

Scoping Review of Good Practices of Suicide Prevention in The European Region

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Abstract

Almost 800,000 people globally commit suicide every year and there are many more people who attempt to take their own lives. It has been estimated that each death by suicide directly affects up to 60 people. Furthermore, for every suicide committed there are 10 suicide attempts. Suicide is not limited to high-income countries; it is a global phenomenon and affects all regions of the world. Unfortunately, the European region has the highest suicide rate.

The aim of this report was to conduct a scoping review to find good European practices in suicide prevention.

The final results (n= 23) were categorised into three groups: 1) studies in which the intervention was targeted at a risk group, 2) studies in which the intervention focused on training or education of professionals or reducing the means of suicide, and 3) studies with no specific objects or contexts.

The results on preventive measures against the harmful effect of the risk factors are much more visible than focusing on strengthening the protective factors. Even though promotional activities strengthen mental health and well-being and thus indirectly reduce mental health problems and prevent suicides. The results of this scoping review are supported by earlier studies what comes to often used suicide prevention interventions or practices. At the same time, earlier findings are contradictory whether the evidence of their effectiveness is conclusive. These studies often focused on quantitative methods, perhaps we should increase the utilisation of qualitative research in order to find out how instead of how many.

Keywords: Suicide Prevention; Best Practices; Scoping Review

Introduction

Every year close to 800,000 people globally take their own lives and there are many more people who attempt suicide. Every suicide is a tragedy that affects families and friends, communities and entire countries directly as well as indirectly. Suicide has long-lasting effects on the people left behind thus increasing their risk for suicidal behavior. Even though suicide was the second leading cause of death among 15–29-year-olds globally in 2015, suicide occurs throughout the lifespan. In spite of potential risk groups, suicide does not select between ages, cultures or population groups. With regards to suicide attempts; they are more common than suicides as there are 10 attempts per one suicide. [1]

Several authors [2,3] suggest that there is not enough evidence-based information about suicide prevention interventions. Thus, knowledge on which interventions are effective is scarce [4]. This may be a result of the low incidence of suicides, the sample sizes, heterogeneity in the treatment implementation or treatment contamination [5, 6]. Furthermore, often other very important consequences, such as social and illness morbidity associated with suicidal behaviour are overlooked [5]. According to Zalsman and partners [3] the limited number of randomised controlled trials has made the evaluation of suicide prevention intervention difficult, thus there is a need for alternative measures to show evidence-based results of effective suicide prevention efforts.

Collecting the information on successful suicide prevention interventions is also time-consuming. Studying the effectiveness of suicide prevention programmes or interventions often requires a long-term focus (over 5-10 years) and large sample sizes, which funding agencies are reluctant to finance. [6] The costs of prevention programmes are reasonably simple to calculate, but unfortunately, the benefits derived from them are not [7]. For example, measuring the value of the potential loss in production of a family member in mourning is very difficult.

When policymaking processes are considered, interventions as such may well be effective. However, the implementation may not be successful. There are several obstacles which may hinder implementation, for example the intervention may not be tailored to the predetermined context, collaboration may not work, or there may be scarce human, monetary or time resources. Additionally, stigma may impede implementation [8]. Furthermore, evaluation of an intervention should focus on both the outcomes as well as the process in order to be able to replicate, interpret and understand the outcomes, and if necessary, to make the alterations needed [9].

An activity or procedure can be called a good practice when there is evidence of its positive effectiveness [10]. Additionally, the term 'evidence-based practice' is occasionally used to refer something as good practice [11]. Furthermore, the terms 'good practice' and 'best practice' are often used quite freely, as synonyms. The aim of this scoping review is to map good or best practice interventions focusing on suicide prevention in the European region. Due to the varied use of terminology, the literature search in this study included not only the terms good practice and best practice, but also other related terms, such as evidence-based, recommendations and interventions as synonyms to the term good practice.

Scoping review

Scoping reviews were first defined as a method by Mays, Roberts and Popay in 2001 [12] and are a preliminary means of assessing the size and scope of the available research literature and evidence on a given research topic. The method has been referred to in numerous ways, such as scoping studies, scoping reports, literature mapping, evidence mapping and many more [13,14]. However, regardless of the terms used, scoping reviews, as a method are still quite rare [15].

Scoping reviews tend to focus on topics with a wider focus in comparison to systematic literature reviews. Another feature of scoping review is that they do not concentrate on assessments of the quality of the findings as much as systematic literature reviews do [16]. Thus, scoping reviews can be used to determine the coverage of literature on a given topic, to clarify key concepts or definitions in the literature and to identify key characteristics or factors related to them, to examine how research is conducted on a certain topic or field and finally to identify knowledge gaps in the research area. [17] This extent of perspectives offered possibility to scrutinize the issue in more detail in this study. In the study the key concepts were "given" as research terms, thus the scoping review in this case focused on the quick location of the main sources of evidence available [12,16]

Search terms and databases

The search terms were decided on the grounds of their being accurate as well as wide enough to collect as much literature as possible. The search terms are presented below and in the Phase I, II and III sections. A search of the literature was conducted in the following databases: Ovid MEDLINE(R), Web of Science, Core Collection (WOS), ASSIA, IBSS, Political Science database, Social Science Database, Sociology Database, Education Database, Eric, Sociological Abstracts, Cochrane Library, Cinahl, ASE – EbscoHost, SocIndexFullText, Ageline and PsycInfo.

Phase I of literature Search

The first phase of literature search was conducted in November 2017 and used following main terms: suicide-related terms (suicides, suicidal behavior, suicidal ideation, suicide prevention etc.); prevention-related terms (prevention, primary prevention, early intervention, preventive programmes, health promotion etc.); best practices –related terms (best practices, good practices, benchmarking/evidence-based practices/interventions/treatment/procedures, evidence-based etc.) and Europe-related terms (Europe, European Union, OECD-countries, Scandinavian and Nordic Countries etc.). This phase produced 835 references (Figure 1).

Phase II of literature search

In order to narrow down the results a second phase was conducted in January 2018. In this search the following main terms were used: suicide-related terms (suicide, suicides, suicidal behavior, suicidal ideation, suicide prevention [MeSH]); prevention-related terms (prevention, primary prevention, early intervention, preventive programmes, health promotion, preventive mental health care, mental health promotion etc.) and best practices –related terms (best practices, good practices, practice guidelines as topic/ [MeSH]). This literature search produced 278 references.

After the second phase of the literature search the title and the abstract of 278 records were screened by two researchers. The following exclusion criteria were applied: if the study was situated outside Europe; if the language of the paper was other than English; if the abstract seemed to show no relevance to the search theme or studies, which concentrated on very minor target groups instead of population level interventions. After the screening, 58 full-text articles remained to be assessed for eligibility. From which 39 were excluded. The exclusion criteria included: double listing; if the publication was not available or the form of publication did not present the intervention/practice adequately; if the language of the whole article was other than English or if the study was situated outside Europe. After exclusion 19 references remained.

Phase III of literature search

Because of the delay between the second literature search and reporting, a third literature search was conducted. In this way new articles between January 2018 and May 2020 were harvested. The search terms were the same as in the second search. This literature search produced 81 references. After the results were assessed for eligibility, four references remained, thus resulting a total of 23 results.

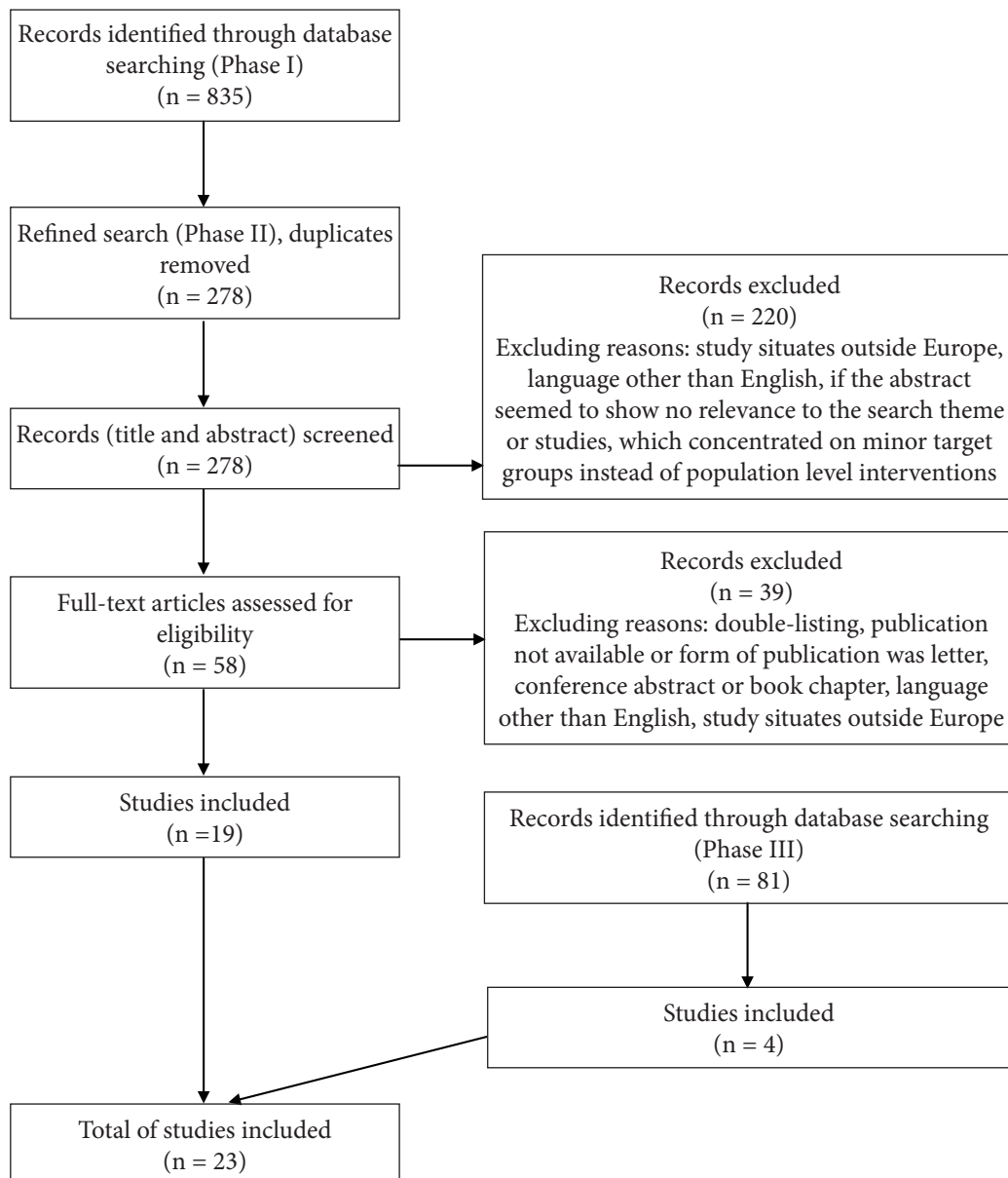


Figure 1: PRISMA flow chart

Content analysis of scoping review results

Content analysis is a method suitable for analysis of either qualitative or quantitative data. Inductive content analysis was used to organize the data and thus the categories were derived from it instead of preliminary theory. [18] After reading each result, three main categories started to develop. One of the main categories was larger than others, and thus, four subcategories emerged. The names of the categories and subcategories describe the contents of these results.

Results

The final phase produced 23 suitable results (Table 1). The final results were categorised into three groups;

- 1) studies in which the intervention was targeted at a risk group (n=3)
- 2) studies in which the intervention focused on training or education of professionals or reducing the means of suicide (n=16). This group was divided into the following sub-categories:
 - a. Training of professionals (n=4)
 - b. Suicide risk assessment (n=6)
 - c. Policies and recommendations (n=4)
 - d. The views of health care professionals (n=2)
- 3) studies with no specific objects or contexts (n=4)

Article	Target group	Country	Results
Group 1.			
Robinson, M, et al. (2014). Influencing public awareness to prevent male suicide.	Males	Scotland	The campaign effectively raised the suicide awareness substantially but with regional variations. It also affected the attitudes and behavior.
Chapple, A, et al. (2013) How people bereaved by suicide perceive newspaper reporting: qualitative study.	People bereaved by suicide	UK	The bereaved relatives were sometimes keen to talk to the press. Those who were upset by the press focused on careless reporting, misquoting and speculation that gave an inaccurate impression of the death.
Kearns, M, et al. (2017) Darkness into light? Identification with the crowd at a suicide prevention fundraiser promotes well-being amongst participants.	People affected by suicide	Ireland	For those who lost someone they knew or a family member to suicide, there was a significant increase in psychological well-being after the event.
Group 2.			
Group 2. sub-category Training of professionals			
Appleby, L, et al. (2000). An educational intervention for front-line health professionals in the assessment and management of suicidal patients (The STORM Project).	Health professionals	England	The staff who underwent training showed improvements in skills in the assessment and management of suicide risk.
DeBeurs, D.P, et al. (2015). The effect of an e-learning supported Train-the-Trainer programme on implementation of suicide guidelines in mental healthcare.	Health professionals; "train-the-trainer-programme"	The Netherlands	The training improved guideline adherence, self-perceived knowledge and confidence. No significant effect of the intervention on team performance was found.
DeBeurs, D.P, et al. (2016). Evaluation of benefit to patients of training mental health professionals in suicide guidelines: cluster randomised trial.	Health professionals; "train-the-trainer-programme"	The Netherlands	Intention-to-treat analysis showed no effects of the intervention on patient outcomes at follow-up. Suicidal patients with a DSM-IV diagnosis of depression showed a significant decrease in suicide ideation in the intervention group.
Manaana, K.R, et al. (2020) PROTECT: Relational safety-based suicide prevention training frameworks.	Professionals	UK	PROTECT's goal is to enthuse practitioners with recovery-oriented practice that focuses on the strengths of the person. It will provide the confidence in seeking out unique individualized solutions.
Group 2. Sub-category Suicide risk assessment			
Cutcliffe, J.R. & Barker, P. (2004) The Nurses' Global Assessment of Suicide Risk (NGASR): developing a tool for clinical practice.	Nurses	UK	The preliminary attempts to 'validate' or 'rate' the tool in practice are presented. The NGASR appears to provide a useful template for the nursing assessment of suicide risk, especially for the novice.
Heke, S, et al. (2009). Risk identification and management of adults following acute sexual assault.	Adults	UK	Recommendations are made for applying this developed risk identification tool in sexual assault referral centres together with good practice guidelines for staff dealing with identified risk, including suicide and self-harm.
McElroy, A. & Sheppard, G. (1999). The assessment and management of self-harming patients in an Accident and Emergency department: an action research project.	Self-harming patients	England	Four recommendations were made 1) a 'self-harm planning group' should be established, 2) a standardized questionnaire and interview procedure should be developed, 3) a training programme should be designed and 4) a patient progress and outcomes system should be introduced.
Ruddell, P. & Curwen, B. (2002) Understanding suicidal ideation and assessing for risk.	Patients	England	The paper outlines best practice regarding the exploration and assessment of suicidal ideation and suicidal potential.
Paxton, R, et al. (2001). Improving general practitioners' assessment and management of suicide risk.	General physicians	England	General practitioners' practice and opinions in assessing and managing suicide risk were significantly improved.
Tumme, R. (2001). A collaborative approach to urgent mental health referrals.	Mental health nurses	England	A nurse-led service has benefits in combatting the growing need for urgent assessment. There is also needs for specific mental health practitioner involvement at the point of referral and a liaison at the interface between primary and secondary care.
Group 2. Sub-category Policies and recommendations			
Bowers, L, et al. (2000) Suicide and self-harm in inpatient psychiatric units: a national survey of observation policies.	Health professionals	England and Wales	Extreme variation in terminology and practice was encountered. There were services which still have no written observation policy or no clinical recording system of the procedure in place.

Article	Target group	Country	Results
Havárneanu, G.M, et al. (2016). Lessons learned from the collaborative European project RESTRAIL: reduction of suicides and trespasses on railway property.	Public transportation providers, decision-makers	EU members states	The outcomes included a list of 25 recommended measures, 11 field tests and a free online toolbox for decision-makers.
Mokkenstorm, J, et al. (2018) Suicide Prevention Guideline Implementation in Specialist Mental Healthcare Institutions in The Netherlands.	Mental health care providers	The Netherlands	MHIs improved significantly on the development of an organizational suicide prevention policy; monitoring and trend-analysis of suicides numbers; evaluations after suicide; and clinician training. No improvement on the multi-annual training policies; collaborative care with external partners; recording and evaluation of suicide attempts; routine assessment of suicidality; safety planning and involving next of kin and carers.
Pompili, M, et al. (2009). Preventing Suicide in Jails and Prisons: Suggestions from Experience with Psychiatric Inpatients.	Jails and prisons	-	The best practices for preventing suicides in jail and prison settings should include: training programs, screening procedures, communication between staff, documentation, internal resources, and debriefing after a suicide.
Group 2. Sub-category the views of health care professionals			
Saini, P, et al. (2016) General practitioners' perspectives on primary care consultations for suicidal patients.	General physicians	UK	Following recommendations were made: increasing GP awareness of suicide-related issues and improving training and risk assessment skills; removing barriers to accessing therapies and treatments needed in primary care; improving collaboration between services; and increasing awareness in primary care and focusing on each individual's situational context.
Littlewood, D.L, et al. (2019) Learning from clinicians' views of good quality practice in mental healthcare services in the context of suicide prevention: a qualitative study.	Clinicians	UK	The key elements of good practice in mental health services; 1) promotion of safer environments, 2) development of stronger relationships with patients and families, 3) provision of timely access to tailored and appropriate care, 4) facilitation of seamless transitions, and 5) establishment of sufficiently skilled, resourced and supported staff team.
Group 3.			
Harris, F. M, et al. (2013) Developing social capital in implementing a complex intervention: a process evaluation of the early implementation of a suicide prevention intervention in four European countries.	Health professionals, PR, gatekeepers, high risk groups and relatives	Germany, Hungary, Ireland and Portugal	Some some key areas for best practice in implementation are careful planning of the composition of the advisory group to access target groups; the importance of establishing common goals and acknowledging and complementing existing experience and activity; and facilitating an equivalence of benefit from network participation.
Mishara, B.L, & Dargis, L. (2019) Systematic comparison of recommendations for safe messaging about suicide in public communications.	Media	-	Recommendations in over half of guidelines are: avoid glorifying suicide, do not describe suicide methods, don't say suicide is inexplicable or explain simplistically, do not state that suicide is frequent in specific circumstances, encourage help seeking. There were disagreements on including personal details about people who died by suicide, and agreement to avoid certain phrases.
van der Feltz-Cornelis, C. M. et al. (2011) Best Practice Elements of Multilevel Suicide Prevention Strategies.	-	-	Effective best practices identified were: training general practitioners to recognize and treat depression and suicidality, improving accessibility of care for at-risk people, and restricting access to means of suicide.
Wahlbeck, K, et al. (2010). European Pact for Mental Health and Wellbeing: collating forces to put mental health on the political agenda.	Mental health policies in Europe	EU member states	

Table 1: Results of the scoping review

The group where the intervention targeted at the risk group included three articles which all focused on awareness raising [19-21]. Two of them [19,20] concentrated on those bereaved by suicide and the third article [21] focused on males as a risk group. Awareness raising methods included campaigning, newspaper reporting and fundraising events.

Group 2 concentrated on studies in which the intervention focused on training or education of professionals or reducing the means of suicide. This group was indisputably the largest category with 16 results and thus they were divided into four sub-categories.

The “Training of professionals” subcategory consists of four results which focused on training of general physicians or nurses in suicide prevention [22-25]. Two articles in this group focused on the same Dutch study [23,24], which examined the effects of e-learning and evaluation of patient benefits. The studies of DeBeurs and partners [23,24] did show increase in some measured areas. Also in the study of Appleby and partners [22] the staff who underwent training showed improvements in skills in the assessment and management of suicide risk. The PROTECT training of Manaán and partners [25] suggests four frameworks of AWARE, DESPAIR, ASPIRE and NOTES which refer to different and equally important perspectives in suicide risk assessment and management. Use of these frameworks would improve the recovery-oriented practice, however the training of these frameworks is essential part. Noteworthiness of this model lays in its down-top thinking. Patients’ needs and strengths for recovery are stressed. [25].

The sub-category “Suicide risk assessment” included six articles [26-31]. This group consisted of the articles describing and evaluating suicide risk assessment tools and discussing improvements in suicide risk identification. Cutcliffe and Barker [26] developed an assessment tool to be used by nurses, while Heke and partners [27] developed a risk identification and management tool for adults who have experienced a sexual assault. Both Tummey [31] and Ruddell and Curven [29] emphasize the importance of first-hand assessment of suicidal patient by health care staff. McElroy and Sheppard [28] situated their assessment –related action research project in Accident and Emergency department. The study by Paxton and partners [30] concentrate on training of general physicians in suicide risk assessment.

Sub-category of “Policies and recommendations” consisted of four results [32-35]. These results were different from each other. The first concentrated on a railway suicide prevention project, which produced a list of recommended measures and an online toolbox for decision-makers [33]. The second result studied the terminology used among nurses and its effects on their work and suggested that a clear and written observation policy as well as clinical recording system should be developed [32]. The study by Pompili and partners [35] was a literature search on suicide prevention in psychiatric facilities and suggested that policy recommendations could be utilised in these places. The paper by Mokkenstorm and partners [34] concentrated on implementation of suicide prevention guideline in The Netherlands.

“The views of health care professionals” sub-category had two results, which concentrated on professionals’ perspectives [36,37]. The first article concentrated on general physicians’ interpretations of suicidal patient communication and treatment in primary care [36]. The second article focused on clinicians’ views of good quality practice in mental healthcare services [37].

The third group with no specific objects or contexts consisted of four results [9, 38-40]. One of the results discussed the prioritisation of mental health on the political agenda [40]. Harris and partners [9] presented the results of a process evaluation of an early implementation of four suicide prevention interventions. Van der Feltz-Cornelis and partners [39] identified three effective best practices in their review of systematic reviews. A study by Mishara and Dargis [38] concentrated in recommendations about suicide reporting in media.

Discussion

Patton [41] has critically pointed out that the term ‘best practice’ needs clarifying when used; especially the question, “For whom is it a best practice?” In addition to, “In what context and in under what circumstances?” There is no possibility to define a universal best practice due to these required clarifications and therefore, it would be more accurate to use terms such as effective, better or good practice. [41]. In this paper we collected papers with certain search terms, such as best or good practice. As can be seen, the results varied from each other. Some of the papers presented interventions or actions, which were already given a label of “best practice” [39] or they presented policy recommendations or guidelines [33,34]. These recommendations and guidelines as well as interventions discovered effective could easily be referred as best practices. Our aim was not to assess whether the found results are worthy of this label. It would be a following study and, what is more important, it would need clarification of the term as Patton [41] has suggested. However, in this discussion we scrutinise our results with each other as well as earlier studies to see, whether they support each other.

Robinson and partners [21] state that not only professionals, but also the public can be a powerful “influencer”. At its worst, suicide can be recognised as subject to social contagion, with an elevated risk of adverse outcomes amongst those affected [20]. On the other hand, at its best, a well-educated public can reduce stigma in the community tremendously. However, it requires solid information on the background, risk and protective factors as well as practical information about suicide prevention [21]. Public awareness and education campaigns are popular public health interventions for reducing stigma, suicides and suicidal behavior; even though the results have been controversial as to whether they are effective or not [2]. Zalsman and partners [3] found in their systematic review that school-based awareness programmes have shown to reduce both suicide attempts as well as suicidal ideation. On the other hand, there are several studies showing that there is not enough evidence of general public education about suicide prevention. [2, 42, 43]

Unfortunately, even professionals can hold false beliefs about suicide related issues, for example that enquiring about [21] stress the importance of research and practice of a variety of perspectives for certain target groups, stigma and mental health, but also risk and protective factors which can inform campaigns to be effective. Furthermore, studies on media reporting, especially on celebrity suicides, have shown that to prevent copycat effects, more responsible reporting is needed [46]. Glamorising the suicides of famous people, reporting a suicide place or means of suicide with photos can be a trigger for suicides [2,42,43]. The systematic comparison of safe messaging about suicides in public communications by Mishara and Dargis [38] found that even though there was a wide range of research papers, there were no empirical data that could help support or decline any of the guidelines. Despite these results, the media should be utilized for awareness raising and education [3,38]. Furthermore, the reporting style should be considered more carefully, stressing the protective factors, such as coping strategies [47]. Increasing awareness promotes seeking and receiving help, and it also enhances implementation, resource allocation and commitment to suicide prevention efforts [48].

Van der Feltz-Cornelis and partners [39] found that together with restricting access to means of suicide and improving the accessibility of care for at-risk people, also training of general physicians (GPs) to recognise and treat depression and suicidality was effective. As a study area, training of professionals is very interesting and important as there are several studies which show that a wide number of those patients who committed suicide visited a general physician within a month prior to their suicide [49,50]. There may be several reasons why the risk of suicide has not been detected by the GP; the lack of assessment tools, years in practice or poor interactional skills. Additionally, the findings by Ahmenadi and partners [49] indicate that mental health and the risk of suicide thus may need more profound assessments, especially in primary healthcare settings.

The study of Michail and Tait [51] explored the views and experiences of GPs concerning suicide risk assessment and the management of young patients in primary care. Even though the article was not about training it still gives valuable clues to why or why not the training of GPs is not always effective. According to their study, GPs acknowledged the need for improving their skills in the assessment and management of suicide risks with specialised training. When asked, the GPs themselves suggested that different learning styles and years of experience should be taken into consideration when offered training. For example, small and practical face-to-face group sessions and online training were suggested. The main conclusion of the study was that training on suicide risk and management for youth should promote a holistic understanding and assessment of suicide risks as well as the individual, social and contextual influences [49]. To compensate the possible inadequacy of training, Mana'an and partners [25] suggest the PROTECT (PROactive deTECTion) training frameworks to improve suicide risk assessment and management.

The less experienced or unqualified nursing staff seemed to especially benefit from the training. However, it is important that the organisation culture supports and supervises the reinforcement and development of the skills. [52] Thus, it should be remembered that the training itself is only part of a successful intervention. According to Mokkenstrom and partners [34] there is evidence which shows that implemented guideline recommendations reduce the risk for patients to die by suicide. They also showed that certain practices did improve after implementation of suicide prevention guideline recommendations: the development of an organizational suicide prevention policy, monitoring and trend-analysis of suicides numbers, evaluations after suicide, and clinician training. Even though there were domains with no improvement, these results show that implementation of guidelines do make a difference. [34]

Conclusions

In this scoping review the results concentrated on preventive measures against the harmful effect of the risk factors instead of focusing on strengthening the protective factors. Even though promotional activities strengthen mental health and well-being and thus indirectly reduce mental health problems and prevent suicides. There are several risk factors behind suicide and suicidal thoughts; however, there are also several protective factors [53]. Positive mental health and a variety of protective factors help individuals to overcome challenges in life and thus reduce the possibility of a person developing suicidal thoughts [54]. Protective factors include having a positive self-image, good coping strategies and stress tolerance, a person's help seeking tendencies, and social support, which is one of the most important protective factors. Also, cultural and religious beliefs and community involvement act as protective factors. Additionally, an individual's previous positive experiences when seeking help increase the willingness to seek help when feeling suicidal [55].

Several studies have claimed that there is no consistent evidence on which is the most efficient intervention in suicide prevention [2]. A study by Purebl and partners [8] found that only twelve interventions out of 69 were defined as effective. As suicide is a result of a complex net of risk factors, it is suggested that the most effective interventions are those which focus on the issue on several levels [56]. Hjelmeland & Knizek [57] claim that it is still relatively little known about how suicide risk factors relate to suicidal ideation. They may vary at different times and for different persons, and thus suicide prevention research needs not only explanation but also understanding of the phenomenon.

It is very likely that there would have been more results if the search would have included also other than European countries. As mentioned at the beginning, an effective intervention may not succeed in another context, country or time. To succeed, an intervention has to be modifiable and resilient when implemented in another time and place.

As suicide is a major public health challenge, governments have a need to build effective strategies. However, choosing and implementing the most effective interventions can only be based on information on which methods work and why. Evidence-based studies on the effectiveness of the suicide prevention interventions may be scarce, thus decision-makers may rely on already used solutions. If evidence-based studies would be replaced, they would most likely be replaced by randomised controlled trials (RCTs) as they are seen as the gold standard for decision-making [58]. Tanenbaum [58] argues that there are several controversies in this respect. Perhaps the most important for our study is the question of what the term "effective" actually means. What is meant by the word? From which perspective is it measured; monetary, relief of the patient, the number of cured patients or the patients' own enhanced understanding of what is happening to them? And most importantly, who decides? When this reasoning is viewed next to the results of this scoping research, only a small number of studies can be found. An intervention may well be effective; it may just not yet have been proven. Additionally, evidence-based results of one intervention may not be similar in another country.

The results of this scoping review are supported by earlier studies what comes to often used suicide prevention interventions or practices. At the same time, earlier findings are contradictory whether the evidence of their effectiveness is conclusive. These studies often focused on quantitative methods, perhaps we should increase the utilisation of qualitative research in order to find out how instead of how many.

References

1. WHO (2018) Suicide Fact sheet.
2. Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, et al. (2005) Suicide prevention strategies: A systematic review. *JAMA* 294: 2064-74.
3. Zalsman G, Hawton K, Wasserman D, van Heeringen K, Arensman E, et al. (2016) Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psych* 3: 646-59.
4. Beautrais A (2006) Suicide prevention strategies 2006. *AeJAMH* 5: 1-16.
5. Goldney R (1998) Suicide prevention is possible: A review of recent studies. *Arch Suicide Res* 4: 329-39.
6. Jenkins R, Kovess V (2002) Evaluation of suicide prevention: a European approach. *Int Rev Psychiatry* 14: 34-41.
7. Sari S, de Castro S, Newman FL, Mills F (2008) Should we invest in suicide prevention programs? *J Socio Econ* 37: 262-75.
8. Purebl G, Petrea I, Shields L, Tóth MD, Székely A, et al. (2015) Joint Action on Mental Health and Well-being. Depression, suicide prevention and e-health. Situation analysis and recommendations for action.
9. Harris FM, Maxwell M, O'Connor R, Coyne J, Arensman E, et al. (2013) Developing social capital in implementing a complex intervention: a process evaluation of the early implementation of a suicide prevention intervention in four European countries. *BMC Public Health* 13: 158.
10. Koivisto J (2005) Hyvän käytännön kuvaus. *Fin-Soc: Sosiaalialan menetelmien arviointi*. 1: 16-8.
11. Borg P, Korteniemi P (2008) Evidence-based practices. In Borg P, Högnabba S, Kilponen M-R, Kopisto K, Korteniemi P, Paananen I & Pietilä N: Evaluation as a way of working - experiences in developing customer work evaluation. At the Helsinki Social Services Office. City of Helsinki Social Services Office: University Press.
12. Mays N, Roberts E, Popay J, (2001) Synthesising research evidence. In N. Fulop P, Allen A, Clarke, N. Black (Eds.), *Studying the organisation and delivery of health services: Research methods* (PP: 188-219). London: Routledge.
12. Colquhoun H (2014) Reviews: Time for Clarity in Definition, Methods, and Reporting *J Clin Epidemiol* 67: 1291-4.
13. Pham M (2014) A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Res Synth Methods* 5: 371-85.
14. Dijkers M (2015) What is a Scoping Review? *KT Update* 4 1. The Center on Knowledge Translation for Disability and Rehabilitation Research.
15. Arksey H, O'Malley L (2005) Scoping studies: Towards a methodological framework. *Int J Soc* 8: 19-32.
16. Munn Z, Peters M, Stern C, Tufanaru C, McArthur A, et al. (2018) Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Med Res Methodol* 18: 143.
17. Elo S, Kyngäs S H (2008) The qualitative content analysis process. *J Adv Nurs* 62: 107-15.
18. Chapple A, Ziebland S, Simkin S, Hawton K (2013) How people bereaved by suicide perceive newspaper reporting: qualitative study. *Brit J Psychiat* 203: 228-32.
19. Kearns M, Muldoon O, Msetfi RM, Surgenor, PWG (2017) Darkness into light? Identification with the crowd at a suicide prevention fundraiser promotes well-being amongst participants. *Eur J Soc* 47: 878-88.
20. Robinson M, Braybrook D, Robertson S, (2014) Influencing public awareness to prevent male suicide. *J Public Ment Health* 13: 40-50.
21. Appleby L, Morriss R, Gask L, Roland M, Lewis B, et al. (2000) An educational intervention for front-line health professionals in the assessment and management of suicidal patients (The STORM Project). *Psychol Med* 30: 805-12.
22. DeBeurs DP, de Groot MH, de Keijser J, Mokkenstorm J, van Duijn E, et al. (2015) The effect of an e-learning supported Train-the-Trainer programme on implementation of suicide guidelines in mental health care. *J Affect Disord* 175: 446-53.
23. DeBeurs DP, de Groot MH, de Keijser J, van Duijn E, de Winter RF, et al. (2016) Evaluation of benefit to patients of training mental health professionals in suicide guidelines: cluster randomised trial. *Brit J Psychiat* 208: 477-83.
24. Manaán Kar Ray, Wyder M, Crompton D, Kousoulis AA, Arensman E, Hafizi S, et al. (2020) PROTECT: Relational safety-based suicide prevention training frameworks. *Int J Ment Health Nurs* 29: 533-43.
25. Cutcliffe JR, Barker P (2004) The Nurses' Global Assessment of Suicide Risk (NGASR): developing a tool for clinical practice. *J Psychiatr Ment Hlt* 11: 393-400.
26. Heke S, Forster G, d'Ardenne P (2009) Risk identification and management of adults following acute sexual assault. *Sex Relatsh Ther* 24: 4-15.
27. McElroy A, Sheppard G, (1999) The assessment and management of self-harming patients in an Accident and Emergency department: an action research project. *J Clin Nurs* 8: 66-72.
28. Ruddell P, Curwen B (2002) Understanding suicidal ideation and assessing for risk. *Brit J Guid Couns* 30 363-372.
29. Paxton R (2001) Improving general practitioners' assessment and management of suicide risk. *Int J Health Care Qual Assur* 14:133-8.
30. Tummey R (2001) A collaborative approach to urgent mental health referrals. *Nurs Stand* 15: 39-42.
31. Bowers L, Gournay K, Duffy D (2000) Suicide and self-harm in inpatient psychiatric units: a national survey of observation policies. *J Adv Nurs* 32: 437-44.
32. Havárneanu GM, Bonneau MH, Colliard J (2016) Lessons learned from the collaborative European project RESTRAIL: REDuction of suicides and trespasses on RAILway property. *Eur Trans Res Rev* 8.
33. Mokkenstorm J, Franx G, Gilissen R, Kerkhof A, Smit JH (2018) Suicide Prevention Guideline Implementation in Specialist Mental Healthcare Institutions in The Netherlands. *Int J Environ Res Public Health* 15: 05-3.
34. Pompili, M (2009) Preventing Suicide in Jails and Prisons: Suggestions from Experience with Psychiatric Inpatients. *J Forensic Sci* 54: 1155-62.
35. Saini P, Chantler K, Kapur N, (2016) General practitioners' perspectives on primary care consultations for suicidal patients. *Health Social Care Community* 24: 260-9.
36. Littlewood DL, Quinlivan L, Graney J, Appleby L, Turnbull P, et al. (2019) Learning from clinicians' views of good quality practice in mental healthcare services in the context of suicide prevention: a qualitative study. *BMC Psychiatry* 19: 346.

37. Mishara BL, Dargis L (2019) Systematic comparison of recommendations for safe messaging about suicide in public communications. *J Affect Disord* 244: 124-54.
38. van der Feltz-Cornelis CM, Sarchiapone M, Postuvan V, Volker D, Roskar S, et al. (2011) Best Practice Elements of Multilevel Suicide Prevention Strategies. A review of systematic reviews. *Crisis* 32: 319-33.
39. Wahlbeck K, Braddick F, Gabilondo M, McDaid D, Lang D, et al. (2010) European Pact for Mental Health and Wellbeing: collating forces to put mental health on the political agenda. *Die Psychiatrie* 7: 74-80.
40. Patton MQ (2001) Evaluation, Knowledge Management, Best Practices, and High-Quality Lessons Learned. *Am J Eval* 22: 329-36.
41. Dumon E, Portzky G, Euregenas partners (2013) Niederkrotenthaler T, Till B, Kapusta ND, Voracek M, Dervic K, Sonneck G, (2009) Copycat effects after media reports on suicide: A population-based ecologic study. *Soc Sci Med* 69: 1085-90.
42. Stoppe G, Sandholzer H, Huppertx C, Duwe H, Stedt J (1999) Family physicians and the risk of suicide in the depressed elderly. *J Affect Disord* 54: 193-8.
43. Bajaj P, Borreani E, Ghosh P, Methuen C, Patel M, et al. (2008) Screening for suicidal thoughts in primary care: the views of patients and general practitioners. *Ment Health Fam Med* 5: 229-35.
44. Niederkrotenthaler T, Fu K, Yip PSF, Fong DYT, Stack S, et al. (2012) Changes in suicide rates following media reports on celebrity suicide: a meta-analysis. *J Epidemiol Commun H* 66: 1037-42.
45. Niederkrotenthaler T, Voracek M, Herberth A, Till B, Strauss M, et al. (2010) Role of media reports in completed and prevented suicide: Werther v. Papageno effects. *Brit J Psychiat* 197: 234-43.
46. World Health Organization (2012) Public health action for the prevention of suicide. A framework. World Health Organization, Geneva.
47. Ahmenadi B, Simon G, Stewart C, Beck A, Waitzfelder B, et al. (2014) Health care contacts in the year before suicide death. *J Gen Intern Med* 29: 870-7.
48. Luoma JB, Martin CE, Pearson JL (2002) Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry* 159: 909-16.
49. Michail M, Tait L (2016) Exploring general practitioners' views and experiences on suicide risk assessment and management of young people in primary care: a qualitative study in the UK. *BMJ Open* 6: e009654.
50. Gask L, Dixon C, Morriss R, Appleby L, Green G (2006) Evaluating STORM skills training for managing people at risk of suicide. *J Adv Nurs* 54: 739-50.
51. World Health Organization (2016) mhGAP Training Manuals - for the mhGAP Intervention Guide for mental, neurological and substance use disorders in non-specialized health settings, version 2.0.
52. Keyes C, Simoes E (2012) To flourish or not. Positive mental health and all-cause mortality. *Am J Public Health* 10: 2164-72.
53. World Health Organization (2014) Preventing suicide: A global imperative.
54. Hegerl U, Wittenburg L (2009) Focus on mental health care reforms in Europe: The European Alliance against depression: A multilevel approach to the prevention of suicidal behaviour. *Psychiatr Serv* 60: 596-99.
55. Hjelmeland H, Knizek, BL (2010) Why we need qualitative research in suicidology. *Suicide Life-Threat Behav* 40: 74-80.
56. Tanenbaum SJ (2005) Evidence-based practice as mental health policy: three controversies and a caveat. *Health Aff* 24: 163-73.