been a pretty cohesive and supportive team. Well, actually I will take the pretty out of that, a really cohesive supportive team' (Amy)

although two described contact with managers as less helpful:

> 'I guess we were struggling to adjust to a new manager with a different style.'

> 'the high people and high managers that you never see but you get those emails from…' (Cath)

Three practitioners mentioned the benefit of having their reactions to the experience validated; they felt supported. The importance of the supervisory relationship was also mentioned.

> 'I suppose, the supervisory relationship has been very helpful…' (Erica)

However, note the ambivalence in Erica's comment. This and the fact that formal supervision was not cited as a source of support by other practitioners is surprising given the emphasis placed on regular supervision within IAPT services.

Having their training needs met was identified in three cases as important (e.g., in report writing and risk training).

> ‘Yes, sometimes I think we don’t do enough, really, about risk. I know it can be very inexact trying to manage risk but I think we could probably do with a little bit more risk training as well. I think that might be helpful.’ (Gina)

Notice also here that Gina refers to the potential fallibility of risk assessment and management protocols.

Clarity about support procedures was also suggested by Donna and Erica, although one practitioner (Amy) indicated that an individual approach to identifying support needs was desirable.

The descriptions related to this theme highlighted the diversity of practitioners’ experience but also the individualised nature of support needs. The benefit of raising awareness to the possibility of loss of a patient through suicide to better prepare practitioners was however reflected on by all but one participant (Table 13).

6.4 Discussion

Our study explored the personal and professional impact on practitioners within IAPT services following the death of a patient through suicide, and practitioners’ experiences of preparation and support. The practitioners described the initial emotional impact, a period of resolving the experience, longer-term consequential changes, and aspects that they found mitigated the impact. A previous qualitative review of the impact of patient suicides on psychiatrists, nurses, social workers and mental health workers on an inpatient unit identified three phases of experience reported by staff (Cotton et al., 1983). Evidence for each of the phases could also be identified in the accounts by the participants in the current study.

These phases were 1) working in shock 2) emergence of overwhelming feelings and 3) new growth over emotional scars. The main initial emotional impacts described in the present study were upset, shock, guilt and fear of blame. Practitioners reported becoming more cautious in managing risk. Previous studies involving other mental health professionals have reported comparable findings. The main reactions of nurses have been described as shock, fear, guilt and stress (Wang et al., 2016). Social workers reported sadness, shock, self blame, anger and fear (Sanders et al., 2005) whilst psychologists indicated shock, anger, guilt, distress and sadness (Finlayson & Graetz Simmonds, 2016). One study (Séguin et al., 2014) reported, in contrast to others studies, that although practitioners did report shock, helplessness and sadness the overall emotional impact and reaction was low. The authors of that study suggested that a number of features of their sample might explain this finding and indicate protective factors. These included that the practitioners reported receiving sufficient support, they worked in a team setting and had experienced a number of suicides with a potential habituation effect. The current study provides some support for this explanation as the impact here was related to problems with support, having sole responsibility and lack of previous exposure.

6.4.1 Preparing practitioners

Following a traumatic event, the individual has to either assimilate or accommodate the novel experience into their existing understanding (Ehlers and Clark, 2000; Resick, Monsoon and Chard, 2014). Prior beliefs held by practitioners could interfere with their ability to cope with the experience of losing a patient to suicide and contribute to psychological and behavioural disturbance. Such unhelpful beliefs could include: that their role (and the task of risk assessment) held the sole responsibility to prevent all deaths, that the elimination of all suicide was achievable, that the service they worked for was for people of low risk therefore suicide was extremely unlikely, or as a practitioner they had sufficient efficacy to prevent all suicides on their caseload. If the experiences of losing a patient to suicide were shared among the wider team the knowledge that such events occur would help prepare practitioners and other unhelpful beliefs could be shifted (I.e., that ‘competent practitioners do not lose patients’ or ‘I am the only one this has happened to’) and ultimately lead to a cultural shift. Barriers to sharing experience should be explored and addressed, for example belief in this being a taboo subject, fear of shame or blame, collective silence, or lack of opportunity. An example of services’ response to this problem is the introduction of Schwartz Rounds (Robert et al., 2017) which are designed to give all staff a forum to discuss the emotional impact of working in healthcare. Likewise a system of peer support to encourage practitioners to seek help, such as in the Trauma Risk Management (TriM) approach, could be adopted (Greenberg et al., 2010).

6.4.2 Mitigating the sense of guilt

Helping mitigate practitioners’ sense of guilt could be informed by Kubany’s model for the understanding and treatment of trauma related guilt ((Kubany & Manke, 1995; Young et al., 2021). This highlights four potential cognitive biases: hindsight-bias (i.e., presuming that current knowledge of the outcome was known at the time of the event) *‘Now I know what happened, if I’d had that knowledge when I went back, you would do something different because you know the outcome*’; responsibility (i.e., taking on all or most of the responsibility for the event) *‘this was my case and he was my patient and it was just me and I thought this is…I’m responsible for this young lad’*; justification (i.e., believing there was no justification for choices taken at the time and ignoring the conditions under which you took those choices) '*….judged and criticised for the decisions I made';* and wrongdoing (i.e., the belief that you have violated personal values) *'dread feeling that you've done something wrong'.* The underlying themes of each of these categories of bias could potentially be addressed either with the individual practitioner or for example, to identify targets to be incorporated in the educational component of risk management training.

The function of self-questioning and self-doubt could be explained by the need to understand what had happened in order to better prevent it happening again (therefore fulfilling the professional role whilst avoiding a future aversive experience). However, if performed in a maladaptive way, there can be a close link between these processes and the emotional reaction of guilt. This could be viewed as parallel to the potential impact of a formal review; if carried out in the spirit of learning rather than blame attribution, the processes can helpfully contribute to resolution.

6.4.3 Fear of Blame and Just Culture

Within the NHS and in health and social care organisations more generally the need to shift from a blame culture to a just culture has long been recognised (NHS England, 2021). The shipping and aircraft industries have been seen as exemplars of this approach. Encouraging an openness to discussing problems and mistakes enables learning from adverse events and the promotion of safer systems. The ubiquity of fear of blame amongst the practitioners in the current study would indicate that more needs to be done to move away from the perception of a blame culture. The adoption of a just culture could help reduce the negative impact on practitioners and promote learning and growth.

6.4.4 Barriers to recovery

A number of factors could combine to hinder a practitioner’s ability to cope with and recover from the experience of a patient dying by suicide. An initial problem could be insufficient preparation characterised by a lack of prior knowledge or clarity (i.e. patient’s level of suicide risk, extent of responsibility for risk management, required process following a death, likely impact, support available). As highlighted elsewhere, we need to better prepare practitioners for such losses (Bowers et al., 2006; Chemtob et al., 1989; Gibbons et al., 2019; Hendin et al., 2000; Jacobson et al., 2004; Sherba et al., 2019; Wang et al., 2016; Wurst et al., 2011). This lack of preparation could combine with personal characteristics (e.g. tendency to self-blame, perfectionism, reluctance to seek help) and negative perceptions of the organisational culture (i.e. blame based) may contribute to the reactions of shock, guilt and fear of blame. These reactions will be moderated in turn by factors such as the organisational culture (including degree of openness, support available, and the manner in which formal processes are conducted) and the extent to which these contribute in a restorative way to help the practitioner resolve the experience and promote growth and learning.

The finding from this study that all participants valued and benefited from informal and peer support is reported extensively in the existing literature (Pieters et al., 2003,Trimble et al., 2000). Some studies describe this form of support as being the most highly valued (Alexander et al., 2000; Cotton et al., 1983). In contrast, whilst in the current study only one participant discussed the benefit of supervision, previous studies have described individual supervision as being helpful and the most valued of the formal processes in place (Courtenay and Stephens, 2001; Kleespies et al., 1990; Ruskin, 2004; Trimble et al., 2000).

A formal process, if conducted in a collaborative and supportive way, can be helpful to counter doubt, the sense of guilt, fear of blame, and to foster a spirit of learning through adverse events whilst guarding against hollow reassurance. Conversely, however, the process can be experienced as fault finding, punishing or shaming if carried out in a less supportive manner. The evidence from previous studies for the benefit of formal processes has indeed been mixed; some finding critical incident debriefs or case reviews useful (Alexander et al., 2000; Kleespies, 1993; Kleespies et al., 1990; Landers et al., 2010; Pieters et al., 2003; Rothes et al., 2013; Sherba et al., 2019), whilst others reported them unhelpful (Bowers et al., 2006; Courtenay & Stephens, 2001, Hendin et al., 2000) and insensitive or persecutory (Gibbons et al., 2019).

On balance, formal reviews are likely to be beneficial if they promote understanding and learning and therefore help overcome the sense of shock and self-blame. However, clearly the manner and spirit in which the review is performed is crucial, so as not to compound or create feelings of guilt or fear of blame.

6.4.5 Limitations

A potential limitation of the study arises from the sampling process. It is possible that those who had been most distressed may have been unwilling or unable to come forward. All participants were female,however this reflects in part the predominantly female IAPT workforce (NHS England and Health Education England, 2016). Furthermore, there is no conclusive evidence to suggest variation in practitioners’ responses based on gender (Sandford et al., 2020).

Integral to the IPA approach is the double hermeneutic; the researcher is interpreting and giving meaning to the interpretation of the event by the participant. As such, it is important to acknowledge how the researcher’s experiences will influence this interpretation. On reflection two points seem particularly relevant, firstly the researcher has worked in an IAPT service as a CBT therapist and has first-hand experience of the impact on colleagues of the loss of a patient through suicide. As a therapist, you are aware that your role is to try to understand any relevant maladaptive meanings that people attach to events and to help the person reappraise these to reduce the emotional impact. In the role of the interviewer, the researcher was acutely aware that the participants had been through the process of resolving the experience, and the goal was to understand this rather than effect change. One possible outcome was that the researcher was perhaps reluctant to pursue particular lines of questioning for concern of destabilising adaptive interpretations. This may have impacted on the richness of the data gathered. Additionally, the interviewer had previously carried out a systematic review on the impact of patient suicide on practitioners. This raises the possibility that the interview questioning was primed to look for evidence that supported previous learning at the expense of a fully objective approach.

6.4.6 Recommendations

There are a number of recommendations arising from this study. Practitioners need to be clear on the extent of their responsibility and supported to develop the confidence to actively engage with the patient in meaningful discussion around risk. If practitioners are confident in the process of risk assessment formulation and safety planning that guidelines recommend (Department of Health, 2007), they are more likely to engage in it effectively and less likely to be adversely affected in the event of a suicide. Key recommendations that could help mitigate the impact of patient death on practitioners include provision of training that increases awareness of the potential impact and support available in the event of the loss of a patient by suicide and that services develop cultures that support learning after adverse events. For a full list of recommendations, see Table 15.

6.5 Conclusion

The impact on IAPT practitioners of the death through suicide of a patient appears to be consistent with that found in studies of mental health practitioners more broadly (Sandford et al., 2020). It is hoped that the current study will help raise awareness of this amongst practitioners such as those working in IAPT services and training centres, and encourage them to consider how best to prepare and support practitioners in this eventuality. In the words of Donna:

> ‘It is one of those things I think everybody who works in the field, mental health, dreads so why not address it before, rather than wait for it to happen, or worry about it happening, why not prepare people a bit more’.

Table 15: Recommendations

Delivery	Recommendations
Risk training by the providers of the initial core professional training for this group of staff should cover:	• The recognition of the likelihood of experiencing a patient suicide. (i.e. the ‘career prevalence’ of such an event). • The limitations of risk assessment tools. • The dynamic nature of risk (e.g. risk maybe low when a person is allocated to PWP but circumstances could quickly change). • The severity and complexity of presentations within services such as IAPT. (Still widely understood to be categorised as ‘mild to moderate’)
In service training should include:	• Clear understanding of the service and statutory procedures following a suicide. • Training in risk assessment, formulation and safety planning, including recognition of the poor predictive power of risk assessment tools and the importance of the therapeutic encounter to enable open discussion of risk. • Clear guidance on self-care and support available in the event of a patient death.
Services should develop:	• An open learning culture. • A recognition of shared responsibility. • A clear procedure for communicating to the practitioner (by those with direct management or clinical responsibility for that person) in a caring and supportive manner. • The opportunity for the practitioner to state their preference for support. • Full support for report writing. • Ongoing regular feedback during the process.

	• Offer access to a colleague volunteer with personal experience of the loss of a patient.

Chapter 7 General Discussion

Background: This chapter discusses the main findings from the three studies conducted within this thesis and places these in the context of previous research, future directions and overarching conclusions.

Methods: The findings from the three studies are discussed in terms of the three research questions set out in Chapter 1: 1) What is the impact on mental health practitioners of losing a patient to suicide?; 2) Can the factor structure of the Attitudes to Suicide Prevention scale be replicated, and consequently can it be used to examine the attitudes of NHS trust staff to suicide prevention? and; 3) How can practitioners' confidence in their ability to assess, formulate and manage suicide risk be measured?

Results: The experience of losing a patient to suicide can have a profound and lasting impact on mental health practitioners both in their personal and professional reactions. Practitioners in IAPT services experience comparable reactions to other mental health practitioners. No satisfactory factor structure was found for the Attitudes to Suicide Prevention Scale. The newly developed scale designed to measure practitioners' confidence in assessing, formulating and managing risk of suicide displayed good psychometric properties and these provisional findings indicate a single factor structure representing confidence in risk assessment, formulation and management of suicide risk.

Conclusions: The findings from Study Three support the recommendations from the systematic review. Mental health services and training providers should ensure that practitioners are prepared for the eventuality of a patient suicide and are adequately supported if they experience such a tragic event. The selection of the Attitudes to Suicide Prevention Scale for research purposes should be treated with caution, indeed there is sufficient rationale to develop a new measure. A newly developed scale designed to measure practitioners' confidence in assessing, formulating and managing risk displays promise.

7.1 Main Findings

The background to this thesis was an initiative within a primary care mental health service in England to focus on suicide prevention. This involved supporting a culture that maintained an awareness of suicide risk, the development of suicide prevention training, and acknowledging the responsibility to support practitioners in the event of them losing a patient through suicide. Some of these efforts are addressed in this thesis; gauging staff attitudes to suicide prevention, measuring practitioners' confidence in their assessment, formulation and management of suicide risk, and investigating the impact on practitioners of the death of a patient by suicide. Gauging staff attitudes was considered important as this would help focus the service on suicide prevention but would also inform the development of training. Whilst there are numerous measures designed to assess attitudes to suicide, only one was found specifically focussed on suicide prevention (ie., the Attitudes to Suicide Prevention Scale, Herron et al., 2001)). The validation of this latter measure had not been replicated, so as a result, this was investigated in the thesis.

As there was no existing measure to assess clinicians' confidence in the RAFM approach, a questionnaire was developed specifically for this purpose and a preliminary psychometric evaluation was conducted.

In order to better support practitioners we needed to know more about the impact of losing a patient to suicide. To this end, a systematic review was conducted and it provided relevant information. However, the review also highlighted gaps, revealing that a study of the impact on practitioners within services such as the host IAPT service had not been carried out. The findings of the other studies within this thesis are discussed in relation to the three broad research questions.

1) What is the impact on mental health practitioners of losing a patient to suicide?

The findings of the systematic review into the impact on mental health practitioners were presented in Chapter Two. The conclusion was that the death of a patient through suicide can have a significant personal and professional impact on practitioners. This review represented an important synthesis of both quantitative and qualitative studies. The most recent, though partial review prior to this had concluded that stress reactions or affective-related symptomatology were minimal (Séguin et al., 2014). In contrast to this the current systematic review found that the death of a patient by suicide can have a considerable, and lasting, emotional impact on mental health professionals, most commonly manifested as guilt, blame, shock, anger, sadness, anxiety, and grief. The impact is comparable to that of other traumatic life events, with notable impacts on professional practice including self-doubt and being more cautious and defensive in the management of suicide risk.

The review also highlighted that the majority of studies had focussed on psychiatrists and psychologists and that no studies had investigated the impact on those working in primary care mental health services such as those set up following the English Improving Access to Psychological Therapies (IAPT) initiative. This led naturally to the study presented in Chapter Six, a qualitative study of the impact on mental health practitioners in an IAPT service of the death of a patient by suicide. This study found that the self-reported emotional responses were of shock, upset, guilt and fear of blame, which is consistent with that found in studies of other mental health practitioners working in a range of settings (Finlayson & Graetz Simmonds, 2016; Foley & Kelly, 2007; Lafayette & Stern, 2004; Wang et al., 2016) (as presented in Chapter Two). Some findings were more specific to the context in which the study took place, however. For example, one participant highlighted the heightened sense of guilt when working as the sole practitioner in contact with a patient, compared to working in a team with a sense of shared responsibility. Another practitioner highlighted that the feelings of shock were linked to the lack of awareness of the potential complexity of problems clients present with and the level of risk clinicians may be exposed to in a primary care service.

2) Can the factor structure of the Attitudes to Suicide Prevention scale be replicated, and consequently can it be used to examine the attitudes of Trust staff to suicide prevention?

The findings described in Chapter Four were clear: the original factor structure of the Attitudes to Suicide Prevention Scale could not be replicated. Two items of the scale were excluded as their item-scale correlation was poor and one item was excluded as it used different anchor points from the other items. No adequate factor structure emerged for the remaining 11 items.

In light of these findings the use of this scale to examine the attitudes of trust staff to suicide prevention should be treated with caution. With this in mind, the findings following administration of the scale to the whole Trust staff group, were that, overall, there were significant differences in attitudes across some characteristics of staff groups (i.e., those who had attended suicide awareness or prevention training, gender and by level of patient contact), but not between groups defined by age range. Generally, however, findings indicated that there were positive attitudes across all Trust staff.

3) How can practitioners' confidence in their ability to assess, formulate and manage suicide risk be measured?

Chapter Five presented the initial validation of a new scale to measure practitioners' confidence in their ability to assess, formulate and manage suicide risk. Factor analysis indicated a single-factor structure, the scale had good test–retest reliability and it detected statistically significant increases in confidence between pre- and post-training and between pre-training and six-month follow-up. Although this should only be considered as a preliminary examination of the scale psychometrics that requires further replication, these initial findings indicate the viability of this measure as a potential tool to measure practitioners' confidence, which should help guide the further development of training.

7.2 Broader Interpretation and synthesis of results

1) What is the impact on mental health practitioners of losing a patient to suicide?

The synthesis of studies presented in the systematic review (Chapter Two) concluded that the death of patient by suicide can have a profound impact on mental health practitioners from a range of professions and a variety of settings. The findings from the qualitative study (Chapter Six) indicated that practitioners in an IAPT service experience a comparable impact to those mental health practitioners in other settings. This makes both intuitive and theoretical sense, although the study reported here also gave some indications of how the working context may influence their response to the death(s). For example, there was a perception of a service culture of blame that may increase fear of blame and cause a sense of heightened responsibility. It was also challenging working as a lone practitioner, with an associated increased fear of blame compared to when responsibility is shared in a team. There was also a lack of preparedness, which may be related to the rarity of suicide or a misconception about the nature of risk. As noted elsewhere in a previous non-systematic review, Castelli et al. (2014) concluded that impact was relatively low, however the authors of that study did suggest that a number of factors might have accounted for this apparent discrepancy. These factors included the following: that (i) the majority of their sample had experienced several patient suicides (with potential habituation effects and hence feeling better prepared), (ii) practitioners worked in team settings with shared responsibility, (iii) they reported receiving sufficient support, and (iv) they worked in a socio-cultural setting in which they felt little sense of blame or fear of litigation.

2) Can the factor structure of the Attitudes to Suicide Prevention scale be replicated, and consequently can it be used to examine the attitudes of trust staff to suicide prevention?

The findings of Study One have a number of implications specifically to efforts to measure staff attitudes to suicide prevention and more broadly to the selection of measures for practice-based research. The initial scale validation could not be replicated by the application of best practice factor analytic methods. An adequate factor structure was not found, thereby suggesting that the scale is not measuring a single construct representing a global attitude to suicide prevention nor sub-constructs of such attitudes.

Despite numerous papers describing best practice in factor analysis (Costello & Osborne, 2005; Watkins, 2018), studies are frequently published in which suboptimal statistical decisions have been made. This is sometimes attributed to the fact that popular statistics packages often have defaults that encourage poor practice (Osborne & Costello, 2009). It is important not to presume the validity of a scale simply because that scale has been widely used. This has particular implications for busy clinicians attempting to carry out service audits who need to be confident that scales they select are fit for purpose. Ensuring a scale has been properly validated and that these findings have been replicated should be embedded in the early planning stages of such an exercise.

3) How can practitioners' confidence in their ability to assess, formulate and manage suicide risk be measured?

The initial study into a newly developed scale yielded promising findings for its use in measuring practitioners' confidence in assessing, formulating and managing risk of suicide.

Factor analysis indicated a single-factor structure, and the scale showed good test–retest reliability. Statistically significant increases in confidence between pre- and post-training and between pre-training and six-month follow-up were indicated with Cohen's effect size values suggesting a moderate to large effect.

7.3 Strengths and limitations of studies

A strength of the present collection of studies is that they are an example of practice-based research. Collaborations between clinically-based psychotherapists and academic-based researchers have a number of potential benefits that can contribute to improvements in patient care. These can include improving the academic rigour of the research, reducing the implementation gap, and ensuring the real world effectiveness of interventions that have displayed promising outcomes in efficacy studies. Furthermore, this thesis adopted a mixed methods approach with the potential benefits of a combination of both quantitative and qualitative studies. Broadly speaking, qualitative approaches enable in-depth analysis of the experiences of a small number of individuals and can help to generate theory. Quantitative approaches are used to test theory, and most typically cover larger sample sizes. Consequently however, these studies are also subject to a number of potential weaknesses that affect many quantitative and qualitative research studies.

Recruitment across the studies was susceptible to selection bias. It is likely that the respondents to the Attitudes to Suicide Prevention Scale (ASPS) questionnaire and those who participated in the IPA study were not wholly representative of the populations from which they were drawn. The same selection bias is also the case for those studies included in the systematic review. Similarly, given the retrospective nature of the studies included in the systematic review and the design of Study Three, recall bias is likely to have affected the findings as the accuracy or completeness of participants’ accounts of impact could potentially change over time. It is also important to consider the sample sizes in the studies. Study One (utilising the ASPS) benefited from a large number of participants (n=957) which was particularly important for the statistical power of the factor analysis. The response rate in Study One however was low which would have been relevant if the outcomes from the scale had been analysed. It would not have been possible to generalise out the findings to the whole workforce of the Trust. In contrast, the sample size for Study Two was modest (n=128), limited by the number of people working in the host IAPT service who had undertaken the training. Although the sample size was sufficient to meet good practice guidelines for factor analysis (Costello & Osborne, 2005), the study would have benefited from a larger sample, as larger samples are generally believed to improve confidence in exploratory factor analysis (Yong & Pearce, 2013). Furthermore, the response rate at follow up after training was also low which increases the potential for bias to be introduced. The follow up group may not be representative of the original sample, for instance those who felt least confident may have been loath to report this and therefore may have been more likely to not respond.

More general limitations of the studies relate to the nature and breadth of the topic of the thesis itself. The original motivation for the thesis stemmed from the aim to improve the focus and effectiveness of suicide prevention activities within the mental health service. The desire to understand the factors that influence effective engagement in suicide prevention led to the selection of the studies reported on. However, there is a paucity of research on barriers to effective engagement in this area and it is also a very broad topic. For example, do practitioners avoid asking about suicidal ideation for fear of causing harm or through lack of knowledge about how to manage risk? There are natural limits to research resources and time within a busy NHS service as well as what can be adequately addressed within the scope of one PhD thesis.

A further limitation was the use of the ASPS itself to survey the staff of the NHS Mental Health Trust to gauge attitudes to suicide prevention. The ASPS was selected as it was the only available validated scale designed for this purpose. However, it quickly became apparent that the original validation of the scale had not been replicated and on closer examination it transpired that the construct validity had not been tested according to most recent best practice guidelines. Although this led to the factor analysis study reported in Chapter Four, the results of that study indicate that the findings of the Trust-wide survey should be treated with caution. This concern is discussed further in the clinical implications section below. The importance of replication is also relevant to the development of the measure in Study Two (Chapter Five), the findings can only be treated as preliminary and require further investigation. As well as replicating the initial findings, further analysis would be desirable, for instance convergent and divergent validity were not examined. All of the studies may have been subject to gender bias. The majority of the participants were female, however this reflects the characteristics of the target population, that the IAPT workforce is predominantly female (NHS England and Health Education England, 2016).

7.4 Clinical and research implications

7.4.1 Support for mental health practitioners in primary care

Study three (presented in Chapter Six) supported the conclusion from the systematic review (Chapter Two) that more should be done to support mental health professionals in the event that they may lose a patient through suicide. Together they led to the following recommendations for practitioner training and support:

1) Core professional suicide prevention training for this group of staff should cover:

The recognition of the likelihood of experiencing a patient suicide (i.e. the ‘career prevalence’ of such an event).
The limitations of risk assessment tools.
The dynamic nature of risk (e.g. risk may be low when a person is allocated to PWP, but circumstances could quickly change).

That although primary care services such as IAPT were designed to work with people with mild to moderate mental health problems, in reality people present with more severe and complex difficulties.

2) Continuing professional development training should include:

The recognition of the likelihood of experiencing a patient suicide.
Clear understanding of the service and statutory procedures following a suicide.
Training in risk assessment, formulation and safety planning, including recognition of the poor predictive power of risk assessment tools and the importance of the therapeutic encounter to enable open discussion of risk.
Clear guidance on self-care and support available for practitioners in the event of a patient death.

3) Services should develop:

- An open learning culture.
- A recognition of shared responsibility.
- A clear procedure for communicating to the practitioner (by those with direct management or clinical responsibility for that person) in a caring and supportive manner.
- The opportunity for the practitioner to communicate their individual preference for support.
- Full support in writing any reports for serious incidents requiring investigation.
- Ongoing regular feedback during the process.
- Offer practitioners access to a colleague volunteer who has had personal experience of the loss of a patient.

These recommendations should be considered in the context of the Self-harm and Suicide Prevention Competence Framework (National Centre for Collaboration in Mental Health, 2018) which describes best practice according to current knowledge about the effectiveness of approaches and interventions for self harm and suicide prevention.

7.4.2 Attitudes to Suicide Prevention

Assessing staff attitudes to suicide prevention in mental health services can help to raise the profile of suicide prevention within an organisation, recording these attitudes is a priority. This can also be helpful in the development of training which specifically addresses any maladaptive attitudes that may compromise suicide prevention efforts. Given its psychometric properties, the use of the ASPS for this purpose should be treated with caution. However, inspection of individual item-level data from the ATSP may be helpful to identify specific problematic attitudes. The development of a new measure to assess staff attitudes to suicide prevention is recommended.

7.4.3 Measuring practitioners' confidence

The new measure reported on in Chapter Five could be useful in gauging practitioners' confidence in the RAFM approach and in evaluating and developing training. It is the first scale specifically focussed on all the elements of risk assessment and formulation. Further research studies to replicate the psychometric properties of this new measure are required.

7.5 Future directions

7.5.1 Development of a new questionnaire to assess staff attitudes to suicide prevention

The development of a new measure of staff attitudes to suicide prevention is encouraged. This would involve preliminary development through expert consensus, piloting of the measure to confirm face validity, exploratory factor analysis and confirmatory factor analysis for construct validity, internal and test-retest validity testing, testing for convergent and divergent validity and further replication studies.

7.5.2 Development of a Resource for IAPT clinicians.

An early output from this thesis was the production of an information leaflet (Appendix J) which was subsequently given out at induction to all new members of staff in the IAPT service and soon adopted by other services within the Trust. The purpose of this was to help practitioners become better prepared for the rare event of a patient suicide. This was based on preliminary findings and information gained from a scoping search prior to the systematic review. The leaflet contained information designed to highlight the potential for patient suicide, the common reactions of practitioners, the process to be followed and the support available.

7.5.3 Development and appraisal of suicide prevention training using the new measure

The new measure of practitioner confidence in assessing, formulating and managing risk of suicide can be used in the continuing development of training in mental health services. Specific areas in which practitioners report low confidence could be identified by analysing measures administered prior to training. The training could then be adapted to focus on these areas in more depth. If differences were detected in different cohorts of practitioners, i.e., those with different professional roles, bespoke training could be designed to meet their needs. The effectiveness of training could be evaluated by administering the measure following training, and necessary improvements implemented. Using the measure as a follow-up procedure after training could help inform decisions on how frequently top-up training should be provided.

7.5.4 Development of a training resource for CBT therapists – 'IMV model in practice'

Staff in primary care mental health settings such as IAPT are not expected to provide therapy to acutely suicidal individuals or target acute suicidal thoughts or behaviours directly. However, feedback in supervision and following training events indicates that practitioners value and appreciate training that improves their knowledge about models of suicidal behaviour (e.g. Joiner's Interpersonal Theory [IPT] (Joiner, 2007), Williams' Cry of Pain (Williams, 1997), O'Connor's Integrated Motivational Volitional [IMV] (O'Connor & Kirtley, 2018)). Further anecdotal evidence from supervision and feedback also indicates good post training uptake and application of specific suicide prevention interventions such as the use of Safety Planning (Stanley & Brown, 2012). Practitioners describe being more confident engaging in suicide risk assessments with better background knowledge and the ability to offer a practical intervention. A common feature of these models of suicidal behaviour is that they identify psychological processes that are evidenced as being moderators that act on a pathway that includes the development of suicidal ideation and can lead to suicidal behaviours. Examples of these psychological moderators are socially prescribed perfectionism, perceptions of burdensomeness and thwarted belongingness, rumination and compromised problem solving. These are often targets for CBT interventions when treating depression or anxiety disorders. A helpful future development would be the development of educational materials that help therapists understand psychological models of suicidal behaviour from a CBT perspective. This would aid them in developing ‘dual formulations’ that both focussed on the treatment planning for the central presenting depression and/or anxiety but also refined the impact that therapy had on the reduction of suicide risk.

This has subsequently led to publication of an article: Sandford, D., Thwaites, R., Kirtley, O., & O’Connor, R. (2022). Utilising the Integrated Motivational Volitional (IMV) model to guide CBT practitioners in the use of their core skills to assess, formulate and reduce suicide risk factors. The Cognitive Behaviour Therapist, 15, E36. doi:10.1017/S1754470X22000344

7.5.5 Qualitative study: Practitioner perception of barriers to effective engagement in suicide prevention

Further understanding of the barriers to effective engagement by mental health practitioners in suicide prevention would be beneficial. This could be achieved through a qualitative study methodology to explore mental health practitioners’ perceptions of the relevant factors. Data gathered through a series of interviews could help to further develop suicide prevention training and to improve the support offered to practitioners to help them engage effectively in suicide prevention efforts.

7.6 Conclusions

Understanding staff attitudes could help identify potential barriers to effective engagement of practitioners in suicide prevention. The selection of the Attitudes to Suicide Prevention Scale for such research purposes should be treated with caution and given the findings of Study One there is a sufficient rationale to develop a new measure. Effective engagement is also likely to be affected by practitioners' confidence in their ability to assess, formulate and manage suicide risk. A newly developed scale (Study Two) displays promise as a measure of for this purpose. The findings from Study Three support the recommendations from the systematic review. Mental Health services and training providers should ensure that practitioners are prepared for the eventuality of a patient suicide and are adequately supported if they experience such a tragic event. The provision of regular suicide prevention training can help create a culture that supports engagement in this vital activity. Training should also address any negative attitudes to suicide prevention, increase practitioner's confidence in this area, prepare staff for the potential experience of losing a patient through suicide and inform them of what to expect in such an event and the support available.

Appendices

Appendix A Data Extraction Form for Systematic Review

Title		Country	
Author(s)		Year	
Study Type	Quantitative	Qualitative	Mixed

Population (Mental Health Professionals)					
Selection (method, inclusion/ exclusion)					
Profession(s)					
Number sampled		Number included (%)		Missing	
Number reporting death of patient by suicide					
Demographics e.g. Gender, Age, Experience, Specialism.					
Setting / Client Group					
Outcomes/ Aims					
Findings					

Impact on Health Professional	
Support offered to Health Professional	
Predictors	
Evaluation	
Strengths	
Weaknesses	
Notes	

Appendix B PRISMA Protocol for Systematic Review

(Moher D et al: Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. Systematic Reviews 2015 4:1).

Title :	**A Systematic Review of the Impact on Mental Health Professionals of Losing a Patient Through Suicide.**	
Registration:	Prospero	Registration number:
Reviewer: David M Sandford PhD student Suicidal Behaviour Research Laboratory (SBRL) Mental Health and Wellbeing Institute of Health and Wellbeing College of Medical, Veterinary and Life Sciences University of Glasgow Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH David.Sandford@cumbria.nhs.uk	**Supervisor:** Dr Olivia Kirtley Suicidal Behaviour Research Laboratory (SBRL) Mental Health and Wellbeing Institute of Health and Wellbeing College of Medical, Veterinary and Life Sciences University of Glasgow Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH	**Supervisor:** Prof Rory O’Connor Suicidal Behaviour Research Laboratory (SBRL) Mental Health and Wellbeing Institute of Health and Wellbeing College of Medical, Veterinary and Life Sciences University of Glasgow Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH
Funding	PhD funded by Cumbria Partnership NHS Foundation Trust.	
Introduction:		
Rationale: There is a growing body of studies investigating the impact on mental health professionals of losing a patient through suicide; the latest synthesis of these was a literature review of studies completed up to 2012 (Seguin et al., 2014). That paper focussed on those studies that had		

employed an outcome measure and concluded there were:

> 'very minimal reactions with regard to the presence of stress- or affective-related symptomatology, but an impact in the way professionals conduct their clinical assessment and reach treatment decisions' (Seguin et al., 2014).

This review will update and extend the Seguin et al (2014) review by performing a systematic search of the literature and including a synthesis of both quantitative and qualitative studies.

The majority of studies have investigated the reactions of psychiatrists or psychologists. However a recent English National Health Service initiative (The Improving Access to Psychological Therapies (IAPT) programme (Department of Health, 2008)) established to provide access to evidence-based psychological therapies to high volumes of patients in line with best clinical practice (NICE, 2004a; 2004b) has necessitated the development of a new work force equipped to deliver the programme.

This review will explore if any research has been carried out within this new workforce and consider if the findings to date can be generalised to IAPT services.

Objectives:

A systematic review of the impact on mental health professionals of losing a patient through suicide.

Population :	Mental Health Professionals or Teams of Mental Health Professionals.
Exposure:	Having experienced the loss of a patient through suicide (either in active treatment or post-discharge).
Outcomes or themes:	The impact in two domains: 1) personal (emotional response /ways of coping / support received) and 2) professional (confidence/behaviour in clinical sessions/attitude) practice responses. Identifying interventions which minimise the negative sequelae of loss of a patient through suicide.

This review will also establish if research has been carried out within IAPT services.

Methods:

Eligibility:	Databases searched from inception to current date, Search not limited by study design, Studies restricted to English language.	
Information Sources:	Medline via Web of Science.	CINAHL, ERIC, PsychInfo, PsychArticles. Via EbscoHost:
Search Strategy:	TS:mapexp=((Suicide AND (Patient OR Client OR Service User)) AND ((professional OR practitioner OR clinician OR nurse OR worker OR therapist OR psychologist OR psychiatrist OR counselor OR OT OR GP) AND (reaction OR impact OR effect)))	TX (suicid*) AND (TX patient* OR TX client* OR TX service user*) AND TX (professional* OR practitioner* OR clinician* OR nurse* OR worker* OR therapist* OR psychologist* OR psychiatrist* OR counselor* OR ot OR GP) AND TX (reaction* OR TX impact* OR TX effect*)
Study Records:		
Data management	Literature search results will be uploaded to the Covidence web based software system that facilitates the screening process.	
Selection process	The reviewer will screen the titles and abstracts yielded by the search against the inclusion criteria. The full reports will be obtained for all titles that appear to meet the inclusion criteria or where there is any uncertainty. The reviewer will then screen the full text reports and decide whether these meet the inclusion criteria. Additional information will be sought from study authors where necessary to resolve questions about eligibility.	

Data collection process	Data collection will be done independently by the reviewer.
Data items	Data will be collected on professional role, working environment, length of experience, relevant training, emotional and behavioural responses and support sought or offered.
Outcomes and prioritization	The impact or reaction experienced, with particular reference to emotional and behavioural responses and support received.
Risk of bias in individual studies	Evidence that potential reporting biases have been considered will be reviewed and reference is given to time elapsed between data collection and experience of loss.
Data:	
Synthesis	A systematic narrative synthesis will be provided with information presented in the text and tables to summarise and explain the characteristics and findings of the included studies. The narrative synthesis will explore the relationship and findings both within and between the included studies
Meta-bias(es)	Generalisation of findings, selection of populations studied
Confidence in cumulative evidence	Consideration will be given as to whether populations studied are representative of broader populations of mental health workers.

Appendix C IPA Study Protocol

The impact on Improving Access to Psychological Therapy (IAPT) practitioners of the death of a patient through suicide: an interpretative phenomenological analysis.

IRAS Number: 249864

Study Summary

Study Title	The impact on Improving Access to Psychological Therapy (IAPT) practitioners of the death of a patient through suicide: an interpretative phenomenological analysis.
Short title	The impact on practitioners of the death of a patient through suicide.
Study Design	Qualitative, interpretative phenomenological analysis (IPA).
Study Participants	NHS IAPT Practitioners
Planned Size of Sample	6 - 8
Planned Study Period	February 2019 – December 2019
Research Question/Aim(s)	• What is the impact of losing a patient to suicide on practitioners in Improving Access to Therapy (IAPT) services? • What helped or would help to mitigate the more negative responses of practitioners both personally and in their work practice? • Is there any evidence of personal or professional growth following such a loss and what may support this? • How does the impact on IAPT practitioners compare to other professional groups that have previously been reported on?

Background

Within First Step (Cumbria's Improving Access to Psychological Therapy (IAPT) service) we witness the impact on individual practitioners when they experience the tragic death through suicide of a person they have been working with clinically. Informal feedback has suggested that levels of stress are increased by practitioners feeling unprepared for the eventuality of a death due to the rarity of such an event, low awareness of the potential for such an event, lack of knowledge of the process to be followed following a SIRI (Serious Incident Requiring Investigation, and the lack of open discussion to share learning following a SIRI. A brief scoping literature search suggests that previous studies in this area have mainly focused on the impact on psychiatrists or mental health workers operating within a
multidisciplinary team. IAPT practitioners are often the only or main point of contact with patients (given the level of intervention at steps 2 and 3 within the stepped care model). In order to better support staff within First Step and other similar mental health services we need to better understand the range of impacts on, and variable patterns of experience of, staff and to gather their perceptions of best practice in responding. To our knowledge no studies have explored the impact of losing a patient by suicide on the relatively new work force that comprises IAPT services. Such study could inform services and training providers on how best to prepare and support practitioners in such an event. Dissemination of the findings of such a study could in itself serve to increase awareness of this risk and therefore better prepare practitioners.

Research Questions

- What is the impact of losing a patient to suicide on practitioners in Improving Access to Therapy (IAPT) services?
- What helped or would help to mitigate the more negative responses of practitioners both personally and in their work practice?
- Is there any evidence of personal or professional growth following such a loss and what may support this?
- How does the impact on IAPT practitioners compare to other professional groups that have previously been reported on?

Methods and Design

- Semi structured interviews will be carried out with at least 6 practitioners following an Interpretative phenomenological analysis (IPA) methodology.
- Between 6 and 8 practitioners will be recruited from across the North of England.
- NHS IAPT services will be invited to take part and give permission to distribute information about the research and invite prospective participants to complete a brief questionnaire that will be used to ensure they satisfy the inclusion criteria for the study. If more than 8 practitioners respond and meet the criteria, the responses will be selected so that as many different practitioner roles (e.g. Psychological Welbeing Practitioners, Cognitive Behavioural Therapists, and Counsellors) are represented, within these role groupings respondees will be selected randomly.
- Participants will be asked to make themselves available (with permissions of their local management) and to select a suitable interview room at their local base, for a quarter of an hour introduction, collection of demographic

information, discussion and recording of consent, followed by a one hour audio recorded interview with the option of a further half hour debrief (including time to answer any questions that have arisen and to check on the emotional wellbeing of the participants).
- All interviews will be carried out by the lead investigator, a senior psychotherapist from an IAPT service who is cognitive behavioural therapist. Interviews will be a semi structured format, i.e. a script of questions will be used but this may be expanded on during the interview so that relevant information is not lost. Transcripts will be made from the audio recordings and these will be analysed using an approach called Interpretative Phenomenological Analysis. This approach acknowledges that the researcher’s experiences and beliefs will influence how they interpret the verbal account that the participant provides of their own experience. Transcripts will be analysed for key themes and these will be compared across the 6 to 8 different accounts to see if themes compare of if new themes emerge.
- Participants will be invited to comment on the draft write up and request amendments or indeed to withdraw from the study.

Inclusion criteria

Participants must be currently working in an IAPT service. They must have experienced the death of a patient whilst either actively engaged in therapy with them or 12 months
post discharge.

Exclusion criteria

Participants who are currently engaged in a SIRI (serious incident requiring investigation) process or awaiting attendance at Coroner’s court as a consequence of a patient death by suicide. Participants who are currently receiving emotional (e.g. therapy or counselling) or practical support (e.g. reduced caseload, graded return to work) as a consequent of experiencing the death of a patient through suicide.

Managing Risk

Maintaining confidentiality of the NHS practitioners who are interviewed given that loss of a patient is a relatively rare event.
- It is planned to recruit by inviting practitioners from between 5 - 8 NHS sites across the north of England.
- Any information included in the write up of the study will be strictly anonymised. Any information that it is not feasible to anonymise and that could identify the participant will be excluded from the write up.
- Information gathered at interview will stored securely and will not be linked to any identifier that could be linked to the participant.

Discussing the loss of a patient could potentially be distressing for the practitioner concerned even though there could be a significant time elapsed since the event.
- Informed consent will be gained, with the clear indication that it is possible to withdraw consent or any involvement in the research at any time, including during the interviews.

- The potential for the material discussed to be upsetting or cause distress will also be discussed at the start of each interview. The practitioner participant will be asked at the start how best they wish to be supported and by whom, in the event that they become upset during or after the interview.
- Full contact details of the lead researcher / interviewer will be made available to each interviewee and they will be invited to get in touch if they have any questions prior to the interview or if there is anything they would wish to discuss post interview.
- Contact details and referral processes for the specific local arrangements at each site for NHS staff who wish to seek support, therapy or counselling will be sought prior to the interviews and this information made available to the participants.

Research Ethics

Although the participants in this study will be NHS staff, on consulting the research and development team within the host Trust it was decided it would be advisable to seek ethical approval. This is because the subject of the study is to explore the personal reactions of staff members to the tragic circumstances of losing a patient through suicide. It is very possible that being interviewed on this subject will trigger some upset or distress and therefore it is important that the study procedure is examined from an ethical standpoint.

Limitations

By nature of the study design the sample group is small to enable a more in depth analysis of the impact on individual practitioners. Consequently results may not be generalizable to the broader IAPT workforce. Furthermore recruitment by invitation across a number of IAPT services may introduce bias, for example those most affected may choose not to take part.

Dissemination

This study will be reported on within the PhD thesis of the lead investigator. It will also be submitted for publication in a peer reviewed journal.

Appendix D IPA Study HRA Approval

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Mr David M Sandford
24 Black Dyke Road Email: hra.approval@nhs.net Arnside HCRW.approvals@wales.nhs.uk

Cumbria
LA50HJ

13 January 2020

Dear Mr Sandford

HRA and Health and Care

Study title:	**A qualitative study into the impact of the death of a patient through suicide on practitioners in Improving Access to Psychological Therapy (IAPT) services .**
IRAS project ID:	**249864**
Protocol number:	**N/A**
REC reference:	**19/HRA/4840**
Sponsor	**Cumbria Partnership NHS Foundation Trust**

I am pleased to confirm that **HRA and Health and Care Research Wales (HCRW) Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Please now work with participating NHS organisations to confirm capacity and capability, in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?

HRA and HCRW Approval does not apply to NHS/HSC organisations within Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) have been sent to the coordinating centre of each participating nation. The relevant national coordinating function/s will contact you as appropriate.

Please see IRAS Help for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

How should I work with participating non-NHS organisations?
HRA and HCRW Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to obtain local agreement in accordance with their procedures.

What are my notification responsibilities during the study?

The "*After HRA Approval – guidance for sponsors and investigators*" document on the HRA website gives detailed guidance on reporting expectations for studies with HRA and HCRW Approval, including:

- Registration of Research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

Who should I contact for further information?
Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is **249864**. Please quote this on all correspondence.

Yours sincerely,

Carolyn Halliwell

Approvals Specialist

Email: hra.approval@nhs.net

Copy to: *Ms Barbara Cooper, North Cumbria IC NHS Trust* **List of Documents**

The final document set assessed and approved by HRA and HCRW Approval is listed below.

Document	*Version*	*Date*
Covering letter on headed paper [Letter]		14 June 2019
Covering letter on headed paper [Covering Letter]	2	10 November 2019
Covering letter on headed paper [Covering Letter]	3	10 January 2020
Interview schedules or topic guides for participants [Questions]	1	06 August 2019
IRAS Application Form [IRAS_Form_12082019]		12 August 2019
IRAS Application Form [IRAS_Form_25112019]		25 November 2019
Letters of invitation to participant [invite]	1.1	10 November 2019
Participant consent form [consent]	1.2	11 December 2019
Participant information sheet (PIS) [PIS]	1.2	14 December 2019
Research protocol or project proposal [Protocol]	1.1	10 November 2019
Summary CV for Chief Investigator (CI) [CV]	1	10 November 2019
Summary CV for supervisor (student research)		01 March 2019

Appendix E IPA Study Application for Ethical Approval

University of Glasgow | College of Medical, Veterinary & Life Sciences

College of Medical, Veterinary & Life Sciences Ethics Committee for Non-Clinical Research Involving Human Participants

APPLICATION FORM FOR ETHICAL APPROVAL

NOTES:
THIS APPLICATION FORM SHOULD BE TYPED NOT HAND WRITTEN.

ALL QUESTIONS MUST BE ANSWERED. "NOT APPLICABLE" IS A SATISFACTORY ANSWER WHERE APPROPRIATE.

The primary remit of this committee is the review of non-clinical research. However, clinical research involving humans, their tissue or data that falls outwith the remit of the NHS Research Ethics Service will also be reviewed by the MVLS committee. If your project involves NHS facilities, or is clinical research, then you must ensure that NHS REC review is not needed before applying to the MVLS REC. The review of the MVLS REC does not obviate the need for NHS review.

Please note – it is now a requirement for a Data Protection Impact Assessment (DPIA) to be completed where processes are likely to involve high-risk personal data. This is likely to be the case for many research projects. If so, you must complete this before submission for ethical review. For research involving personal data, you should give participants a Privacy Notice as well as a Participant Information sheet.

Information on DPIAs and Privacy Notices
https://www.gla.ac.uk/myglasgow/dpfoioffice/gdpr/dpia/
https://www.gla.ac.uk/myglasgow/dpfoioffice/gdpr/privacy%20notices/

Information on the General Data Protection Regulation (GDPR)
https://www.gla.ac.uk/myglasgow/dpfoioffice/

Information on Research Data Management
https://www.gla.ac.uk/myglasgow/datamanagement/

University of Glasgow policy on surveys of students for research purposes

https://www.gla.ac.uk/myglasgow/senateoffice/policies/studentengagement/studentsurveys/policyonstudentsurveys/

Project Title: The impact of patient suicide on IAPT practitioners

Has this application been previously submitted to this or any other ethics committee? No
If 'Yes', please state the title and reference number.
Is this project from a commercial source, or funded by a research grant of any kind? No
If 'Yes', has it been referred to Research Support Office?
Has it been allocated a project Number?
Give details and ensure that this is stated on the Informed Consent Form.

Insurance Coverage and Restrictions:

Please Note: The Insurance restrictions set out below relate to research of a clinical nature. Non clinical research is not subject to restriction and no additional insurance is required

The University insurance cover is restricted under specific circumstances, including, but not limited to the following -

- **work involving the use of research participants outside Great Britain, Northern Ireland, the Channel Islands or the Isle of Man**
- **the use of hazardous materials**
- **non CE marked medical devices**
- **molecules or compounds developed and manufactured at the University of Glasgow**
- **number of participants in excess of 5000**
- **work involving research participants known to be pregnant at the time of the project**

All such projects must be referred to Research Support Office and coverage confirmed before ethical approval is sought. Please contact Dr Debra Stuart in the University's Research Governance Office: debra.stuart@glasgow.ac.uk

Please tick here if this project has been referred to the Research Support Office to confirm adequate insurance coverage.

Please tick here if the project includes a technique involving incision, piercing of skin, insertion of a device or object, ingestion of medicines or food substances.
Please tick here if the project involves work on human

participants
that will be conducted within the Imaging Centre of Excellence (ICE)

Date of submission: 24/11/19

Name of all person(s) submitting research proposal:

David Sandford
Professor Rory O’Connor
Dr Olivia Kirtley

Position(s) held:

David Sandford: Senior Psychotherapist, First Step South Cumbria, Lancashire and South Cumbria NHS Foundation Trust / PhD Student, University of Glasgow.

Professor Rory O’Connor: Professor, Chair of Health Psychology, Director of the Suicidal Behaviour Research Laboratory (Institute of Health and Wellbeing), University of Glasgow.

Dr Olivia Kirtley: Postdoctoral Research Fellow, Center of Contextual Psychiatry, KU Leuven.

School/Group/Institute/Centre:

Suicidal Behaviour Research Laboratory, Institute of Health and Wellbeing, College of Medicine, Veterinary and Life Sciences.

Email address: d.sandford.1@research.gla.ac.uk

Name of Principal Researcher (if different from above, e.g., Student's Supervisor):

Position held:

Undergraduate student project:No If 'Yes', please state degree being undertaken:**Postgraduate student project: Yes** If 'Yes', please state degree being undertaken:PhD Psychology Research

For postgraduate student projects, please state whether this a research (PGR) or taught (PGT) degree: **PGR1. Describe the purposes of the research proposed. Please include the background and scientific justification for the research. Why is this an area of importance? Please try to describe why the research is novel and experimental.**

We do not need a comprehensive review of the topic area: a short summary that is sufficient for the reviewers to understand the study is sufficient. Bullet points and references to more detailed texts are both acceptable.

In England, psychological treatments are often delivered by Improving Access to Psychological Therapy (IAPT) services such as First Step (South Cumbria's Improving Access to Psychological Therapy (IAPT) service). Similar to other services, we witness the impact on individual practitioners when they experience the death through suicide of a person they have been working with clinically. Informal feedback has suggested that levels of stress are increased by practitioners feeling unprepared for the eventuality of a death due to the rarity of such an event, low awareness of the potential for such an event, lack of knowledge of the process to be followed following a SIRI (Serious Incident Requiring Investigation, and the lack of open discussion to share learning following a SIRI). A systematic review found that previous studies in this area have mainly focused on the impact on psychiatrists or mental health workers operating within a multidisciplinary team. IAPT practitioners are often the only or main point of contact with patients (given the level of intervention at steps 2 and 3 within the stepped care model). In order to better support staff within First Step and other similar mental health services we need to better understand the range of impacts on, and variable patterns of experience of, staff and to gather their perceptions of best practice in responding.

Semi structured interviews will be carried out with 6 – 8 practitioners following an Interpretative phenomenological analysis (IPA) methodology. This will have the following research questions:

- What is the impact of losing a patient to suicide on practitioners in Improving Access to Therapy (IAPT) services?
- What helped or would help to mitigate the more negative responses of practitioners both personally and in their work practice?
- Is there any evidence of personal or professional growth following such a loss and what may support this?
- How does the impact on IAPT practitioners compare to other professional groups that have previously been reported on?

Such a study could inform services on how best to prepare and support practitioners in such an event. Dissemination of the findings of such a study could in itself serve to increase awareness of this risk and therefore better prepare practitioners.

2. Describe the design of the study and methods to be used. If multiple methods are to be used, please describe them each in turn. Include details of the study sample size and how you decided this. Statistical advice should be obtained if in doubt.

Between 6 and 8 practitioners will be recruited from across the North of England.
NHS IAPT services will be invited to take part. The clinical lead in each centre will be asked to distribute information about the research and invite prospective participants to contact the principal researcher if they wish to take part in the study. This will be their sole involvement in the study.

Participants will be asked to make themselves available (with permissions from their local management) and to select a suitable interview room at their local base, for a quarter of an hour introduction, confirmation of meeting the criteria for the study, collection of demographic information, and discussion and recording of consent, followed by a one hour audio recorded interview (approximately) with the option of a further 15 minute debrief (including time to answer any questions that have arisen and to check on the emotional wellbeing of the participants).

All interviews will be carried out by David Sandford, the principal researcher, a senior psychotherapist from an IAPT service who is an accredited cognitive behavioural therapist.
Interviews will be in a semi structured format, i.e. a script of questions will be used (Appendix A) but this may be expanded on during the interview so that relevant information is not lost.
Transcripts will be made from the audio recordings and these will be analysed using an approach called Interpretative Phenomenological Analysis. This approach acknowledges that the researchers’ own experiences and beliefs will influence how they interpret the verbal account that the participant provides of their own experience.
Transcripts will be analysed for key themes and these key themes compared across the 6 to 8 different accounts to see if themes compare of if new themes emerge from them.

Inclusion Criteria:
Participants must be currently working in an IAPT service.
They must have experienced the death of a patient whilst either actively engaged in therapy with them or 12 months post discharge.
Exclusion Criteria:
Participants who are currently engaged in a SIRI (serious incident requiring investigation) process or awaiting attendance at Coroner's court as a consequence of a patient death by suicide.
Participants who are currently receiving emotional (e.g. therapy or counselling) or practical support (e.g. reduced caseload, graded return to work) as a consequence of experiencing the death of a patient through suicide.

3. How will potential participants in the study be (i) identified, (ii) approached and (iii) recruited? Give details for cases and controls separately, if appropriate

You should explain how a person becomes identified as a potential participant and then an enrolled participant. If the initial approach uses a poster, social media or email then the materials should be submitted for review.

Between 6 and 8 IAPT practitioners will be recruited from across the North of England.
NHS IAPT services will be invited to take part. The clinical lead in each centre will be asked to distribute information about the research (The invitation to participate – Appendix B) by email and invite prospective participants to contact the principal researcher (Sandford) if they wish to take part in the study.

4. Describe the research procedures as they affect the research participants and any other parties involved. It should be clear exactly (i) what will happen to the research participant, (ii) how many times and (iii) in what order. If your research involves administration of a substance, for example saline, topical anaesthetic etc. then please give full details on the substance and manufacturer. Reference to an existing standardised operating procedure is acceptable.

1) Invitation to take part by email (via the clinical lead within the site)
2) Face to face introduction, confirm eligibility, complete consent form (Appendix C), agree support in event of upset. 15 minutes.
3) Semi structured interview (Appendix A), 1 hour. Interviews will take place on NHS premises in a quiet, confidential room at the participant’s place of work and identified by them.
4) 15 minute debrief (including time to answer any questions that have arisen and to check on the emotional wellbeing of the participants).
5) The researcher will offer to send participants the completed write up of the study.

5. What are the ethical considerations involved in this proposal? You may wish, for example, to comment on issues to do with consent, confidentiality, risk to participants, etc.

1) Maintaining confidentiality of the NHS practitioners who are interviewed given that loss of a patient is a relatively rare event.
- It is planned to recruit by inviting practitioners from 8 NHS sites across the north of England.
- Any information included in the write up of the study will be completely anonymised. Any information that it is not feasible to anonymise and that could identify the participant will be excluded from the write up.
- Information gathered at interview will stored securely electronically and will not be linked to any identifier that could be linked to the participant.
- Please note that assurances on confidentiality will be strictly adhered to unless evidence of serious harm, or risk of serious harm, is uncovered. Participants will be informed in the PIS and the consent form that In such cases, the University may be obliged to contact relevant statutory bodies/agencies.

2) Discussing the loss of a patient could potentially be distressing for the practitioner concerned even though there could be a significant time elapsed since the event.
- Informed consent will be gained (appendix C), with the clear indication that it is possible to withdraw consent or any involvement in the research at any time, including during the interviews.
- The potential for the material discussed to be upsetting or cause distress will also be discussed at the start of each interview. The practitioner participant will be asked at the start how best they wish to be supported and by whom, in the event that they become upset during or after the interview.
- Full contact details of the principal researcher / interviewer will be made available to each interviewee and they will be invited to get in touch if they have any questions prior to the interview or if there is anything they would wish to discuss post interview.
- Contact details and referral processes for the specific local arrangements at each site for NHS staff who wish to seek support, therapy or counselling will be sought prior to the interviews and this information made available to the participants.
- Participants will be assured that their data will be anonymised and will remain confidential in accordance with GDPR. Confidentiality will be explained, including limits regarding risk to self or others. Participants will be referred to by a pseudonym during analysis and all reporting of results to protect their identity. Participants will be given a Privacy Notice (appendix D) which will explain the University of Glasgow privacy policy. A DPIA has also been completed (appendix E). Following data transcription the audio recordings of the interviews will be destroyed.

6. Outline the reasons why the possible benefits to be gained from the project justify any risks or discomforts involved.

Practitioners who themselves have experienced the death of a patient have described atherapeutic benefit of being given the opportunity to describe their experience and have this account listened to and witnessed. They have also expressed potential satisfaction in helping other people understand more about the potential impact and therefore be better prepared. Such study could inform services on how best to prepare and support practitioners in such an event. Dissemination of the findings of such a study could in itself serve to increase awareness of this risk and therefore better prepare practitioners.

7. Who are the investigators (including assistants) who will conduct the research? What are their qualifications and experience?

David Sandford (CV – Appendix F) will be conducting the research under the supervision of Professor Rory O'Connor (CV – Appendix G) and Dr Olivia Kirtley (Appendix H).
David qualified as an Occupational Therapist at in 1995 and as a Cognitive Behavioural Therapist (CBT) in 2003. He completed an MSc in CBT in 2005 and is accredited through the BABCP. He has worked as a senior psychotherapist in Cumbria since 2010 within the local Improving Access to Psychological therapies service.

Professor Rory O'Connor, the study's academic supervisor, has over 20 years' experience and considerable expertise in suicidal, clinical and health research. He is the past President of the International Academy for Suicide Research, current Vice President of the International Association for Suicide Prevention, and member of the American Association of Suicidology. He also leads the Suicidal Behaviour Research Laboratory at the University of Glasgow, the leading suicide and self-harm research group in Scotland and head of the Mental Health & Wellbeing research group.

Dr Olivia Kirtley is a post-doctoral research fellow at KU Leuven, Belgium in the Center for Contextualised Psychiatry. She completed her PhD at the Suicidal Behaviour Research Laboratory at the University of Glasgow. Her research interests include the roles of pain and emotion regulation in psychological distress, and specifically in self-harm and suicidal thoughts and behaviours. Currently, she is leading SIGMA, a large-scale, longitudinal study of adolescent mental health and development, using experience sampling methods (ESM).

8. Are arrangements for the provision of clinical facilities to handle emergencies necessary? If so, briefly describe the arrangements made.

N/A

9. In cases where participants will be identified from information held by another party (e.g., a doctor or hospital), describe how you intend to obtain this information. Include, where appropriate, whether additional Research Ethics Committee approvals will be sought and gained (including overseas committees).

N/A

10. Specify whether participants will include students or others in a dependent relationship and, where possible, avoid recruiting students who might feel to be, or be construed to be, under obligation to volunteer for a project. This is most likely to be when a student is enrolled on a course where the investigator is a teacher. In these circumstances, the recruitment could be carried out by one of the other investigators or a suitably qualified third party.

N/A

11. Specify whether the research will include children or participants with mental illness, physical disability or intellectual disability. If so, please explain the necessity of involving these individuals as research participants and include documentation of the suitability of those researchers who will be in contact with children or vulnerable adults (e.g., Disclosure Scotland or membership of the Protection of Vulnerable Groups Scheme).

N/A

12. Will payment or other incentive, such as a gift or free services, be made to any research participant? If so, please specify, and state the level of payment to be made and/or the source of the funds/gift/free service to be used. Please explain the justification for offering an incentive.

No.

13. Please give details of how consent is to be obtained and recorded. A copy of the proposed consent form, along with a separate information sheet, written in simple, non-technical language MUST ACCOMPANY THIS PROPOSAL FORM.

Participants will be required to complete a consent form.
They will have the opportunity to read the information sheet (Appendix I) and privacy notice (Appendix D).
They will provide written consent and be reminded that their participation is voluntary and confidential and that they are free to withdraw at any time (Appendix C).
They will be informed about the potential sensitive nature of the research topic and will be advised that they do not have to answer any questions they do not wish. They will also be told that they can take a break during the interview if necessary. At this stage, participants will be offered an opportunity to ask any further questions.

14. Comment on any cultural, social or gender-based characteristics of the participants that have affected the design of the project or may affect its conduct.

None

15. Please state (i) who will have access to the data, (ii) how the data will be stored, how will access be restricted, and (iii) what measures will be adopted to maintain the confidentiality of the research participants and to comply with data protection requirements.

(i) David Sandford will be the only person with access to the interview data, initially. Professor Rory O’Connor (supervisor), Dr Olivia Kirtley (supervisor), will have access to anonymised transcripts.
(ii) The interviews will be audio-recorded with the permission of participants, and transcribed verbatim by David Sandford. Data files (audio and transcripts) will be stored electronically on NHS computers. Data will not be kept for longer than 10 years after the end of the study, and then will be securely and confidentially destroyed. The access to the data will be restricted by David Sandford’s NHS credentials (ID and login).
(iii) Procedures on data protection and confidentiality are described on item 5.3.

Please tick to confirm that all relevant research data generated during and after the study will be collected and held in compliance with the General Data Protection Regulation (May 2018).

☑

Please tick to confirm that you have completed a data protection impact assessment form if required.

☑

If this is not required, please specify why not;
For guidance in this matter, please refer to the University Data Protection Office webpages:
https://www.gla.ac.uk/myglasgow/dpfoioffice/gdpr/

In regard to (ii) above, please clarify (tick one) how the data will be stored:

✔ **(a) in a fully anonymised form (link to participants broken),**

(b) in a linked anonymised form (data +/- samples linked to p cipant identification number but participant not identifiable to researchers), or

(c) in a form in which the participant could be identifiable to researcher.

If data are stored in linked anonymised form, please state who will have access to the code and personal information about the participant. The data will be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research. (https://www.gla.ac.uk/research/strategy/ourpolicies/) Please tick and give further details below

✔

16. To your knowledge, will the intended group of research participants be involved in other research? If so, please justify.

No

17. Proposed starting date:

January 2019

Expected completion date:

June 2020

18. Please state location(s) where the project will be carried out, including all overseas laboratories, hospitals and other relevant locations.

Interview rooms will be identified within the participants' host NHS Trust premises.

19. Please state briefly any precautions being taken to protect the health and safety of researchers and others associated with the project (as distinct from the research participants), e.g., where blood samples are being taken, home visits.

We do not anticipate any risks to researchers. However, the researcher David Sandford will have regular meetings with Prof Rory O'Connor, and Dr Olivia Kirtley. Through these meetings, we will ensure that the researcher is supported.

20. Please state all relevant sources of funding or support for this study.

PhD funding from Cumbria Partnership NHS Foundation Trust.

21a). Are there any conflicts of interest related to this project for any member of the research team? This includes, but is not restricted to, financial or commercial interests in the findings. If so, please explain these in detail and justify the role of the research team. For each member of the research team please complete a declaration of conflicts of interest below.

Researcher Name: ____David Sandford________________________ conflict of interest Yes / [✓ No]
If yes, please detail below

Researcher Name: _____Rory O'Connor _______________________ conflict of interest Yes / [✓ No]
If yes, please detail below

Researcher Name: _____Olivia Kirtley__________________________ conflict of interest Yes / [✓ No]
If yes, please detail below

Researcher Name: ____ conflict of interest Yes / No
If yes, please detail below

21b). If there are any conflicts of interest, please describe these in detail and justify conducting the proposed study.

None

22. How do you intend to disseminate the findings of this research?

Please include details of how the study participants will be notified of the study finding. If they are not to be informed, please justify.

By inclusion in PhD thesis of David Sandford, by submission for publication in a peer reviewed journal, by presentation at conference.

Participants will be offered a copy of the write up.

I confirm that have read the University of Glasgow's Data Protection Policy. https://www.gla.ac.uk/myglasgow/dpfoioffice/

Please initial box

Name _David Sandford____________________ Date __24/11/19____
(Proposer of research)
Please type your name on the line above.

For student projects:
I confirm that I have read and contributed to this submission and believe that the methods proposed and ethical issues discussed are appropriate. I confirm that the student will have the time and resources to complete this project.

Name _______________________________________ Date ________________
(Supervisor of student)
Please type your name on the line above.

Please upload the completed and <u>signed</u> form, along with other required documents by logging in to the Research Ethics System at - https://frontdoor.spa.gla.ac.uk/login/

Appendix F IPA Study Ethics Approval

Dear Professor Rory O Connor

MVLS College Ethics Committee
Project Title: *The impact of patient suicide on IAPT practitioners*
200190084

The College Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study.

We are happy therefore to approve the project, subject to the following conditions.

- Project end date as stipulated in original application.
- The research should be carried out only on the sites, and/or groups defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment, except when it is necessary to change the protocol to eliminate hazard to the subjects or where the change involves only the administrative aspects of the project. The Ethics Committee should be informed of any such changes.
- For projects requiring the use of an online questionnaire, the University has an Online Surveys account for research. To request access, see the University's application procedure at https://www.gla.ac.uk/research/strategy/ourpolicies/useofonlinesurveystoolforresearch/.
- You should submit a short end of study report to the Ethics Committee within 3 months of completion.

Terry Quinn
FESO, MD, FRCP, BSc (hons), MBChB (hons)
Senior Lecturer / Honorary Consultant

College of Medicine, Veterinary & Life Sciences

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

The University of Glasgow, charity number SC004401

Yours sincerely

Dr Terry Quinn

Appendix G IPA Study Consent form.

IRAS ID: **249864**

Centre Number:

Participant Identification Number for this trial:

CONSENT FORM

Title of Project: A Qualitative study into the impact of the death of a patient by suicide on practitioners in Improving Access to Psychological Therapies (IAPT) services.

Name of Researcher: David Sandford

Please initial box

1 I confirm that I have read the information sheet dated 14/12/19 (version 1.2) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2 I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected.

3 I agree to my interview being audio recorded

4 I understand that my words may be quoted in publications, reports, web pages and other research outputs, this will be anonymous and my identity will not be revealed. I understand that my information will be kept strictly confidential and that my identity will not be revealed in any reports, publications or presentations. Please note that assurances on confidentiality will be strictly adhered to unless evidence of serious harm, or risk of serious harm, is uncovered. In such cases, the University may be obliged to contact relevant statutory

bodies/agencies.

5 I agree to take part in the above study.

______________________	______________________	______________________
Name of Participant	Date	Signature
______________________	______________________	______________________
Name of Person taking consent	Date	Signature

Appendix H IPA Study Patient Information Sheet

Participant Information Sheet:

A qualitative study into the impact of the death of a patient through suicide on practitioners in Improving Access to Psychological Therapy (IAPT) services.

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

Who is conducting the research?

The research is being conducted by David Sandford (Senior Psychotherapist, First Step South Cumbria and University of Glasgow) under the supervision of Professor Rory O’Connor (University of Glasgow), and Dr Olivia Kirtley (K U Leuven).

What is the purpose of the study?

The aim of the study is to learn about the impact of the death of a patient by suicide on practitioners in Improving Access to Psychological Therapy (IAPT) services. The findings should help understand how services can better prepare and support practitioners in this eventuality. In previous studies that have explored the impact of patient suicide, the majority focussed on health care professionals in psychiatry and psychology. To date no studies have focused on the experience of practitioners within IAPT services.

Why have I been invited?

We are interested in meeting and interviewing practitioners who, during their time working in an NHS IAPT service, have been informed that a patient that they were working with had died by suicide. As an NHS IAPT practitioner, you may be eligible to take part.

What does taking part involve?

I will contact you by phone or email in the next two weeks to arrange a time and place to meet you. Before taking part, it is necessary for you to confirm with your line manager that this is acceptable.

Prior to the interview we will have time to confirm that you still wish to take part in the study and for me to answer any further questions about the study and the consent form.

Following the study we will have time to debrief following the interview and whether you require any further support, and answer any questions arising from the interview.

The interview itself will take approximately one hour and will be audio taped. It will take a semi structured approach, with some pre-planned questions but also allows time to expand on areas that are important to you. You will be asked about your response, and of others, to the experience, any changes you have noticed since and for your thoughts on what support should be available.

Do I have to take part?

No. It is up to you to decide if you want to take part in the study or not. If you agree to take part, you will be asked to sign a consent form today to show that you have agreed to take part in the study. You are free to withdraw from the study at any time without giving a reason until the research findings are written in the study report. Withdrawing from the study will not affect you in any way and there is no penalty for withdrawal.

What happens to the information?

Your identity and personal information will be kept completely confidential and known only to the researcher. The audio recording will not be linked to your name or contact details. Following completion of the study, names and contact information will be deleted. Please note that assurances on confidentiality will be strictly adhered to unless evidence of serious harm, or risk of serious harm, is uncovered. In such cases, the University may be obliged to contact relevant statutory bodies/agencies.

Any information from your interview that is included in the write up of the study will be anonymised. Your data will form part of the study result that will be published in expert journals, presentations, and student thesis. Your name will not appear in any publication.

North Cumbria Integrated Care NHS Foundation Trust (NCIC) is the sponsor for this study and is based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it correctly.

All study data will be held in accordance with The General Data Protection Regulation (2018). Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information [https://www.hra.nhs.uk/information-about-patients or https://www.ncic.nhs.uk/patients-visitors/privacy-notice).

What are the possible benefits of taking part?

We cannot guarantee any direct benefit to the participants. However, this study may form the basis for information that may help IAPT practitioners and services who experience the loss of a patient through suicide and therefore help practitioners in the future.

What are the possible disadvantages and risks of taking part?

The subject of the interview is understandably a sensitive one and it is possible you may find recounting your experience distressing. Therefore please consider your participation carefully. We will take time at the end of the interview to discuss how you are feeling and whether you would like any further support.

Who is organising and funding the study?

The study is conducted by North Cumbria Integrated Care NHS Foundation Trust, through the Research Department; this Trust is also the study sponsor for indemnity purposes. The study has been reviewed and approved by the Health Research Authority and the NHS Trusts where the study is conducted.

What if something goes wrong?

If you have any concerns at any stage of your involvement in this research project, please feel free to discuss these with the research team. We will do our best to resolve any problems quickly. If you are still unhappy and wish to complain about any aspect of the way you have been approached, the normal National Health Service (NHS) complaints mechanisms are available to you.

Will I be made aware of the results of the study?

You will be asked at the interview if you would like to receive a copy of the write up of the study.

If you have any further questions?

We will give you a copy of the information sheet and signed consent form to keep. If you would like more information and would like to speak to someone who is not closely involved in the study, then you can contact: Richard Thwaites (T: 0300 123 9122 or E: Richard.thwaites@cntw.nhs.uk).

Researcher(s) Contact Details:

Principal Investigator:

David Sandford, First Step, College House, Howard St., Barrow-in Furness, Cumbria.

Email: david.sandford@lancashirecare.nhs.uk

Mobile:

Thank you for taking the time to read this information sheet.

Participant Information Sheet V1.3 20/01/20 IRAS ID 249864

Appendix I IPA Study Invite to Study

South Cumbria First Step to a healthier state of mind

NHS Lancashire & South Cumbria NHS Foundation Trust

University of Glasgow | Institute of Health & Wellbeing

A qualitative study into the impact of the death of a patient by suicide on practitioners in Improving Access to Psychological Therapy (IAPT) services.

Has a patient you were working with died by suicide?

Would you be willing to describe the impact of this experience?

I work as a Senior CBT Psychotherapist in South Cumbria's NHS IAPT service and I am also a PhD student at the Suicidal Behaviour Research Lab, University of Glasgow.

In order to better support staff within IAPT and other similar mental health services we need to better understand the range of experiences of practitioners who have lost patients to suicide.

I am seeking to interview practitioners who during their time working in an NHS IAPT service have been informed that a patient that they were working with had died by suicide.

The interviews will be confidential and anonymous.

Thank you for considering taking part.

Please contact me if you are interested in participating.

David Sandford

Senior Psychotherapist, First Step. David.sandford@lancashirecare.nhs.uk.

Mob:

Participation V1 06/08/2019 IRAS ID 249864

Appendix J Interview Schedule

Prior to interview it will be discussed if the practitioner has experienced more than one loss of a patient (the number will be recorded). In this circumstance the practitioner will be asked to consider their response based on the first death through suicide of a patient that they experienced.

- Background / context
    - **Question: Can you describe your work role for me, and broadly speaking the organisation you work in?**
- Narrative / Own reaction
    - **Question: Please can you describe your experience of losing a patient to suicide?**
    - Prompts:
        - What was your contact with the person? (e.g. no of sessions, time period)
        - What was your last contact
        - How did you first hear that this person had taken their life?
        - Can you describe your immediate reaction?
        - And in the following days/weeks/months?
        - What was the impact on you personally?
        - On your behaviour, thoughts, emotions, feelings?
        - What are the factors that you think most account for the impact you experienced?
- Reaction of others
    - **Question: Can you tell me more about how the response of others influenced your reaction to the death?**
    - Prompts:
        - What was the effect on you of their response?
        - Do you think there has been a longer term impact on your co-workers?
        - How did your managers respond?
        - How supported, both formally and informally did you feel and by whom?
    - **Question: Can you tell me more about the reaction of your family and friends?**
    - Prompts:
        - What was the effect of their response on you?
        - How supported, both formally and informally, did you feel and by whom?
- Subsequent change
    - **Question: Have you noticed any changes in your professional practice since, both in the short term and in the long term?**
    - Prompts

    - Has the experience brought about any changes to your approach at work?
    - In what way has this changed your attitude to suicide prevention?
    - In what way has this experience changed your confidence when assessing and managing risk?
- **Question: Had anything helped prepare you for this experience?**
- Prompts:
    - Prior to this experience had you considered the possibility of losing someone to suicide?
    - Had any training supervision or advice helped prepare you?
- **Question: How do you think people should be supported?**

Appendix K Practitioner Induction Information Sheet

When a patient dies through suicide

> **At some point in their careers, most mental health workers will lose a patient to suicide during the course of treatment. (Foley and Kelly, 2007).**

Background

Across the world approximately 16 per 100,000 of the population die through suicide. In Cumbria between 50 and 60 lives are lost each year. Of this number between 5 and 10 are people who are, or have recently been in contact with First Step. This is in the context of the high number of referrals First Step receives (approximately 13,000 each year). Given the high volume of people that First Step practitioners work with (for example a PWP working for 5 years may have worked with upwards of 2000 patients) it is a sad fact that most practitioners are likely to experience losing a patient through suicide at some point in their careers.

Whilst these sad statistics suggest an inevitability of loss we also never let this detract from our efforts to do what we can to mitigate risk and reduce the numbers of people in Cumbria who take their own lives. First Step continues to work to improve practitioners' confidence in their ability to apply their therapeutic skills to the effective implementation of the policy and procedures for assessing, formulating and managing risk.

There has perhaps been a reluctance to discuss the aftermath of a patient suicide, linked to sensitivity towards the practitioners directly involved. Unfortunately this can contribute to practitioners feeling ill prepared in the event of one of their patients taking their own lives.

This leaflet is intended to contribute to the following areas which hopefully will go some way to helping a practitioner to best cope in such an event:

- Ensuring an understanding of the processes that must be followed subsequent to a death

- Recognising the potential impact on a practitioner of a patient suicide

- Knowledge of the support available.

The Process following a Patient Suicide

How you should be informed.

If a patient on your caseload, or who you had contact with, dies through suicide your team leader and senior psychotherapist should be informed first. They will then make every effort to meet with you face to face to inform you, explain the process of a serious incident requiring investigation (SIRI) and check and agree with you how you wish to be best supported both immediately and throughout the process of the investigation.

Incident report.

An electronic incident report will be required to detail whatever information is immediately available.

5 day incident report

A five day incident report will be completed. This will typically be done jointly with all staff members who had contact with the deceased along with the team leader and/or senior psychotherapist.

Serious Incident Requiring Investigations (SIRI)

All deaths will trigger an SIRI. The aim of these investigations is to explore if the service can learn and improve its practices rather than to look for or attribute blame. Two people will be appointed to prepare the SIRI report, usually one of these will be someone from within First Step.

Witness statement

You will be required to complete a witness statement which is a factual account of your contacts with the deceased. Your team leader will assist you in the process of completing this.

Coroner’s Inquest

You may be called as a witness to the Coroner’s Court. In this case a meeting will be arranged prior to the court date for you and your team leader/senior psychotherapist to meet with the Trust solicitor who will offer you advice and information. A Trust document entitled “Guidance Notes for Inquest Witness” is available.

If you think it would be helpful to discuss how you would like to be informed in the event of a suicide and how you think you would best be supported in such circumstances please discuss this at your management supervision.

What you may experience following a Patient Suicide

The majority of the research into the impact of a patient suicide on mental health practitioners has been studies carried out with Psychiatrists (e.g. Alexander et al.,2000). The following list however is likely to be equally representative of the understandable reactions that any mental health practitioner may experience following a patient suicide.

Personal

Stress

Guilt

Social withdrawal

Reduction in self-esteem

Disruption to relationships

Irritability at home

Poor sleep

Low mood

Decreased self-confidence

Symptoms of post-traumatic stress disorder

Feelings of anger, shame and isolation

Professional

Fears of litigation and retribution

Greater use of suicide observations

More detailed note-keeping and communications

Lower thresholds for using mental health legislation

More defensive approaches to patient risk

Self-doubt

Consideration of early retirement

(From Foley and Kelly (2007) and based on Chemtob *et al* (1988), Gitlin (1999), Alexander *et al* (2000), Dewar *et al* (2000), Courtenay & Stephens (2001), Yousaf *et al* (2002))

This list is presented with the aim of demonstrating that such reactions are understandable. However each individual will of course respond differently, there is no right or wrong way to react. Some people are able to recognise that they have done all that they could be expected to do, and are able to resist the hindsight biased ‘what if’ or ‘I should have known type’ thinking.

Support for Practitioners

As an individual, each practitioner who experiences the loss of a patient through suicide will want and need a different response to provide them with the support they deserve. In the event of a suicide this should be discussed as soon as possible with your team leader or senior psychotherapist. They should ask you what would be most helpful, and please let them know of any further support you require.

Some (but this is not an exclusive list) of the things you may find immediately helpful or supportive are:

- Time with colleagues/team lead/senior psychotherapist/risk champion
- Cancelling therapy sessions
- Going home to be with others
- Focussing on administrative duties
- Asking for someone to fend your emails re patient queries etc.

Give time to think how best to support yourself – you are expert at giving this advice to others – how can you apply this to yourself?

Other practitioners are able to offer support. There is a list on sharepoint (under the risk tab) of practitioners who have been through a similar experience and have volunteered to offer support. You are of course under no obligation or expectation to take this up but please do not hesitate to contact anyone on this list.

If the understandable reactions to such an event persevere for a number of weeks and are interfering with your ability to function either in or outwith work then please ask for further support. You can be referred to Occupational Health and/or therapy sessions can be arranged with a practitioner from another sector within First Step.

Responsibility as a Practitioner

Within the trust, policy advocates the use of a risk formulation approach including the use of the GRiST assessment tool to aid in the assessment, management and communication of risk (see Trust Clinical Risk Policy). Individual qualified clinicians are responsible for ensuring their practice is consistent with policy requirements and that they attend the required training. The policy recognises that our approach is aimed at being preventative rather than predictive.

Key things to remember are to assess and document risk in the notes (even if risk has not changed) at every contact. The new session format provides a reminder for this.

If you have any questions or doubts about an aspect of risk do not hesitate to consult a colleague, your supervisor, your local risk champion, your senior psychotherapist or your team leader.

Patient Feedback

Unfortunately you will never know how many lives you have turned round and, not to overstate matters, how many lives you have saved…….

The following are quotes from First Step patient feedback:

I found the service both caring and helpful. It helped me through a bad time and came out the other end.

I found the service very professional and it provided help and support at a vulnerable time in my life. Thank you.

When I first attended I felt hopeless but at the end of the course I couldn't believe how well I felt. It helped me more than you can imagine.

The practitioner saw me through some very traumatic times last year, and without her help and support I am not sure I would still be here.

My therapist got me through some very dark days. Thank you.

To receive the help I needed at the most difficult time in my life was literally a life saver

The service I received at FS was excellent. FS practitioner helped me through these terrible times, without her help I don't think I'd of made it. Thank you for all your work.

***It was a lifeline*.**

I will always be grateful to my therapist, she saved my life.

I am certain that the help I got from FS helped me to recover and kept me in work and maybe even saved my life.

I would like to thank her for helping me get my life back, and a future to look forward to. Thank you for all your help.

I would not know where I would be today if it wasn't for all the support I was given.

My therapist helped me to try and live again when I really didn't want to. Thank you.

Thanks to the therapist for putting my life back on track.

Turned my life around and enabled me to want to live again.

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