BARRIERS AND FACILITATORS OF THE SUICIDE AWARENESS AND SUICIDE RESPONSE FOR PRIMARY CARE (SASRPC) TRAINING AND SAFETOOL FRAMEWORK WITHIN PRIMARY CARE: FINAL REPORT

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4 Mental Health
Connecting with People

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The content of this report represents the independent work of the research team of Liverpool John Moores University.

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Executive Summary

Background

Suicide remains a major public health concern in the UK and worldwide. Over 90% of people who die by suicide have contacted primary care services in the year before their death, with more than half having a diagnosable and treatable mental health condition, such as depression. This highlights the vital role of primary care staff, especially General Practitioners (GPs), in identifying and supporting patients at risk of suicide.

Method

This mixed-methods evaluation investigated the Connecting with People Suicide Awareness and Suicide Response for Primary Care (SASRPC) training in Liverpool. Quantitative surveys were conducted before training, immediately after, and three months later, to assess changes in knowledge, confidence, and attitudes. Qualitative interviews were completed with four experienced trainers to explore perspectives of training delivery and impact.

Results

Quantitative survey data from 87 participants showed significant increase in participants' knowledge around the topic of suicide and confidence treating suicidal patients post-training. There was no significant increase in knowledge of suicide facts and myths or participants' attitudes towards helping suicidal patients.

Analysis of qualitative interview data identified four key themes: (1) Training and Implementation - highlighting the value of interactive formats and recognition of knowledge gaps even among experienced clinicians; (2) Benefits of virtual delivery - enhancing accessibility and communication and sharing; (3) Perceived Emotional Impact and Support – the impact of treating suicidal patients on healthcare professionals' own mental health and the need for both emotional and practical support; and (4) Future Recommendations - suggesting scenario-based learning, multimedia resources, and strategies to improve research involvement in primary care settings.

Limitations

Variable survey completion across timepoints limited tracking of individual changes. The three-month follow-up had insufficient *N* to assess long-term effects, and the study could not measure impact on suicide rates.

Recommendations

Both quantitative and qualitative findings indicate the need for regular reinforcement via scheduled refresher sessions. Future program development should include tailored implementation strategies for primary care settings. Future evaluations should aim to improve participant retention across all timepoints, include longer follow-up periods, and explore integrating virtual delivery with periodic in-person components to maximise accessibility while maintaining engagement.

Background

Suicide is a major public health concern, both internationally and in the UK (World Health Organisation [WHO], 2021), with approximately 700,000 individuals dying by suicide each year. Suicide is among the three leading causes of death in those aged 15-44 years in some high-income countries in Europe, North America and East Asia, and the second leading cause of death in 10-24 years old (WHO, 2021). However, these figures do not include non-fatal suicidal behaviours such as self-harm, which are up to 20 times more frequent than completed suicides (WHO, 2021). Over 90% of people who die by suicide have contact with primary care in the year prior to death (Saini et. al.., 2014; Pearson et. al., 2009; Haste et. al., 1998; Rodi et. al., 2010; Luoma et. al., 2002). Patients who have a mental health condition consult in primary care more frequently than those who do not (Saini et. al., 2010; Pearson et. al., 2009; Haste et. al., 1998; Rodi et. al., 2010), and more patients who die by suicide have a lifetime diagnosis of mental health condition compared to living patients (63% v 28%), with 40-50% of those having a depression diagnosis (National Confidential Inquiry into Suicide and Homicide [NCISH], 2014). Half of the people who die by suicide have previously been referred to psychiatric services but only a quarter have been in contact with mental health services in the year prior to death (NCISH, 2022).

The national suicide prevention strategy (DH, 2021; 2023) makes explicit reference to the importance of the role of primary care in preventing suicide, as GPs are often the first health professional contact for people experiencing psychological distress or suicidal thoughts. Additionally, the fact that mental health condition is predominantly managed in primary care and the high prevalence of mental health condition in people who die by suicide highlight the importance of the role of GPs in recognising people who may be at risk of suicide. The management of suicidal patients by GPs has become a key component of suicide prevention policies, as a substantial proportion of patients who die by suicide have visited their GPs in the weeks or months before their death (Pearson et. al., 2009; Rodi et. al., 2010; Luoma, et al., 2002). GPs can intervene and provide treatment to patients who present in primary care consultations (NCISH, 2014). However, GPs are likely to require specialist training or knowledge to identify patients who may be at greater risk of suicide and act as gatekeepers, providing a vital link between patients and mental health services when

additional treatment is required. Further exploration of the consultation process and use of suicide prevention tools within primary care is necessary to inform targeted suicide prevention strategies.

Aim: To explore the barriers and facilitators of the Connecting with People Suicide Awareness and Suicide Response for Primary Care (SASRPC) Module and of implementing the Suicide Assessment Framework E Tool (SAFETool, an assessment and safety planning framework) within primary care settings in Liverpool.

Objectives:

- Compare primary care staffs' knowledge, attitudes, and confidence before and after training
- Explore primary care professionals' experience of the Connecting with People suicide awareness training
- Examine the use of the SAFETool framework and changes in behaviour post- training

Methodology

Design: A mixed-methods approach was used for this study. Quantitative survey data and qualitative interview data were collected and analysed to assess the effectiveness of the SASRPC training programme and the implementation of the SAFETool within primary care settings in Liverpool. A longitudinal pre-post survey design (a design to track behavioural changes of a group of people over time) was employed to examine primary care staff attendees' experiences of the SASRPC training, their use of SAFETool, and change in knowledge, confidence, and attitudes towards suicide following training. Semi-structured interviews were conducted with the trainers who provided the training to gain a comprehensive understanding of the SASRPC training delivery.

Participants**:** Quantitative data was collected from 87 primary care SASRPC training attendees between 26th July 2023 to 25th January 2025. Qualitative data were obtained through four in-depth interviews with SASRPC facilitators between 2nd December 2024 and 16th December 2024.

Procedure for quantitative data collection**:** Data were collected at three timepoints; before taking the training, immediately after the training, and three months post-training, via online surveys using the QuestionPro survey platform. Participants ticked a consent box before starting the surveys to indicate their explicit consent. Firstly, demographic data were collected from the attendees including age, gender, level of education, occupation, and years of experience in practice. Validated scales listed below were then administered to evaluate the training.

At all time points:

- Landschoot, Portzky, and van Heeringen's (2017) measure of knowledge confidence, and attitudes. The measure uses four scales, each of which have been shown to be valid and reliable measures.
    - Question, Persuade and Refer (QPR) questionnaire – a 7-item questionnaire assessing self-perceived knowledge around suicide.

Participants respond to each item (e.g. suicide warning signs) on a 5-point Likert scale ranging from 1 (very low) to 5 (very high). Responses were summed to give a total score ranging from 7 to 35, with higher scores indicating higher levels of knowledge. The QPR has been shown to be a reliable measure of self-perceived knowledge of suicide prevention.

- Suicide Information Test (SIT) – an 8-item questionnaire measuring knowledge of facts and myths around suicide. Participants agree (score 1) or disagree (score 0) with each statement (e.g. everyone who dies by suicide is depressed), resulting in a total score from 0-8. Higher scores indicate higher knowledge.
- Confidence and Beliefs Questionnaire (CBQ) subscale – a 3-item scale (e.g. I am confident in my ability to successfully treat suicidal patients) measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Responses are summed to give a total score from 3-15, with higher scores indicating higher confidence in caring from suicidal patients.
- Attitudes Towards Suicide Questionnaire (ATTS) subscale – a 3-item scale measuring willingness to help (e.g. It is a human duty to try and stop someone dying by suicide), measured on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). Responses are summed to give a total score from 3-15, with higher scores indicating more positive attitude towards caring for suicidal patients.

At T2 (immediately post-training) and T3 (3-months post-training):

- Questionnaire for Professional Training Evaluation (Kraiger and Jung, 2013) - The Q4TE is a questionnaire designed to assess participants' satisfaction with training programs. It is based on Kirkpatrick's (1954) four-level model of training evaluation, which covers the domains of reaction, learning, behavior, and results. Participants respond to each item (e.g. I have better understanding of suicide) on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Q4TE evaluates participants' reactions to the training, their

perceived acquisition of knowledge and skills, their intent and actual transfer of learning to the workplace, and their perceived organisational benefits. Higher scores in each domain indicate more positive perceptions of training effectiveness, such as greater satisfaction, higher perceived learning gains, stronger behavioral application of training content, and more favourable outcomes in work performance or service delivery. The Q4TE has demonstrated high internal consistency and construct validity, making it a reliable instrument for evaluating professional training programs in various sectors.

At T3 only:

- The Behavioural Change Questionnaire version 1.2 (Smith et al., 2020) - Behavioural Change Questionnaire version 1.2 was used to assess the change of using the SAFETool in consultations; the scale consisted of 12 items using a 10-point Likert scale from 1 (I want to make this change) to 10 (Definitely not). The questionnaire specifically measures factors influencing professional practice change rather than general attitudes toward innovation, with higher scores reflecting greater readiness and capacity to integrate new approaches into routine practice.

Quantitative data analysis: Data was analysed using SPSS 26. To examine attendees' outcomes, repeated measures t-tests were used to compare pre and post training data. When *N* was insufficient for t-tests, means were compared and significance assessed with alpha set to .05. Standard descriptive data analyses were also used to assess distributions and frequencies.

Procedure for qualitative data collection**:** Prior to the interviews, all participants verbally consented to confirm participation. The interviews were conducted online via Microsoft Teams platform, which also automatically transcribed the interview. The semi-structured interviews examined trainer demographics, training delivery, participant engagement, practical challenges, and areas needing improvement. Interview times ranged from 30 to 90 minutes.

Qualitative data analysis: Thematic analysis was used to analyse the interview transcripts. This was selected as an appropriate method to explore the interview data as it facilitates a deeper understanding of the content (Richie and Spencer, 1994). All interview transcripts were checked for errors by listening back to the audio recordings and reading the transcripts simultaneously. Rashmi Liyanage (RL) conducted the four primary care interviews and listened back to the audio-recorded interviews and transcripts to become familiar with the whole data set. Sio Wynne (SW) cross-checked the anonymised transcripts to form a consensus. Pooja Saini (PS), SW and RL conducted the analysis of the anonymised transcripts that have been used within this report. Initially, the qualitative responses were coded and organised into themes and the generated themes cross-checked by PS, SW and RL to form an interpretation.

Data interpretation: The findings from the quantitative and qualitative data analysis were triangulated to understand the barriers and facilitators of the Connecting with People Suicide Awareness and Suicide Response for Primary Care (SASRPC) Module and of implementing SAFETool (an assessment and safety planning framework) within primary care settings in Liverpool.

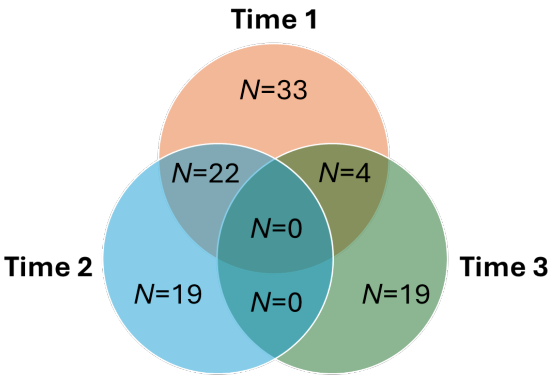
Ethical Approval: Ethical approval was granted by the Liverpool John Moores University Research Ethics Committee.

Findings

Quantitative Findings

Participants

Overall, 87 people completed at least one of the three surveys. 22 completed both T1 and T2 only, and 4 completed both T1 and T3 only. No participants completed all three time points. Because the participants who completed T3 did not complete T1 or T2, T3 could not be analysed as longitudinal data to test the longer-term effects of the interventions. Thus, the analyses focus on pre (T1) vs post (T2) training comparisons.



Demographics

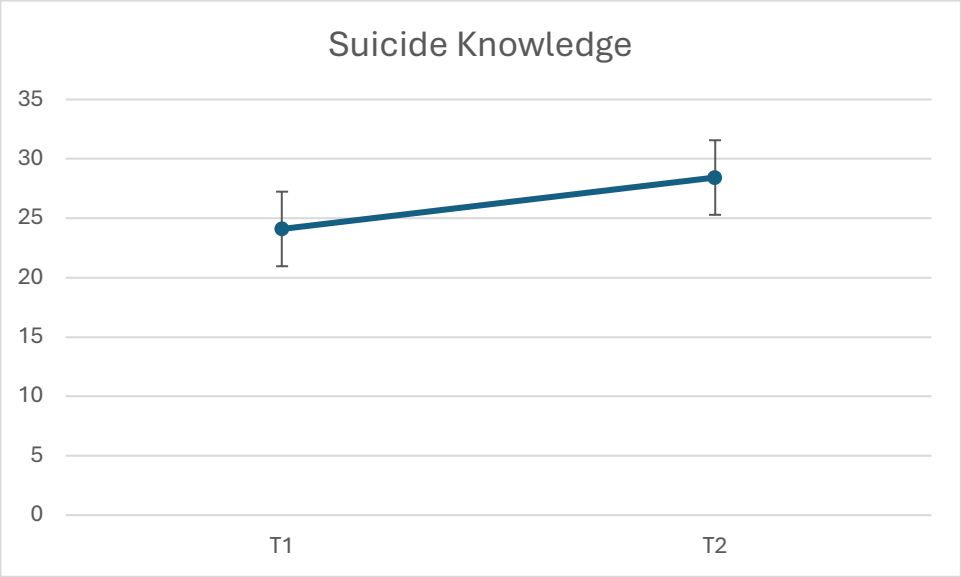
Participants ranged in age from 22-69 years. 73.6% (*n* = 64) were female and 26.4% (*n* = 23) male. The majority of participants (81.6%, *n* = 71) had completed either degree level (39.1%, *n* = 34) or postgraduate level (42.5%, *n* = 37) education.

41.4% (*n* = 36) of participants worked as a General Practitioner and 18.4% (*n* = 16) were a trainee GP or GP registrar. 16.1% (*n* = 14) worked in nursing, as a practice nurse, nurse practitioner, advanced nurse practitioner, mental health nurse, or nurse associate. 5.7% worked as a care co-ordinator, 5.7% as a pharmacy technician, and 12.7% worked in other related roles. Participants' years in practice ranged from 1-40, with a mean of 9.89 (*SD* = 10.238).

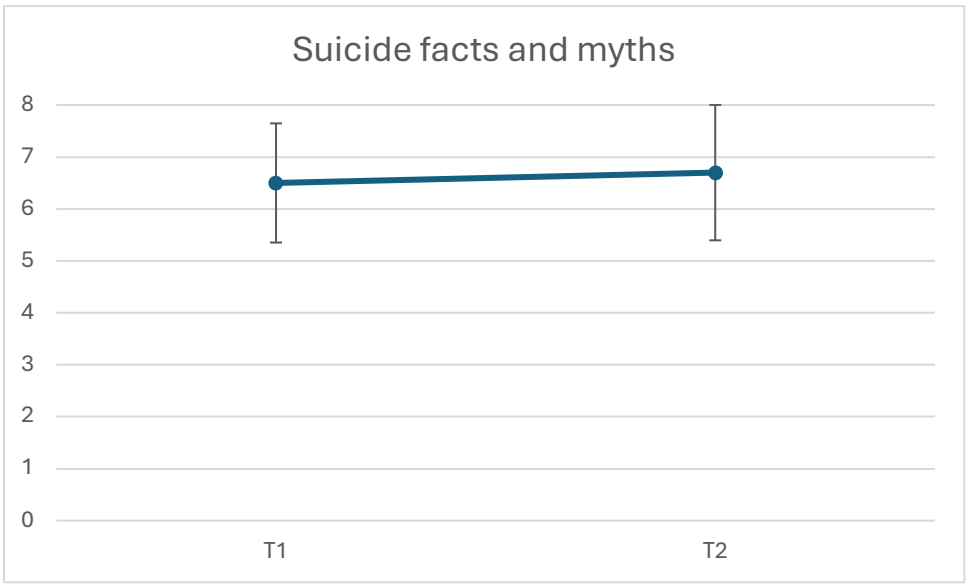
Job Title	N
General Practitioner	36 (41.4%)
Trainee GP/GP Registrar	16 (18.4%)
Practice nurse/ANP/NP/MH nurse/Nurse associate	14 (16.1%)
Care Co-ordinator	5 (5.7%)
Pharmacy Technician	5 (5.7%)
Other	11 (12.7%)

Knowledge, Self-Confidence, and Attitudes

In the first knowledge scale, measuring knowledge around the topic of suicide, participants scored higher at T2 (M = 28.43, SD = 3.140) than T1 (M = 28.43, SD = 3.140). A paired-samples t-test found the increase in suicide knowledge from T1 to T2 was statistically significant ($t(20)$=-4.269, p<.001). This suggests that the training significantly improved general knowledge of suicide.

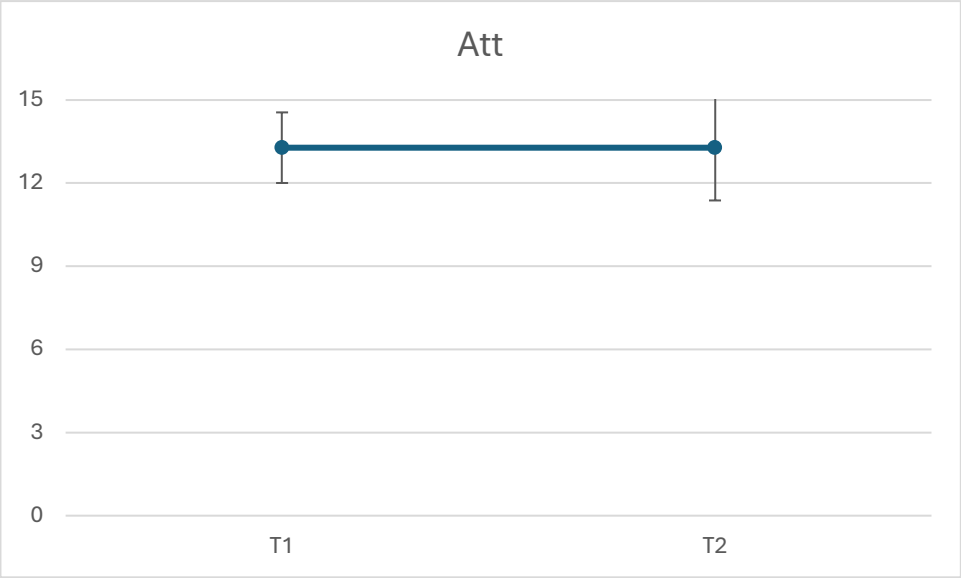


In the second knowledge scale, measuring knowledge of suicide facts and myths, participants scored similarly across T1 (M = 6.50, SD = 1.147) and T2 (M = 6.70, SD = 1.304). A paired-samples t-test showed no statistically significant change in knowledge of suicide myths and facts between T1 and T2 ($t(19)$=-0.847, p=.408).

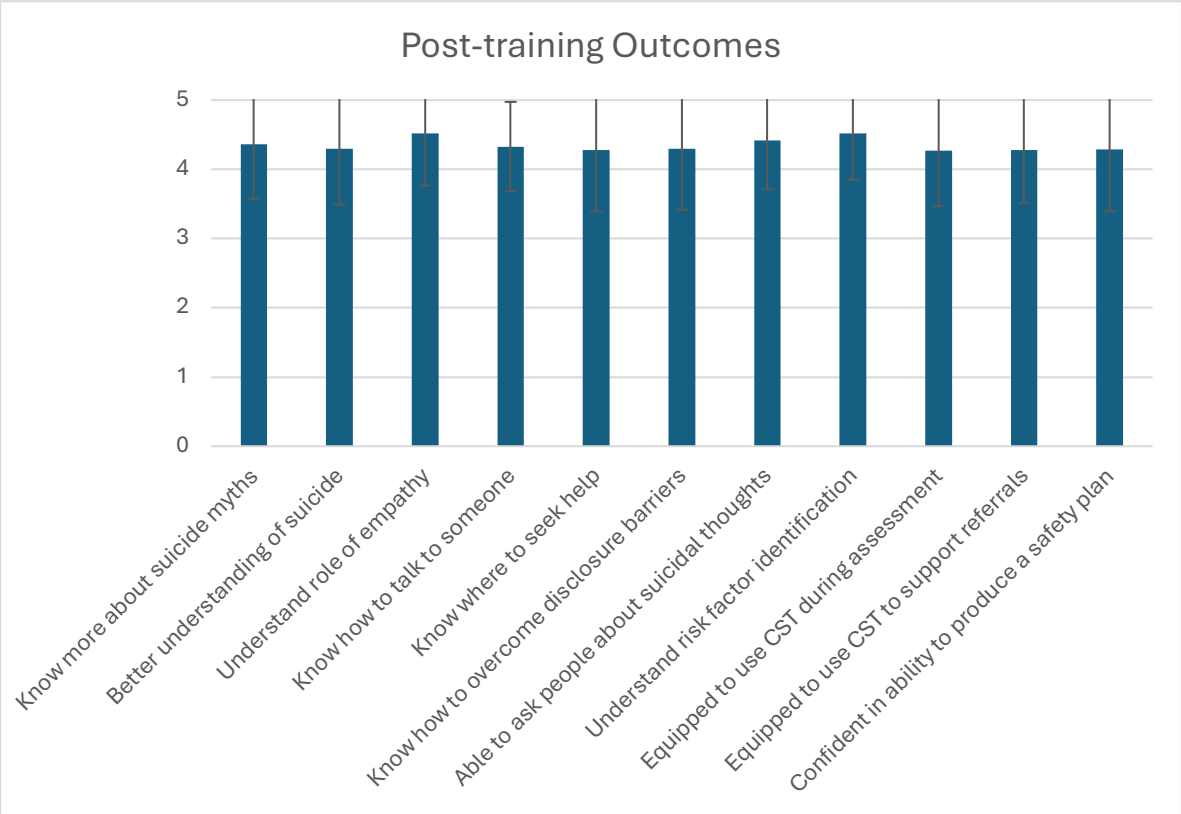


Participants appeared more confident in their ability to speak to, assess, and treat suicidal patients at T2 (*M* = 12.10, *SD* = 1.165) compared to T1 (*M* = 10.05, *SD* = 1.761). A paired-samples t-test suggested a statistically significant increase in scores from T1 to T2 (*t(19)*=-6.245, *p*=<.001), suggesting the training significantly improved attendees' confidence.

Participants' attitudes towards suicide showed little change between T1 (*M* = 13.28, *SD* = 1.274) and T2 (*M* = 13.28, *SD* = 1.904). A paired-samples t-test showed no significant difference between T1 and T2 (*t(17)*=.000, *p*=1.000).



Participants reported high satisfaction across all areas of the training at T2, with means ranging from 4.28-4.52 out of a possible 5. This suggests participants were highly satisfied with the training across all key indicators of knowledge transfer, application, and perceived benefit.



[1]

[1] The survey adapted the Questionnaire for Professional Training Evaluation, and CST stands for Clarification of Suicidal Thoughts.

Qualitative findings

Participants (n=4) ranged in age from 27-59 years. All four were trainers responsible for delivering the SASRPC and SAFETool training, and two had previously worked as a GP. The four trainers, in total, had experience in training over 3,400 delegates over the years. As explained in figure 1, from the interviews, four key themes were identified:1) *Training and Implementation; 2) Benefits of virtual delivery 3) Barriers to Effective Care and prompting wellbeing; 4) Future recommendations*.

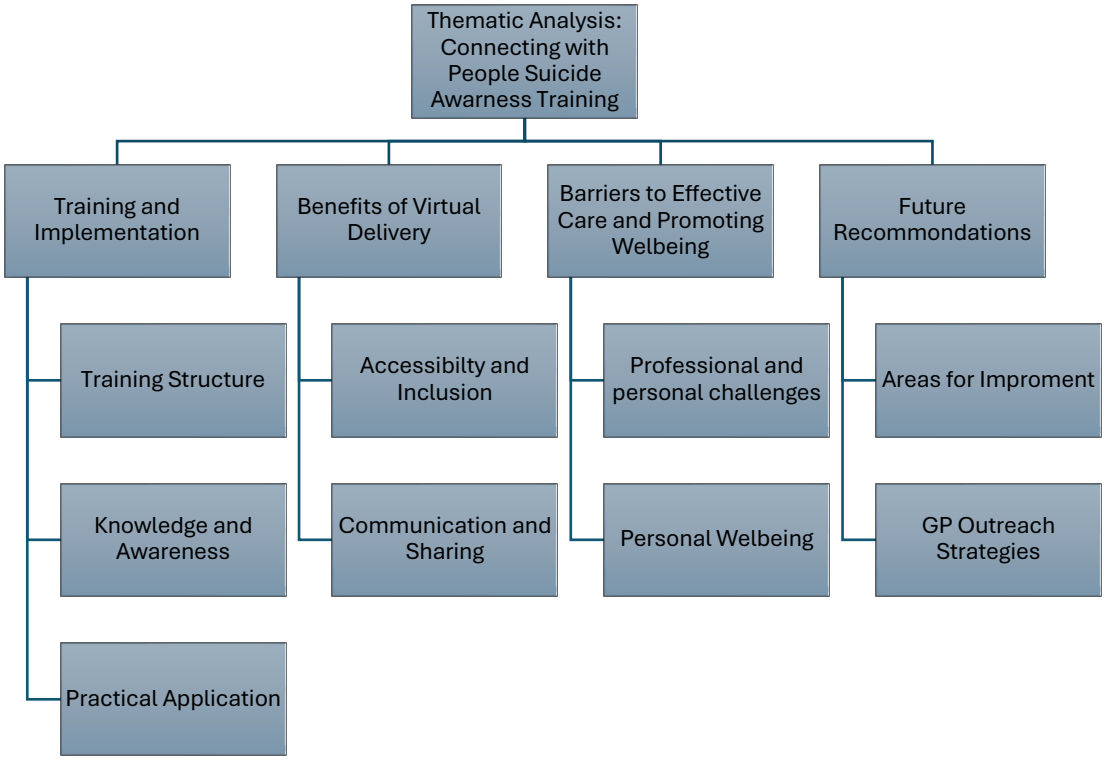


Figure 1

Theme 1: Training and Implementation

Training Structure

All four trainers mentioned that the SASRPC module was often complimented by attendees for its interactive and engaging format that created meaningful space for reflection and discussion.

People are really pleasantly surprised by how interactive the session is and how there's lots of opportunity for discussion within groups. So, that make me wonder whether there's lots of training that's just kind of, you know, someone delivering the content and not really facilitating the exploration of the subject… (P3)

Rather than relying entirely on a formal instruction method, it was highlighted that the training incorporated diverse engagement methods that maintained attention and facilitated deeper learning.

They're in a space that actually feels quite safe, that they can engage however they want to…. I think that kind of approach actually works really well for people because they can put forward whatever they want. It's not right or wrong (P4)

The structure provided valuable continuing professional development opportunities, offering professional development incentives that motivated participation among healthcare professionals who are time limited. At the same time, the training offered personal benefits as well, such as…….

I believe many professionals attend for CPD sessions, the points they earn. They've observed that it's free, so they come and go. This can be true for both professional and personal reasons. I think there's a shift when they realise that these sessions aren't solely for the profession but also for personal growth and wellbeing. (P4)

However, trainers identified challenges with time management during sessions, noting the difficulty in balancing content delivery with adequate discussion time.

I think just making sure that the training doesn't feel rushed at all is important. We only have 3 1/2 hours, and we have a lot of content. And while it's all important, it's just about making sure that nobody in that session ever feels rushed. So, I would say for improvement, that would be something that I would want to focus on (P4)

Knowledge and Awareness

The four trainers consistently observed knowledge gaps regarding suicide, even among experienced GPs with decades of clinical practice, highlighting the critical need for this specialised training regardless of career stage.

It's a program that begins with raising awareness. It often starts with people who are already working in that space, reassuring and reaffirming some current but foundational knowledge about suicide as a subject. The flow of the training starts from that basic understanding. Which is often a reassurance and reaffirmation. But quite often, there are some key points within the

training that even the most experienced GPs haven't really come to terms with, are aware of, or haven't realised the significance of so much that journey coming from that point. (P1)

The trainers further identified concerns of attendees in talking about suicide with their patients, both around the usage of appropriate language and the potential consequences of initiating conversations about suicide. This highlights the need for training to dispel misinformation or misheld beliefs around suicide.

So, there was that tension and anxiety about asking the question about suicidal thoughts…. if it going to make the situation worse (P1)

Facilitators thought the module successfully developed reflective practice skills among attendees, encouraging an awareness of their own assumptions, biases, and emotional responses to suicidal patients. This reflective component was thought to enhance understanding of distress management techniques and increased confidence in addressing suicide risk through structured approaches. Trainers reported that attendees discussed significant shifts in their perception of their role in suicide prevention during the training and saw an increase in attendees' confidence in their ability to respond effectively.

I do see people's confidence grow and I think that's often reflected in the feedback people often say I now feel more confident in talking to someone in distress. (P4)

Practical Application

The training was thought to effectively develop safety planning skills among participants, improving their ability to collaboratively create meaningful safety plans with patients experiencing suicidal thoughts. Facilitators also felt that attendees demonstrated an eagerness to use the techniques and tools in their practice, although did identify barriers that might prevent them from doing so, such as the short duration of appointment times.

There's often a lot of discussion and questions around the clinical tools…which is great and understandable that people would want to delve into how they're used… how we can use these in short appointment times… Questions like that, you know, showing willingness to practically use in the context of primary care. (P3)

Facilitators saw enhanced competence in identifying risk indicators and warning signs that might otherwise be missed in brief primary care consultations. They

also felt that attendees particularly valued learning specific language and questions to use when discussing suicidal thoughts with patients. Most significantly, trainers observed enhanced integration of compassionate and empathetic approaches to patients experiencing suicidal thoughts, suggesting a shift from entirely relying on clinical or risk-management models to more holistic care approaches. This represented an important transition from viewing suicidal patients primarily through a risk lens to seeing them as people experiencing profound distress requiring both clinical expertise and human connection.

…this training is bringing all those fundamentals.. to be compassionate, taking time to listen, how to better assess somebody who's struggling… quite often people would say that they are really glad that they know that there are things that they can do to prevent suicide and self-harm and they are more confident in how to speak to people (P4)

Theme 2: Benefits of Virtual Delivery

Accessibility and Inclusion

The trainers described virtual delivery as an approach that they felt significantly enhanced opportunities in participation across the healthcare community. The online format removed traditional barriers such as childcare arrangements, travel costs, and time constraints that might otherwise prevent attendance, allowing more freedom for attendees to engage with the training.

I think they offer different things. I think for this particular training, it's really allowed people from all sorts of roles and jobs to actually attend. I think it makes it easier for people to show up compared to sometimes when it's face to face. People have to, like, pay for parking, organise childcare. (P4)

Chat functions were also thought to particularly benefit those who might be hesitant to speak up in traditional face-to-face settings, creating avenues for more inclusive participation from people who might otherwise remain silent.

I feel that other people have felt that they can perhaps engage more in a session, particularly through the chat. You know, people feel that they can ask questions and participate without necessarily feeling under pressure to speak, people who are shy speaking in front of other people. (P3)

Communication and Sharing

Facilitators felt that the virtual environment fostered greater openness among attendees compared to traditional face-to-face settings. Trainers consistently observed that healthcare professionals showed increased willingness to share personal stories, clinical challenges, and professional uncertainties in the online space. Facilitators noted how this enhanced disclosure occurred while maintaining appropriate confidentiality, suggesting that the digital platforms provided a sense of psychological safety that facilitated more authentic and genuine engagement.

I've delivered this training for a long time, face to face in the past but now entirely remotely. the emotional and tangible impact it has on individuals in almost every training that I've delivered is extraordinary to the point. They share pretty confidential stories… their own personal stories, their own personal impacts, and the number of times that I've been in a chat conversation while still delivering the training to support somebody throughout the training and then to signpost them and encourage them to help seek immediately, either within or beyond the training within the coming days. And that happens on a recurrent basis. (P1)

The platform was thought to enable synchronic story sharing capabilities that created a more democratic environment where traditional healthcare hierarchies were less pronounced. General Practitioners, nurses, mental health practitioners, and administrative staff were able to participate simultaneously, bringing together perspectives that might otherwise remain isolated in traditional training settings. This equality of voices was noted as particularly valuable in bringing forward perspectives from non-clinical workers and less senior staff, which enriched the training experience for all participants. The dialogue within the session was described as representing a broader spectrum of healthcare experiences which could not have been captured in conventional face-to-face training settings, creating a more comprehensive understanding of suicide awareness and response needs within primary care.

We often get a mixed group from a primary care organisation. People from back office, admin practise managers, healthcare assistance, the cleaner security GPS nurses are all in the same room. When they are in a face-to-face training, is not a democratised room. I've even delivered a training where the GP'S puts their chairs in the front row. The nurses with the 2nd row, the receptionist and the administration go back further…..the worst of the hierarchy dynamic being demonstrated. Fortunately, that's rare now. Non-clinical workers such as receptionists of course offers another dimension. So virtual space just it gives a much broader dynamic to and that dynamic and then be reflected back and put back into the room. (P3)

Theme 3: Barriers to Effective Care and Promoting Wellbeing

Professional and Personal Challenges

Facilitators commented how the training highlighted significant challenges faced by healthcare professionals that reduced their capacity to respond effectively to suicidal patients. The trainers indicated about attendees openly discussed workload pressures, administrative burdens, and symptoms of burnout that impact clinical encounters. Many practitioners who attended the training had disclosed concerns about the impacts of professional stress on family life and personal wellbeing, revealing the interconnected nature of professional and personal functioning.

GP'S are walking with fully laden bags with heavy stones all of the time and their legs are bending under the pressure... workload pressures... lack of control....
They often share their frustrations... their stories of burnouts within the current work.. but also sharing stories of how that has impacted on family life as well. They're struggling in their profession...some even saying "I think I have a diagnosis, but I haven't seen anybody yet because I'm a GP. Why should I? How can I? I don't dare to do that. What would happen to my career or, you know, it's not the thing we do. I'm meant to be supporting patients" (P1)

Facilitators felt that this training further created an opportunity for processing previously unaddressed traumatic experiences with patient suicides or suicide attempts and personal experiences that many had never formally debriefed. This highlighted the importance of addressing primary care provider wellbeing for effective patient care, particularly in emotionally demanding clinical situations involving suicidal ideation.

Personal Wellbeing

Facilitators noted an important outcome was attendees' improved recognition of the importance of their own emotional wellbeing and selfcare aspects when working with suicidal patients. According to the trainers, many attendees identified specific patient presentations or scenarios that evoked particularly strong emotional responses, creating awareness that could help them manage these emotional responses more effectively. The training was also thought to help develop distress tolerance strategies specific to suicide assessment contexts.

We use a seat belt analogy for safety planning, so having a safety plan is like wearing a seat belt and when we opened up for some reflection on how, how was it for you to think about doing your own safety plans (P3)

Trainers noted the development of self-care tools among attendees and observed careful consideration of attendees' personal connections to suicide. The training acknowledged that many healthcare professionals have their own experiences with suicide, either personally or professionally, which influence their clinical interest in suicide prevention. Facilitators felt that this therefore helped to normalise emotional responses and encouraged the integration of self-awareness into professional practice. The development of personalised wellbeing strategies emerged as a key perceived component of sustainable practice in such challenging clinical spaces.

People now feel more confident in not only thinking about another person's distress, but also thinking about how they look after themselves. Yeah, often times in training sessions, it's all about looking after others, but the first part of this particular module is really about thinking about our own safety and our own well-being and our own safety plan, which can sometimes take people by surprise. And they have an adjustment cognitively. They need to do at that this isn't about patients…this is also about me (P3)

The integration of wellbeing strategies specifically designed for healthcare professionals was particularly valued by the trainers, due to the unique stressors of primary care environments. The trainers further highlighted this component is an often-neglected aspect in many suicide prevention training.

Theme 4: Future Recommendations

Areas for Improvement

Trainers identified several avenues to enhance the program based on their extensive delivery experience. They recommended development of more scenario-based learning to bridge theory and practice, allowing attendees to apply new knowledge in simulated clinical encounters before facing similar situations with actual patients. They felt these scenario-based approaches should ideally incorporate diverse patient presentations to prepare clinicians for a variety of situations they may encounter. They thought the balance between instructive method coupled with discussion and more real-world application would enhance learning outcomes.

Perhaps something that would be great for people is to see scenarios. Film clips of scenarios that they can then reflect on and use for in their discussions. So, a patient, a doctor, patient interaction. A mixed media approach within the training, rather than just static slides, there's film clips and things like that something different and appealing to different people's learning styles. (P3)

Regular refresher sessions were further suggested by all the four trainers to sustain knowledge and skills over time, acknowledging that single training interventions, although effective, require reinforcement for lasting impact on clinical practice.

GP Outreach Strategies

When asked about strategies to improve GP involvement in research participation, the trainers recommended targeting larger GP practices where recruitment could be maximised through reaching multiple practitioners simultaneously. They emphasised consulting practice managers as organisational gatekeepers who could facilitate broader staff participation. Personal contact approaches were also favoured over mass communications such as generalised emails, while the researchers building healthy relationship with the primary care staff was identified as crucial in enhancing research participation.

I think it starts before the training even takes place. I think if we can get buy in from all levels before the trainings, even before dates even being set and say this is what's going to be expected of the training. Getting practise managers involved from the very beginning of surgeries. If you can target larger surgeries and then have just that one focus surgery with the practise manager, I think would enhance their participation in research. (P4)

Key points

- SASRPC training helped primary care staff improve knowledge and confident when dealing with suicide, but this confidence dropped after three months without refresher courses.
- Attendees felt more confident talking about suicide, but their understanding of facts and myths didn't improve much, nor did their attitudes change.
- Regular refresher sessions are needed to keep confidence and skills up, as one-time training isn't enough.
- Even experienced practitioners had knowledge gaps on the topic, showing a strong need of mandatory suicide prevention training.
- Interactive training methods worked better than lecture-based training in boosting skills and confidence.
- Virtual learning platforms helped more staff in primary care from different backgrounds join and discuss such sensitive topics openly.
- Training should also focus on clinician wellbeing to support long-term suicide prevention efforts.
- Suggestions include combining suicide prevention training with practical tools, self-care, and flexible online learning options to better help primary care staff.

Discussion

Our longitudinal study evaluated the SASRPC training, and the findings support its effectiveness in enhancing understanding and competence of the primary care staff to address suicidality and suicide prevention. The quantitative findings indicate improvements in attendees' knowledge regarding the topic of suicide and their confidence in treating suicidal patients; findings which are mirrored by the qualitative interviews, in which facilitators saw improvement in confidence amongst attendees. Studies conducted by Gerrity et. al. (2001) and van Os et. al. (2002) similarly showed promising results of GP training with increased confidence, though these studies did not consider the long-term effects. Henriksson and Isacsson (2006) and Rutz (2001), however, have demonstrated that intensive training of GPs substantially improved patient outcomes and reduced suicide rates.

In our evaluation, while participants initially reported strong understanding and confidence in utilising the SAFETool immediately after the training. Similar trends were identified by Coppens et. al. (2017) in their study of 208 GPs across three European countries, where an increase was seen immediately after, yet, a decrease in confidence in dealing with suicidality in daily practice was observed at six-months follow-up. This further validates the with the qualitative interview findings as the trainers identified the need of regular refresher sessions. The trainers' observations that "*single training interventions, however effective, require reinforcement for lasting*

impact on clinical practice" directly mirrors Pisani et. al. (2021), who documented that one-time educational events rarely result in sustained practice change regardless of their quality or immediate impact.

The recognition of knowledge gaps even among experienced clinicians in our trainer interviews supports findings by McGorry and Mei (2022), who documented that many primary care providers receive minimal suicide-specific training despite regularly encountering patients with suicidal ideation. A systematic review conducted by Putri et. al. (2025) further highlights the limited confidence and preparedness of primary care providers in assessing patients with suicidal risk. The observed growth in participant confidence post-training in both survey and interview in our evaluation resonates with the outcomes from similar programs like STORM training (Appleby et. al., 2019), which demonstrated improvements in provider confidence following structured intervention training.

The interactive and reflective approach of the SASRPC modules, as revealed in qualitative interviews with the trainers, aligns with best practices that have been identified in prior research. Pisani et. al. (2021) demonstrated that interactive suicide prevention training significantly outperforms didactic-only approaches in developing clinician skills and confidence. The participants' positive response to engagement methods aligns with Cook et. al.'s (2017) findings that adult learners in healthcare settings show greater knowledge retention and implementation when training incorporates discussion, reflection, and application components rather than lecture-only formats. Further, the time management challenges noted by trainers reflect a common concern in healthcare education. Grimholt et. al. (2020) found that balancing comprehensive content delivery with adequate discussion time represents a persistent challenge in suicide prevention training, particularly given the competing demands on healthcare professionals' time.

Our findings on the advantages and accessibility of virtual delivery align with literature on telehealth education following the COVID-19 pandemic. For instance, Seidel et. al. (2022) found that virtual suicide prevention training reached more diverse participants across professional roles and geographic locations complementing our qualitative interview findings. The observed benefits of the chat functions enabling greater participation from otherwise reticent people supports McCosker et. al.'s (2021)

research showing that digital platforms can create psychological safety that facilitates meaningful engagement in sensitive topics.

Strengths and Limitations

Our evaluation provides valuable insight into the real-world application of suicide prevention training in primary care settings. This evaluation captured multiple dimensions including knowledge, attitudes, and practical utilisation of the SAFETool, while the trainer interviews explored the behavioural changes of the training attendees in depth. The longitudinal design further aimed to evaluate the immediate and sustained impact of the training in relation to the knowledge, attitudes and confidence of the participants prior to the training, filling a significant knowledge gap in the field. Further, including trainer perspectives in qualitative interviews offered unique insights into implementation challenges and opportunities not typically captured in participant evaluations. The identification of four key themes includes another layer of a comprehensive framework for understanding the multiple dimensions of suicide prevention training in primary care contexts.

Unfortunately, because no participants completed T3 along with another timepoint, T3 data could not be examined as the T3 sample may have had different baseline characteristics compared to people who completed the other timepoints. This attrition is commonly encountered in longitudinal studies involving GPs and other primary care staff, reflecting the demanding nature of their clinical practice (Pit et. al., 2014; VanGeest et. al., 2014; Parkinson et. al., 2015; Coppens et. al., 2017). The findings of the trainer interviews further highlighted the aspect of workload pressures of the primary care staff regarding provider wellbeing and emotional responses to working with suicidal patients address a critical gap in many suicide prevention programs. Tillman et. al. (2018) found that clinician distress following patient suicidal behavior is common yet rarely addressed in professional development. The training's focus on clinician self-care aligns with recommendations from Shapiro et. al. (2019), who argue that sustainable suicide prevention requires attention to provider wellbeing. Initially, it was planned to recruit primary care attendees to be interviewed, however this proved difficult due to challenges in recruitment, particularly due to significant time constraints of the primary care staff especially GPs. Hence, this prompted a shift in focus to interviewing trainers of the training instead. This, however, could introduce a

limitation to this study. The recruitment difficulty of primary care staff in research is common, and have been well-documented in literature, including Page et. al. (2011), Patel et. al. (2017), and Krebs et. al. (2021).

Implications for research and practice

Our findings suggest participation in training programs improves knowledge and confidence around the topic of suicide and treating suicidal patients. However, it remains unknown whether this knowledge and confidence is sustained over time. Nevertheless, the implementation of regular refresher sessions to maintain confidence and competence in using the SAFETool is highly recommended. It was evident that primary care suicide prevention initiatives require a scope beyond traditional educational approaches. While training remains the cornerstone of suicide prevention in primary care, it should also be integrated with robust systems and practical resources that can effectively engage the primary care staff, especially GPs (i.e., clear referral pathways; a straightforward crisis response protocol readily accessible for clinicians). Integrating self-care components into suicide prevention training is also essential, particularly in emotionally demanding clinical settings to safeguard the wellbeing of healthcare providers and sustain their ability to provide compassionate care for vulnerable patients. This requirement coupled with reflective practice and peer support mechanisms have been cited previously to enhance competence and mitigate burnout among primary care practitioners (WHO, 2021; Samuel and Pfarr, 2022). Consistent with Gask et. al. (2013) and Coppens et. al. (2017), our evaluation supports flexible delivery methods, particularly digital platforms such as Teams and Zoom, as well as web-based learning, which may better accommodate the demanding schedules and working patterns of primary care staff. Such adaptive training platforms could help overcome the common barriers to participation and potentially increase the uptake of suicide prevention training among primary care staff.

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