

ZSA

Resources

Evidence Review 3

Training in Suicide Prevention and Brief Intervention Training

Introduction to the ZSA Resources and the Evidence Reviews developed by the Health Innovation Network

The Zero Suicide Alliance (ZSA) secured funding from the Department of Health and Social Care to develop a world leading 'ZSA Resources' digital suicide prevention resource for its members that work across all sectors engaged with or influenced by suicide prevention.

The ZSA Resources are based on our core belief that everyone, everywhere, in every population can take action to promote good mental health, and prevent mental ill health and suicide.

The content of the ZSA Resources has therefore a very practical focus: to constantly seek out the needs of our membership, and to provide members with the resources and implementation tools they tell us they need, to turn their ambition into action. These resources include easy access evidence briefings, new accessible data, visualised into maps of their local area, live examples of implementation solutions in practice, peer learning and support networks, 'help' clinics, virtual conferences and webinars, and links to international communities of practice, research, innovation, and more.

To develop our resource, the ZSA initially commissioned our ZSA Alliance partner, the Health Innovation Network, to undertake a stakeholder consultation of people from each of our membership sectors to identify their needs. This report is available here:

www.zerosuicidealliance.com/ZSA-Resources/introduction/zsa-evidence-briefings

The Health Innovation Network (HIN) is the Academic Health Science Network (AHSN) for south London, one of 15 AHSNs across England. As the bodies that connect NHS and academic organisations, local authorities, the third sector and industry, they are catalysts that create the right conditions to facilitate change across whole health and social care economies, with a clear focus on improving outcomes for patients. The HIN is therefore perfectly placed to identify and spread health innovation at pace and scale; driving the adoption and spread of innovative ideas and technologies across large populations.

At the request of our members, ZSA commissioned the HIN to undertake research, bring together experts, and produce a series of evidence briefings on the state of knowledge in a number of key suicide prevention areas. Rigorous desk top research took place over a period of 10.5 weeks mid May 2019 – 2 August 2019. All sections were subsequently reviewed by relevant Virtual Steering Group members. The information sources in this report are correct at time of research.

The Evidence Reviews will be continuously updated as new knowledge becomes available, and to include the impacts of COVID-19. We will reach out to our members and Alliance partners to secure feedback on how the resources are used, how they can be updated and how they can be improved to support action.

We very much hope you find these briefings useful. Please continue to tell us how we can help you save lives, to get in touch please visit: www.zerosuicidealliance.com/get-involved/contact-us

Introduction

The initial proposal for the “desktop research” stream of the work undertaken by the HIN specified that “awareness training” and “brief intervention training” resources would be analysed separately. Initial findings of the desktop research revealed that available training resources were in a spectrum ranging from superficial “awareness” and “gate keeping and referral” to “brief intervention” training.

All of these resources were therefore analysed together. Evaluation of educational and training interventions can be conducted at different levels ranging from learner satisfaction, change in knowledge, change in behaviour, impact on patient outcomes to return on investment. Most of the evaluations the HIN identified measured satisfaction or change in knowledge.

Methodology

A mixed approach was taken to identify the training resources:

- Review of systematic and rapid reviews:
 - Zalsman et al. (2016)'s systematic review on suicide prevention strategies (specifically their section on training) was used to identify the training interventions with the highest degree of evidence according to the Oxford criteria (levels 1 and 2a).
 - Liverpool Public Health Observatory (2014)'s rapid review on suicide prevention training
 - Yonemeto et al. (2018)'s “Gatekeeper training for suicidal behaviours: A systematic review”
 - Maple et al. (2018)'s rapid review on programmes and services for suicide prevention.
- Google searches (“brief suicide prevention training” and “suicide prevention tool”). The most popular resources identified in this way were examined in more depth to assess whether they had evidence of effectiveness.
- Resources marked as having evidence of effectiveness by the Suicide Prevention Resource Center (those included in the National registry of Evidence-based Programs and Practices or developed and validated by the American Foundation for Suicide prevention Evidence-based Practices Project).

The resources currently being used by Local Authorities in England around suicide planning mentioned in a recent report by Samaritans (Chadwick et al., 2019).

Findings

A summary of the evidence of effectiveness of the resources identified using the sources listed above is presented here. Note that only standardised programmes (i.e. those with an identifiable name and clear intervention components) are included. The intervention components are not described in detail in this document. It must be noted that many of these programmes are only available for a fee.

The information below *is not intended to be a comprehensive list of all training resources available* but a summary of the evidence available for the most popular resources. We recommend that a more in-depth analysis of the most promising programmes based on the evidence below is conducted during the development of the 'Go-To' resource to ensure that the best possible resources are included.

The training programmes are divided into general, children and young people, workplace, armed forces, means restriction, emergency room and general mental health (the list below also specifies whether it the programme is classroom based or online).

General Training Programmes

Applied Science Intervention Skills Training (ASIST) - classroom based

A two day workshop that prepares caregivers to provide suicide first aid interventions (recognising the signs, engaging with people in crisis in a safe way, elaborate a safety plan with them and follow up on safety arrangements). This programme has been evaluated in numerous publications and recommended by several organisations, including Samaritans, Papyrus, the National Centre for Suicide Prevention (being one of the leading Suicide Prevention Training course worldwide). LivingWorks (the organisation that developed this training) states that more than 30 peer reviewed publications and government report show that ASIST:

- Improves trainee skills and readiness
- Safe for trainees, with no adverse effects from training
- Interventions shown to increase hope and reduce suicidality
- Training shown to increase general counselling and listening skills
- Saving lives and costs, yielding return on investment of up to 50:1

A more detailed inspection of the evidence revealed some gaps. Most of the studies evaluation focus on helpers' confidence (Ashwood et al., 2015) and very few studies have assessed the impact on suicide attempts (see for example, Cornell et al. (2016), which showed a reduction in suicide attempts when ASIST was implemented in high schools in Virginia). The return on investment figure mentioned above seems to be a projection over several decades rather than an actual figure (Ashwood et al., 2015).

The Suicide Prevention Resource Center (SPRC) designated this intervention as a "program with evidence of effectiveness" based on its inclusion in SAMHSA's (Substance Abuse and Mental Health Services Administration) National Registry of Evidence-Based Programs and Practices (NREPP). Note, however, that this evaluation was conducted based only on 1 randomised study (Gould et al., 2013) and only found promising results around personal resiliency and self-concept among suicidal individuals calling a hotline.

SafeTALK - classroom based

SafeTALK is a half day workshop that teaches people to recognise when someone is thinking about suicide and connect them to an intervention provider. It is recommended by a variety of organisations including the Samaritans, The Action Alliance, National Alliance on Mental Illness. LivingWorks (the organisation that developed this training) states that more than 15 peer reviewed publications and government report show that SafeTALK:

- Improves trainee skills and readiness
- Safe for trainees, with no adverse effects from training
- Effective for participants as young as 15 years old
- Helps break down suicide stigma in the community
- Better skill retention compared to other connector programs

The SPRC does not mark it as having evidence of effectiveness and in their review of the evidence, Kutcher et al. (2017a) stated that although there is some evidence of increased knowledge and self rated improvement of skills, no studies report on effects on self reported suicide attempts, emergency room visits or suicide rates. In another study, Kutcher et al. (2017b) mention that the spread of SafeTALK (among other programmes) has coincided with an increase in suicide rates for young people in Canada (suggesting that although this does not mean causation, it does call for caution).

Two of the suicide awareness programmes promoted by PAPYRUS in addition to ASIST (listed below) do not seem to have been evaluated.

- **SP-OT** Suicide Prevention (classroom based)-Overview Training (90 minutes) the focus of this training is on what EVERYONE needs to know)
- **SP-EAK** Suicide Prevention (classroom based)- Explore, Ask, Keep-Safe (3.5hrs): The workshop aims to prepare participants to identify those with thoughts of suicide, respond effectively and connect them with support.

QPR (Question, Persuade and Refer) - online

A one to two hour training programme designed to teach lay and professional “gatekeepers” the warning signs of a suicide crisis and how to respond. This programme is marked as having evidence of effectiveness by the Suicide Prevention Resource Centre (Quinett, 2012) based on two randomised controlled trials (Wyman et al., 2008; Cross et al., 2011) and a cohort study (Matthieu et al., 2008). On a scale of four, the programme was given the following scores:

- 1: Knowledge about suicide
- 2: Gatekeeper self efficacy
- 3: Knowledge of suicide prevention resources 4: Gatekeeper skills
- 5: Diffusion of gatekeeper training information

An adaptation of QPR has been shown to increase these soft outcomes in a high risk Japanese American population (Teo et al., 2016)

STORM (Skills Training on Risk Management) - classroom based

The package was developed in the UK and focuses on the key skills needed to assess and manage a person at risk of suicide (there is an additional version that focuses on children and young people). It has been endorsed by the UK Department of Health and Social Care as a good risk assessment package and was supported by the National Institute for Mental Health in England (NIMHE; Liverpool Public Health Observatory, 2014).

Liverpool Public Health Observatory (2014) mention four studies among nurses, prison staff and mental health and voluntary workers (conducted by the creators of the programme) in which this training was evaluated. They suggest that this training programme demonstrated improvement in confidence and attitudes towards suicide at post intervention, with unclear evidence of sustained effect at follow up or increased skills to deal with people in need. Further studies in schools and universities have similar results and call for research around the effect of these programmes in student-related outcomes (Robinson et al., 2016; Gask et al., 2017).

Morris et al. (2005) did not find evidence that training primary care, emergency, accident and mental health workers led to a reduction in suicide rates.

OSPI (Optimising Suicide Prevention Programmes) - classroom based

A four hour training course that has been found to increase knowledge about suicide prevention, reduce stigma and improve confidence in a variety of groups (eg. teachers and police officers; Arensman et al., 2016;

Coppens et al., 2014). There is some indication that the increase in skills might be larger in low skilled groups but also that certain groups might show increased stigma about their own depression after the training (Yonemeto et al., 2018).

The Zero Suicide Alliance (the commissioner of their piece of work) - online

The Zero Suicide Alliance has developed its own training. This is a 20 minute online short course that aims to provide a basic understanding of suicide signs, how to handle difficult conversations and refer people to professional help. It has been accessed over 1.2 million times across the world, with the majority from the UK. There is currently no formal evaluation of the effectiveness of the Zero Suicide Alliance course, however it is used widely from across sectors and within hundreds of organisations as a baseline awareness module.

The Zero Suicide Alliance recently launched two further modules which have not yet been evaluated:

- The Gateway module (Online) (5-10 minutes): a shortened version of the existing training
- The Step Up module (Online) (10-15 minutes): A short awareness module covering social isolation, with particular focus on isolation related to the Coronavirus.

Training programmes focused on children and young people

Youth Aware of Mental Health Programme (YAM) - classroom based

This was evaluated by the Saving and Empowering Lives in Europe (SEYLE) trial (multicentre, cluster randomised controlled trial involving 11,110 adolescent pupils, median age 15 years, recruited from 168 schools in ten EU countries). YAM approximately halved suicidal ideation and suicide attempts compared to the control group. Wasserman et al. (2015).

Kognito At-Risk for College Students - online

A 30 minute, online, interactive gatekeeper training program that teaches students how to identify the signs, approach people in distress and make referrals to university counselling centres. Based on Albright et al. (2011a), the SPRC's rating of this resource (on a four point scale) is:

- 1: Preparedness to recognise fellow students in psychological distress
- 2: Preparedness to approach fellow students in psychological distress
- 3: Preparedness to refer fellow students in psychological distress
- 4: Likelihood of approaching and referring fellow students exhibiting signs of psychological distress
- 5: Willingness to seek mental health counselling for self

Kognito Family At-Risk for High School Educator - online

A one hour, online, interactive gatekeeper training program that teaches educators how to identify the signs, approach people in distress and make referrals to university counselling centres. Based on Albright et al. (2011b, 2011c), the SPRC has given this resource the following ratings (on a 4-point scale).

- 1: Preparedness to recognise, approach, and refer students exhibiting signs of psychological distress
- 2: Likelihood of approaching and referring students exhibiting signs of psychological distress
- 3: Confidence in one's ability to help students exhibiting signs of psychological distress

More than Sad - classroom based

The HIN did not find any evaluations of "More than Sad", a programme developed by the American Foundation for Suicide Prevention, however this training has been delivered to over 1 million people (see [here](#)).

Life-Lines curriculum

Four 45 minute or two 90 minute lessons that incorporate elements of the social development model and employ interactive teaching techniques, including roleplay. Health teachers and/or guidance counsellors teach the lessons within the regular school health curriculum. These lessons were developed specifically for students in grades 8-10 (13 to 16 years old) but can be used with students through 12th grade (17 to 18 years old). The curriculum manual and materials are available from Hazelden Publishing for a fee. The SPRC has included this on their list of evidence-based programme based on Kalafat et al. (2007), Kalafat et al. (1996), Kalafat et al. (1993).

Outcome(s) Reviewed (Overall Quality of Research Rating scale of 0 to 4)*

- 1: Student knowledge about suicide
- 2: Student attitudes about suicide and suicide intervention
- 3: Student attitudes about seeking adult help
- 4: Student attitudes about keeping a friend's suicide thoughts a secret

Training programmes focused on children and young people that are combined with other light touch interventions

Yellow Ribbon - classroom based

Is a programme for schools that combines gatekeeper training for adults (e.g. high school teachers) and peer leadership training for students with school wide assemblies, community presentations, and local chapters that provide outreach and education.

Liverpool Public Health Observatory (2014) mention that evidence of effectiveness has been anecdotal.

Sources of Strength - classroom based

Universal suicide programme for schools. Student leads are selected and trained for four hours. These student leads are mentored by two to five adult advisors. Certified trainers provide the peer leaders and adult advisors with an initial four hour interactive training. Adult advisors facilitate peer leader meetings over three to four months to plan, design, and practice individual, classroom, and media messaging activities. Although outcome assessment likely reflects the effect not only of training but of the whole activity, the SPRC, based on Wyman et al. (2010); Gould et al. (2004) and Schmeelk et al. (2012), has given this programme the following ratings (on a four point scale):

- 1: Attitudes about seeking adult help for distress
- 2: Knowledge of adult help for suicidal youth
- 3: Rejection of codes of silence
- 4: Referrals for distressed peers
- 5: Maladaptive coping attitudes

Suicide Optimism Programme : Roberts et al. 2018 Skills for Life: Fekkes et al. 2016

Training programmes for teachers focusing on improving general wellbeing among students with positive impact on suicide risk

Good Behaviour Game (intervention rather than training - it aims at socialising children for the student role and reducing aggressive, disruptive behaviour) - classroom based

In a randomised controlled trial during which teachers were trained for 40 hours, this intervention showed to reduce suicide attempts by the time students reached 19 to 21 years or age (RR=0.5; Wilcox et al., 2008) as well as a significant reduction in suicidal ideation. However, these results were not robust for all covariate analyses and the impact of the intervention on suicide attempts was greatly reduced in a second trial in which training for teachers and monitoring was reduced.

Workplace training

Samaritans workplace training - classroom based

Two studies have assessed the effectiveness of Samaritans training in the workplace and found that post intervention there is increased self efficacy regarding knowledge about suicide and suicide prevention (Clark et al., 2010; Matthieu et al., 2006). Please refer to the briefing on workplace initiatives for more information.

Armed Forces

Kognito Family of Heroes - online

A one hour online resource for families of returning army personnel. Based on Albright et al. (2012), the SPRC has given this resource the following ratings (on a four point scale)

- 1: Preparedness to recognise signs of post-deployment stress
- 2: Preparedness to discuss concern with veteran and motivate him or her to seek help at a Veterans Affairs (VA) hospital or Veterans centre (Vet centre)
- 3: Self efficacy in motivating veteran to seek help at a VA hospital or Vet centre
- 4: Intention to approach veteran to discuss concerns
- 5: Intention to mention the VA as a helpful resource

Means restriction

Emergency Department Means Restriction Education (training for parents or adult caregivers of youth admitted to the ED and considered to be at risk of suicide) - classroom based

Based on Kruesi et al., (1999), Wislar et al., (1998) and McManus et al., (1997), the SPRC has included this on their list of programmes with evidence of effectiveness and, on a four point scale, has given it the following ratings:

- 1: Access to medications that can be used in an overdose suicide attempt
- 2: Access to firearms

Emergency Room

Emergency Room intervention for adolescent females (in Spanish but dubbed in English) - mixed: classroom and online components

The SPRC has marked this as having evidence of effectiveness based on Kruesi et al. (1999), Wislar et al. (1998) and McManus et al. (1997)). The ratings on a four point scale are:

- 1: Treatment adherence
- 2: Adolescent symptoms of depression
- 3: Adolescent suicidal ideation
- 4: Maternal symptoms of depression
- 5: Maternal attitudes toward treatment

General mental health and wellbeing

Mental Health First Aid - classroom based

Although not specifically around suicide prevention but around mental health more broadly, Mental Health First Aid is a certified programme. It is offered in different versions:

- Mental Health First Aider (2 days), Champion (1 day) and Aware (0.5 days) for adults and for youth.
- Champion (1 day) for Higher Education Settings
- First Aider (2 days) for Armed Forces.
- There is also a “Train the trainer programme” for adults, youth, higher education and armed forces.

In general, positive impact on attitudes towards mental health, perceived self-efficacy to help someone in need and willingness to actively help someone who requires support. However, many evaluations are qualitative, measure outcomes post-intervention and not at follow-up and do not assess the appropriateness of the support provided by trainees (Mental Health First Aid England, 2018). Below there is a summary of evidence broken down by groups:

- **Higher education:** the only study that has been conducted in England was a feasibility study that found that course takers increased their understanding of mental health (Cregan et al., 2016)
- **Youth education:** Roberts-Holmes et al. (2018) conducted a study involving over 1,000 school staff and found that following the training, staff reported around a three fold (190%) increase in confidence, knowledge, skills and awareness to support a young person struggling with their mental health. Kidger et al. are currently conducting a large evaluation piece after a successful pilot involving 25 schools around the Bristol area. Thorough the analysis of open-ended responses, increased confidence and description of appropriate hypothetical responses were found in other evaluations (Mental Health First Aid England, 2018).
- In terms of **implementation in workplaces**, in a review commissioned by Public Health England and prepared by RAND Europe, MHFA England training was among the top five (out of 117 health and wellbeing programmes) identified as meeting the highest standards of evidence (Nesta level 3; Whitmore et al. 2018). However, two reviews (scoping review by Bell et al., 2018 and a meta-analysis by Morgan et al., 2018) suggest that although MHFA raises awareness of common mental health issues and their signs and symptoms, reduces stigma and increases confidence in assisting someone in need, there is limited evidence on adaptation of MHFA for different workplaces, or of actual sustained improvement in helping colleagues experiencing mental ill health.

Comments

The HIN did not find any specific brief intervention training programmes focused on suicide prevention among LGBTQ+ or ethnic minority groups (the SPRC contains a training resource (American Indian Life skills) for suicide prevention among native Americans but this is not as relevant in the UK and it is delivered throughout a training period of 30 weeks). Teo et al. (2016) have tested QPR specifically in Japanese Americans, but again this group is unlikely to be a priority group in the UK.

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