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Providing First Aid to People Experiencing Mental Health Problems: Development of Evidence-Based Guidance Materials for Laypeople

ORIGINAL ARTICLE

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ABSTRACT

Background: Family and friends are particularly well placed to recognize early signs of mental health problems, provide initial support, and refer to professional help if needed. This project aimed to develop evidence-based guidance materials for laypeople on how to provide help to people experiencing mental health problems, adapted to the context of Flanders, Belgium.

Methods: We performed a systematic literature review for 12 different mental health topics, focusing on communicative support interventions feasible to be performed by laypeople. Systematic literature searches were conducted in MEDLINE, Embase, and PsycNET (October 2018). One reviewer per topic conducted data extraction and methodological quality assessment using the GRADE (Grading of Recommendations, Assessment, Development and Evaluations) methodology. The evidence was used to develop a draft manual, which was presented to a multidisciplinary expert panel involving both content experts (n = 10) and mental health peer workers in training (all people with lived experience) (n = 6).

Results: Included studies involved 15 experimental and 75 observational studies, leading to 58 evidence conclusions on communicative interventions, risk factors or protective factors, and their relationship to mental health outcomes. The certainty of the evidence was very low for the majority of the evidence conclusions (84.5%), highlighting the need for expert and stakeholder input to inform practical recommendations. Scientific evidence and expert input were used to formulate 33 individual actions on how to provide first aid to people experiencing mental health problems. The recommendations were made available to laypeople via a guidance manual and a mobile application.

Conclusions: Input from the scientific literature and the expert panel were essential to obtain evidence-based guidance materials that were meaningful for practice in a Flemish context.

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Mental health problems generally involve changes in thinking, feeling or behavior, or a combination of these. This leads to distress and/or problems in functioning well in social, work, or family life. Such changes can present themselves within a broad range of severity, from life's daily hassles to mental disorders inflicting severe discomfort and impairment. In 2019, a systematic analysis for the Global Burden of Disease Study indicated that mental health disorders were among the top ten leading causes of burden worldwide, responsible for 125.3 million Disability Adjusted Life Years (DALYs, 4.9% of global DALYs), and mainly related to depression and anxiety disorders (GBD 2019 Diseases and Injuries Collaborators, 2020; GBD 2019 Mental Disorders Collaborators, 2022).

The social environment is known to have an important impact on both mental and physical health. For instance, social support has been shown to positively influence mental health outcomes (De Brier et al., 2020; Holt-Lunstad et al., 2010; Santini et al., 2015; Tough et al., 2017). As such, family and friends are particularly well placed to recognize signs of mental health problems, provide initial support, and refer to professional help if needed. This links to the three middle domains of the Chain of Survival Behavior being early recognition, first aid, and accessing help. However, laypeople often lack the knowledge and skills to fulfill this potential, highlighting the need for a range of interventions including awareness campaigns and low-threshold training sessions (Jorm, 2012). In this respect, training programs such as Mental Health First Aid training are a widely disseminated strategy to improve the mental health literacy of laypeople (Kitchener & Jorm, 2002; Liang et al., 2021; Reis et al., 2021). A recent systematic review showed that such training improved relevant knowledge and attitudes up to six months after training, whereas results up to 12 months later remained unclear (Morgan et al., 2018). A narrative review identified 31 studies concerning the development of guidelines for the public on how to provide Mental Health First Aid. However, identified guidelines were mainly developed for English-speaking or Asian countries, or specifically targeted refugees or Australian Aboriginals (Jorm & Ross, 2018).

In reply to the existing lack of evidence-based teaching materials for the general population in Flanders, Belgium, the Flemish government provided funding for the development and implementation of guidelines for laypeople on how to support people experiencing mental health problems. The development of an evidence-based guideline, and subsequent educational materials, relies on the principles of Evidence-Based Practice (EBP). EBP requires the integration of three fundamental components: 1) the best available scientific evidence, 2) the preferences of the target group, and 3) the expertise and practical experience of content and field experts. This is accomplished by conducting systematic literature reviews to obtain the best available evidence, and by involving content and field experts, and people representing the target group (De Buck et al., 2014).

Following this method, we developed a contextualized guidance manual and mobile application. We strived for the materials to be in line with state-of-the-art views in the professional mental health landscape and complementary to already available materials. The project was supported and advised by a steering group involving leading Flemish organizations in mental health care, prevention, and promotion, as well as patient representation. Flanders is one of the few Dutch-speaking regions in the world and it is important to embed first aid recommendations in an appropriate language and relevant background information for the general public. No existing materials were identified which could fulfill the determined needs. The current paper describes the process of developing teaching materials on how to support people experiencing mental health problems for laypeople in a Flemish context.

METHODS

We performed a systematic literature review to provide a scientific basis for the guidance materials. The review was performed according to the AGREE II criteria for the development of evidence-based practice guidelines and reported according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statements (Supporting information S1) (Moher et al., 2009). Time constraints did not allow for protocol publication. Below, we describe the methodology for developing the systematic literature review and the subsequent materials.

SELECTION OF TOPICS AND DEFINING THE RESEARCH QUESTION

Twelve mental health topics were selected for inclusion in the manual: addiction, aggression, anxiety, burnout, depression, eating disorder, grief following bereavement, non-suicidal self-injury, psychosis, stress complaints, suicidality, and traumatic events (see Table 1 for explanations). This list of topics was informed through online questioning of the general population and focus group discussions with experts from mental health-related settings. The aim was to cover the most prominent needs for helping people with mental distress in Flanders, Belgium.

The project team (i.e., the authors of the current manuscript), consisting of content experts and systematic review methodologists, formulated research question(s) for these different topics, as previously described (De Brier et al., 2021). Currently available programs on first aid for mental health problems generally involve the following

TOPIC	RELEVANT POPULATION
Addiction	People at risk for or experiencing addiction-related symptoms or addiction (related to substance use or another habit/activity such as e.g., gambling, gaming, ...)
Aggression	People who engage in physical and/or psychological violence, i.e., deliberately harming another person physically and/or psychologically
Anxiety	People who are at risk for or experiencing anxiety symptoms (e.g., worry, panic)
Burnout	People in a work setting who are at risk for or experiencing burnout-related symptoms (e.g., emotional exhaustion) or burnout.
Depression	People who are at risk for or experiencing depressive symptoms (e.g., sadness, loss of interest) or depression.
Eating disorder	People who are at risk for or experiencing an eating disorder, i.e., anorexia nervosa, bulimia nervosa or binge-eating disorder.
Grief following bereavement	People experiencing the psychological consequences of being confronted with a loved one's death. Studies focusing on end-of-life care, i.e., grieving before actual death, were not included.
Psychosis	People who are at risk for or experiencing psychosis or a psychotic disorder.
Stress complaints	People who are at risk for or experiencing stress complaints (e.g., feelings of tension, frustration, nervousness) in response to events or situations.
Suicidality	People experiencing suicidal thoughts and/or engaging in suicidal behavior, i.e., undertaking actions implying the risk of ending their own life or the expectation it could end their life.
Non-suicidal self-injury	People engaging in non-suicidal self-injury, i.e., deliberately and directly harming their body without suicidal intent or expectation.
Traumatic event	People experiencing psychological consequences of undergoing/witnessing an event that involved exposure to or threat of death, a serious injury, or sexual abuse.

Table 1 Mental health topics included in the manual.

themes: approaching the person, providing practical care and assistance, listening, helping people connect to information or further support, and encouraging the person to get appropriate professional help (Brymer et al., 2012; IFRC Reference Centre for Psychosocial Support, 2018; Morgan et al., 2018; World Health Organization & War Trauma Foundation and World Vision International, 2011). The team dissected and evaluated these different actions, and it was judged that 'communication' in the broad sense could be considered as an overarching theme (i.e., approaching, providing care, listening, helping, and encouraging all rely on communication). In this context, communication involves any (non-)verbal intervention that is feasible for a layperson, such as engaging in a conversation, talking with the individual, providing comforting nonverbal communication (e.g., an open posture), or any other form of communication that is used as a coping strategy by people experiencing mental health problems themselves. Therefore, the research question of interest focused on which communication strategies could be used or should be avoided by laypeople to support people experiencing mental health problems.

SYSTEMATIC LITERATURE SEARCH AND STUDY SELECTION

We performed a systematic literature search in MEDLINE (PubMed interface), Embase (embase.com interface), and PsycNET. A first search strategy was developed for the mental health topics listed in Table 1 (Supporting Information S2). The search was performed from the date of inception of the database to October 3, 2018. Because of the complexity of the topic and the different terminology, we decided to develop a separate search strategy for the topic of traumatic events on March 8, 2019 (separately published) (De Brier et al., 2021). Reference lists and the 20 most similar articles (feature in MEDLINE) were hand-searched for all included studies and systematic reviews extracted from the original search. The reference lists of included articles based on this additional search were also checked, as well as their 20 most similar articles in MEDLINE. Screening of all references based on title and abstract, and in a second phase based on full text, was done by one reviewer per topic. Studies considered for inclusion involved systematic reviews, randomized controlled trials (RCTs), quasi-RCTs, non-RCTs, (un)controlled before and after studies, interrupted time series, cohort studies, and case-control studies. We included cross-sectional studies if the intervention was performed by a layperson (e.g., friend, family member), but excluded if the study involved a (semi-)professional health worker (e.g., nurse, general practitioner, palliative care worker). If the body of evidence for a specific mental health topic was covered by RCTs, we did not include observational studies. Conference abstracts, qualitative studies, PhD theses, narrative reviews, case studies, and case series

were excluded. Only studies published in English or Dutch were included.

We included studies if participants were at risk for or experiencing mental health problems, without any restrictions related to gender, age, or severity. At the level of intervention, we included studies that focused on (any of) different types of communication, either as a concrete intervention (in experimental studies) or as exposure or risk factor (in observational studies). In more concrete terms, the communication strategies could include likely supportive (or unsupportive) actions (e.g., comforting or criticizing the person) aimed at the person experiencing mental health problems, as well as coping strategies adopted by the person themselves (e.g., talking to a confidant). Interventions had to be feasible for a layperson (i.e., someone without any (para)medical or psychological background, including family members, friends, colleagues, caregivers, pastoral workers, or the person themselves (coping through communication)). Any study comparing a communication intervention to no intervention or another intervention feasible in lay settings was included. We also included studies examining the pre-to-post effects of communication. The following interventions were excluded: communication related to the disclosure of a diagnosis, communication as a risk/protective factor for developing mental health problems in later life, mass media campaigns, support groups, computer-assisted communication, storytelling, dream telling, or other treatments that are not fit for a lay setting (i.e., psychotherapy or other interventions requiring extended training and/or professional expertise). The outcome of interest was any mental health or psychological well-being outcome.

DATA EXTRACTION, DATA SYNTHESIS, AND QUALITY ASSESSMENT

Data extraction was performed by one reviewer per topic. The following data were extracted from all included studies where available: study design; characteristics of the population (number of participants, age range, gender distribution); characteristics of the specific intervention (content, duration); methods (and timing, if relevant) of outcome measurement; means, mean differences (MDs), and confidence intervals (CIs) for continuous data; risks, risk ratios (RRs), odds ratios (ORs) and CIs for dichotomous data; or correlation coefficients or regression coefficients in case of correlational research or regression analyses, respectively.

When possible, a random-effects meta-analysis was performed. For dichotomous outcomes, the Mantel-Haenszel method was used; for continuous outcomes, the inverse variance method was used. When a meta-analysis was not feasible, (e.g., due to substantial differences between studies or when only one study was identified) a narrative description of the results was provided. ORs or RRs with 95% CIs were calculated for each of the dichotomous outcomes if not available. MDs or standardized mean differences (SMDs) were calculated for each of the continuous outcomes, as appropriate. Heterogeneity was assessed using non-overlapping confidence intervals of effect sizes between studies and the Chi^2 and I^2 statistics. Cochrane's Review Manager 5 software was used for all analyses (Centre, 2014).

The risk of bias in each of the included studies, as well as a rating of the body of evidence, was assessed by one reviewer per topic according to the GRADE methodology (Schünemann et al., 2013). The latter includes limitations in study design (risk of bias), inconsistency, indirectness, imprecision of the results, and publication bias. Certainty of evidence was rated as very low, low, moderate, or high. All data were documented in a final "evidence summary" per topic (Supporting information S3).

DEVELOPMENT OF DRAFT GUIDANCE MANUAL

As the next step, a manual on helping people who experience mental health problems was drafted. The manual contained information on the following three domains of the Chain of Survival Behavior: how to recognize mental health problems, how to accommodate communicative first aid, and how to inform about and encourage (professional) help when needed. It also provides advice on how to ensure appropriate self-care in the context of first aid for mental health problems. The content of the draft was based on the evidence gathered by the systematic literature search and data collection, for those items for which evidence was identified. Draft recommendations were developed based on content analyses of factor and intervention descriptions in the original studies. To fill gaps not covered by scientific evidence, 'Good Practice Points' (GPPs) were formulated based on information extracted from relevant journal articles, books, (inter)national training materials, and content discussions within the research team and with representatives from mental health care organizations in Flanders, Belgium (see Acknowledgements). GPPs are short pieces of advice, formulated by a group of experts from the field, but without a scientifically and systemically identified evidence base. These additional draft recommendations were created similar to the other recommendations, by analysis of original wordings and subsequent translation into first aid actions. First aid actions were complemented by examples of how to practically apply them and embedded in a dynamic framework including four key actions: recognizing mental health problems, providing informal support, guiding towards more help, and taking care of themselves while helping others. Guidance is provided in the context of daily life as well as crisis support. In addition, the draft manual included background information on the selected mental health topics and mental health in

general (listed in Table 1). It should be stressed that the manual does not promote diagnosis or treatment by laypeople but encourages and guides their natural role of giving informal help and support.

MULTIDISCIPLINARY EXPERT MEETING AND FINALIZING MATERIALS

The draft manual and evidence summaries were distributed among a panel of experts, consisting of 10 content experts and six mental health peer workers in training from Flanders, Belgium. The content experts were psychologists or psychiatrists active in mental health care (policy) and/or academia. The mental health peer workers were in the final stages of a specific trajectory embedded in social work education. This trajectory is aimed at students with patient or client experiences in mental health care, willing to professionalize their volunteering activities or becoming professional peer-workers in mental health services. Throughout the trajectory, they acquire knowledge and skills to broadly apply their lived experience with mental health problems in support of clients and professionals in daily practice. More information regarding the relevant affiliations of content experts and mental health peer workers in training can be found in the acknowledgments.

In the first stage, all members of the expert panel independently provided written feedback, which was jointly implemented in the draft version of the manual. In the second stage, the expert panel participated in five expert meetings, taking place between February and June 2019. During these in-person meetings, all proposed content changes to the draft manual were separately presented to and discussed by the panel. Likewise, members of the expert panel could propose and formulate additional GPPs during the meetings. Proposed content changes were formally discussed and consensus on all included content was eventually obtained. The manual was finalized in September 2019 (Belgian Red Cross-Flanders, 2019a). Furthermore, the content of this manual was used to develop a mobile application. The App contains similar content but is organized as short easy instructions and recommendations. The mobile application was made freely available in November 2020 (Belgian Red Cross-Flanders, 2020). All materials were developed in Dutch.

RESULTS

STUDY IDENTIFICATION AND STUDY CHARACTERISTICS

In total, 30099 records were identified through database searching, of which 27729 hits were related to search strategy 1 (further described below), and 2370 hits were related to search strategy 2 for traumatic events described in De Brier et al., (2021). Following the removal of 6707 duplicates, screening of 21938 records based on title and abstract, and screening of 1403 records based on full-text, 51 primary research articles were included. Another 44 studies were identified from checking the reference lists and 20 most similar articles in MEDLINE of all included studies (n = 51) and 12 relevant systematic reviews (Arcelus et al., 2013; Bryan & Arkowitz, 2015; Fazel et al., 2012; Hallett & Dickens, 2017; Harvey et al., 2008; Hoffmann et al., 2018; Holtom-Viesel & Allan, 2014; Leonidas & Dos Santos, 2014; Macdonald et al., 2016; Minen et al., 2019; Parcesepe et al., 2015; Price et al., 2015). This resulted in a total of 95 included primary research articles. As some research articles discussed the same study data, these 95 articles involved a total of 90 individual studies, including 15 experimental and 75 observational studies. The PRISMA flow chart is depicted in Figure 1. An overview of the study designs within each mental health topic can be found in Table 2. Outcomes (i.e., communicative intervention, risk factor, or mental health) were measured using (non-validated) questionnaires, instruments, subscales of existing scales, or self-developed questionnaires. A detailed overview can be found in Supporting Information S3 (Table 'Characteristics of included studies', column 'Remarks').

BEST AVAILABLE EVIDENCE ON COMMUNICATION STRATEGIES AND CHARACTERISTICS CONSIDERED FOR LAYPEOPLE

Based on the identified evidence, 58 separate evidence conclusions were formulated. The detailed evidence summary for each mental health topic (characteristics of included studies, study findings, risk of bias assessment, GRADE analysis, and evidence conclusions) is available in Supporting Information S3. The certainty of the evidence, as determined by the GRADE approach, was very low for the majority of evidence conclusions (84.5%). Reasons for downgrading are documented in Supporting Information S3 ("Certainty of the body of evidence" tables). It is crucial to note that the cross-sectional study design was the most abundant study type, implying that exposure and outcome variables were measured at the same time via questionnaires. As a consequence, it is difficult to infer causal relationships from the results. The number of included studies and included participants varied strongly per evidence conclusion (ranging from one to nine studies and 24 to 22703 participants).

The evidence conclusions for each topic are available in Supporting Information S3 (detailed overview), Table 3 (summarized, schematic overview), and Supporting Information S4 (narrative summary).

In summary, across all topics, the body of evidence provides very low to moderate evidence concerning the relationship between communication (characteristics)

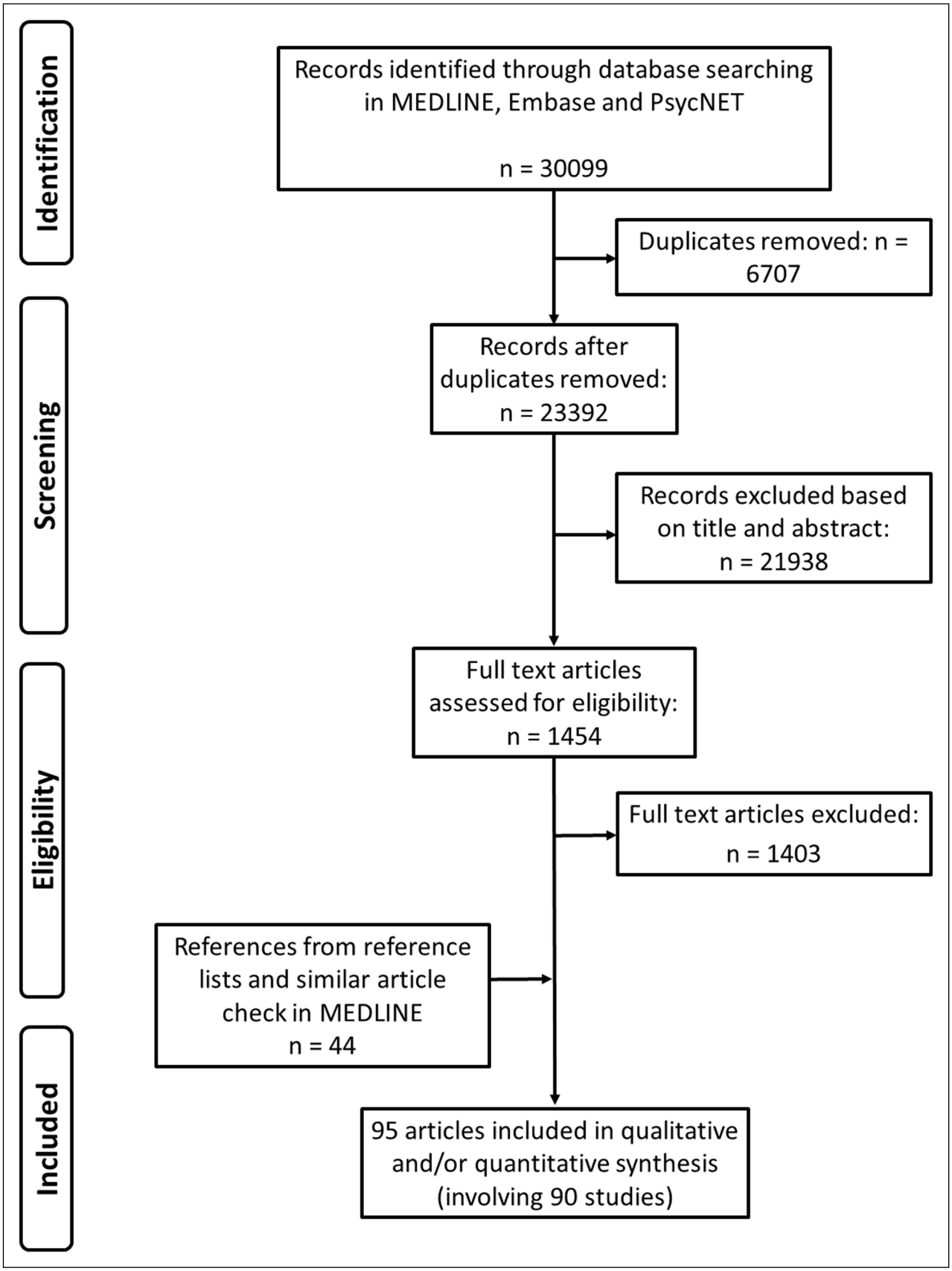

Figure 1 PRISMA study flow chart.

and mental health outcomes. The evidence showed favorable as well as harmful associations and effects. Talking as a coping strategy, trying to provide positive communication, minimizing negative statements, and finding mutual ground were examples of potential helpful protective factors, while risk factors included avoiding communication, expressing criticism, losing your calm, and escalation.

	EXPERIMENTAL STUDIES			OBSERVATIONAL STUDIES			TOTAL NUMBER OF STUDIES
TOPIC	RCT	NON-RCT	UBA STUDY	PC STUDY	CC STUDY	CS STUDY	
Addiction					2	2	4
Aggression					4	1	5
Anxiety	1					11	12
Burnout				1		3	4
Depression	7	1	2	1		1	12
Eating disorders					12	4	16
Grief following bereavement		1		2		10	13
Psychosis				3	2		5
Non-suicidal self-injury					3	2	5
Stress complaints						2	2
Suicidality	3		1		4		8
Traumatic event					1	8	9

Table 2 An overview of the included study designs within each of the mental health topics.

RCT = Randomized controlled trial; Non-RCT = non-randomized controlled trial; UBA = Uncontrolled before-after; PC = Prospective Cohort; CC = Case-control; CS = Cross-sectional.

INTERVENTION EXPOSURE FACTOR	TYPE OF ASSOCIATION [a]	OUTCOMES	RESULTS	CERTAINTY OF THE EVIDENCE (GRADE)	NUMBER OF INCLUDED STUDIES	NUMBER OF PARTICIPANTS PER STUDY (RANGE)
Addiction						
Parent-child communication about substance use	Association not shown	Substance use	r: –0.00, $p > 0.05$	Very low	1 (Wills et al., 2003)	297
Talking with someone about your problems	Protective factor	Alcohol use disorder; substance use; alcohol/drug dependence	Narrative conclusion[b]	Very low	3 (Borders et al., 2010; Fisher et al., 2008; Wang et al., 2009)	250–10195
Aggression						
Reasoning	Association not shown	Physical violence	Narrative conclusion[b]	Very low	2 (Billingham & Sack, 1986; Messinger et al., 2012)	387–1056
Repair attempts (minimizing negative statements, using humor, taking breaks)	Protective factor	Physical violence; psychological violence	r: –0.046, $p < 0.01$	Very low	1 (Cornelius et al., 2010)	173
Accepting influence (trying to find mutual ground)	Protective factor	Physical violence; Psychological violence	r: –0.29, $p < 0.01$ r: –0.42, $p < 0.01$	Very low	1 (Cornelius et al., 2010)	173
Avoidant communication	Risk factor	Physical violence	Narrative conclusion[b]	Very low	1 (Goussinsky et al., 2017)	857
Temporary conflict avoidance	Association not shown	Physical violence	Narrative conclusion[b]	Very low	1 (Messinger et al., 2012)	917–1056
Escalation	Risk factor	Physical violence; Psychological violence	Narrative conclusion[b]	Very low	3 (Cornelius et al., 2010; Goussinsky et al., 2017; Messinger et al., 2012)	173–1056

(Contd.)

INTERVENTION EXPOSURE FACTOR	TYPE OF ASSOCIATION [a]	OUTCOMES	RESULTS	CERTAINTY OF THE EVIDENCE (GRADE)	NUMBER OF INCLUDED STUDIES	NUMBER OF PARTICIPANTS PER STUDY (RANGE)
Communication problems	Risk factor	Physical violence	MD: 2.2, $p < 0.001$	Very low	1 (Robertson & Murachvor, 2007)	116
Anxiety						
Talking with friends/others	Protective factor	Anxiety (various questionnaires)	Narrative conclusion[b]	Very low	2 (Dyregrov et al., 1994; Wallin et al., 2016)	63–174
Communication	Protective factor	Anxiety (various questionnaires)	Narrative conclusion[b]	Very low	4 (Edwards & Clarke, 2004; Fite et al., 2014; Hodgson et al., 1997; Howell et al., 2015)	32–747
Avoidance of communication	Risk factor	Anxiety (various questionnaires)	Narrative conclusion[b]	Very low	4 (Jeong et al., 2016; Shin et al., 2016; Wallin et al., 2016; Yu & Sherman, 2015)	173–990
Lower perceived degree of disclosure	Risk factor	Anxiety (GAD2)	r: 0.31, $p < 0.0001$	Very low	1 (Haun et al., 2014)	189
End-of-life conference	Effective	Clinically significant symptoms of anxiety	OR: 0.39, 95%CI [0.18;0.86], $p = 0.02$	Moderate	1 (Lautrette et al., 2007)	108
Positive emotion words	Association not shown	Anxiety (MASC)	β: −0.16, $p > 0.05$	Very low	1 (Wardecker et al., 2017)	39
Burnout						
Supervisory communication	Protective factor	Time to return to work; Emotional exhaustion; Depersonalization	Narrative conclusion[b]	Very low	2 (Kim & Lee, 2009; Nieuwenhuijsen et al., 2004)	85–478
Talking as a coping strategy	Protective factor	Emotional exhaustion	Narrative conclusion[b]	Very low	2 (Gupta et al., 2012; Lemaire & Wallace, 2010)	63–1151
Keeping stress to oneself	Risk factor	Emotional exhaustion	r: 0.23, $p < 0.0001$	Very low	1 (Lemaire & Wallace, 2010)	1151
Depression						
Counseling by laypeople	Effective	Depression (various questionnaires)	Narrative conclusion[b]	Low	2 (Nagel et al., 1988; Wickberg & Hwang, 1996)	41–60
Listening Visits	Effective	Depression (various questionnaires)	MD [c]: 5.89, 95%CI [3.62;8.15] $I^2 = 0\%$, $p = 0.37$ Narrative conclusion[b]	Moderate	2 [c], (Brock et al., 2017; Segre et al., 2010) +1 (Segre et al., 2015)	19–66
Perinatal peer support	Effective	Depression (various questionnaires)	Narrative conclusion[b]	Moderate	2 (Dennis et al., 2009; Roman et al., 1995)	58–701
Communication with family members	Association not shown	Depression (various questionnaires)	Narrative conclusion[b]	Very low	2 (Fite et al., 2014; Teo et al., 2015)	289–10055
Communication with friends	Protective factor	Depression (CES-D8)	OR: 0.57, 95%CI [0.44;0.76], $p < 0.001$	Very low	1 (Teo et al., 2015)	9907
End-of-life conference	Effective	Depression (HADS)	Narrative conclusion[b]	Moderate	2 (Garrouste-Orgeas et al., 2016; Lautrette et al., 2007)	86–108

(Contd.)

INTERVENTION EXPOSURE FACTOR	TYPE OF ASSOCIATION [a]	OUTCOMES	RESULTS	CERTAINTY OF THE EVIDENCE (GRADE)	NUMBER OF INCLUDED STUDIES	NUMBER OF PARTICIPANTS PER STUDY (RANGE)
Condolence letter	Effect not shown	Depression (HADS)	OR: 1.72, 95%CI [1.00;2.99], p = 0.051	Moderate	1 (Kentish-Barnes et al., 2017)	208
Eating Disorder						
(Good) Communication with mother	Protective factor	Eating disorder, Anorexia severity	MD [c]: −3.79, 95%CI [−7.31;−0.26] I^2 = 57%, p = 0.04 Narrative conclusion[b]	Very low	2 [c], (Cunha et al., 2009; Orzolek-Kronner, 2002) +1 (Pelletier Brochu et al., 2018)	68–186
(Good) Communication with father	Association not shown	Eating disorder, Anorexia severity	MD [c]: −4.10, 95%CI [−8.42;0.22] I^2 = 56%, p = 0.06 Narrative conclusion[b]	Very low	2 [c], (Cunha et al., 2009; Orzolek-Kronner, 2002) +1 (Pelletier Brochu et al., 2018)	68–186
(Good) Communication with peers	Protective factor	Anorexia (severity), Bulimic symptoms, Eating pathology	Narrative conclusion[b]	Very low	4 (Cunha et al., 2009; Pelletier Brochu et al., 2018; Schutz & Paxton, 2007; Sharpe et al., 2014)	68–216
(Good) Family communication from patient perspective	Protective factor	Eating disorder, Anorexia (severity), Bulimia Nervosa, Bulimia Simplex	MD [c]: 0.78, 95%CI [0.50;1.05] I^2 = 56%, p < 0.00001 Narrative conclusion[b]	Very low	7 [c], (Emanualli et al., 2004; Garfinkel et al., 1983; Laghi et al., 2017; North et al., 1995; Shisslak et al., 1990; Steiger et al., 1991; Waller et al., 1990) +2 (Gowers & North, 1999; Waller et al., 1989)	35–93
(Good) Family communication from parent perspective	Protective factor	Eating disorder, Anorexia severity, Eating disorder	MD [b]: 0.19, 95%CI [0.05;0.32] I^2 = 71%, p < 0.01 Narrative conclusion[b]	Very low	4 [c], (Emanualli et al., 2004; Friedmann et al., 1997; North et al., 1995; Waller et al., 1990) +2 (Friedmann et al., 1997; Gowers & North, 1999)	35–379
High perceived level of expressed emotion	Risk factor	Eating disorder	MD: 18.33, 95%CI [14.78;21.88], p < 0.05	Very low	1 (Di Paola et al., 2010)	126
Grief following bereavement						
Communication avoidance	Risk factor	Grief, anxiety (various questionnaires)	Narrative conclusion[b]	Very low	4 (Davis et al., 2016; Lovgren et al., 2018; Stroebe et al., 2013; Wallin et al., 2016)	97–438
Grief-related communication	Protective factor	Grief, anxiety, depression, distress (various questionnaires)	Narrative conclusion[b]	Very low	8 (Kamm & Vandenberg, 2001; Liew & Servaty-Seib, 2018; Lovgren et al., 2018; Shapiro et al., 2014; Stroebe et al., 2013; Stroebe et al., 2002; Wallin et al., 2016; Wardecker et al., 2017)	38–438

(Contd.)

INTERVENTION EXPOSURE FACTOR	TYPE OF ASSOCIATION [a]	OUTCOMES	RESULTS	CERTAINTY OF THE EVIDENCE (GRADE)	NUMBER OF INCLUDED STUDIES	NUMBER OF PARTICIPANTS PER STUDY (RANGE)
Phone call from the hospital	Effective	Loneliness/ depression, guilt, anger/hostility	OR: 0.06, 95%CI [0.01;0.61], p = 0.02	Low	1 (Schreiner et al., 1979)	29
Communication in general	Protective factor	Grief, anxiety, depression (various questionnaires)	Narrative conclusion[b]	Very low	3 (Raveis et al., 1999; Rich, 2000; Traylor et al., 2003)	66–114
Psychosis						
Parental communication deviance	Risk factor	Schizophrenia, schizophrenia relapse	Narrative conclusion[b]	Very low	3 (Goldstein, 1985; Rund, 1986; Velligan et al., 1996)	20–82
High parental affective style	Risk factor	Schizophrenia	OR[c]: 10.19, 95%CI [2.66;39.01] I^2 = 0%, p = 0.0007	Very low	2 (Goldstein, 1985; Hamilton et al., 1999)	38–64
Parental criticism	Risk factor	Schizophrenia	OR[c]: 10.34, 95%CI [2.97;35.99] I^2 = 0%, p = 0.0002	Very low	2 (Goldstein, 1985; Hamilton et al., 1999)	38–64
Parental problem solving	Protective factor	Schizophrenia, social functioning (SCOS)	Narrative conclusion[b]	Very low	2 (O'Reilly et al., 2011; Rund, 1986)	33–41
Parental egocentrism	Risk factor	Schizophrenia	Narrative conclusion[b]	Very low	1 (Rund, 1986)	41
Non-suicidal self-injury						
Talking as a coping strategy	Protective factor	Non-suicidal self-injury	OR[c]: 0.54, 95%CI [0.33;0.89] I^2 = 91%, p = 0.02	Very low	3 (Batey et al., 2010; Evans et al., 2005; Watanabe et al., 2012)	432–17671
Ease of communication with parents	Protective factor	Non-suicidal self-injury	β: –0.12, p < 0.05	Very low	1 (Latina et al., 2015)	832
Not able to talk to mother	Risk factor	Non-suicidal self-injury Thoughts of self-injury, self-injury repetition	OR[c]: 2.41, 95%CI [2.03;2.85] I^2 = 90%, p < 0.0001 Narrative conclusion[b]	Very low	2 (Evans et al., 2005; Portzky et al., 2008)	5737–8889
Not able to talk to father	Risk factor	Non-suicidal self-injury (see meta-analysis), Thoughts of self-injury, self-injury repetition	OR[c]: 2.19, 95%CI [1.81;2.65] I^2 = 95%, p < 0.0001 Narrative conclusion[b]	Very low	2 (Evans et al., 2005; Portzky et al., 2008)	5737–8889
Not able to talk to sibling	Risk factor	Non-suicidal self-injury (see meta-analysis), Thoughts of self-injury, self-injury repetition	OR[c]: 1.68, 95%CI [1.41;1.99] I^2 = 96%, p < 0.0001 Narrative conclusion[b]	Very low	2 (Evans et al., 2005; Portzky et al., 2008)	5737–8889

(Contd.)

INTERVENTION EXPOSURE FACTOR	TYPE OF ASSOCIATION [a]	OUTCOMES	RESULTS	CERTAINTY OF THE EVIDENCE (GRADE)	NUMBER OF INCLUDED STUDIES	NUMBER OF PARTICIPANTS PER STUDY (RANGE)
Not able to talk to another relative	Risk factor	Non-suicidal self-injury (see results), Thoughts of self-injury, self-injury repetition	OR: 1.80, 95%CI [1.43;2.28], p < 0.0001 Narrative conclusion[b]	Very low	1 (Evans et al., 2005)	5737
Not able to talk to a friend	Association not shown	Non-suicidal self-injury (see meta-analysis), Thoughts of self-injury, self-injury repetition	OR[c]: 0.95, 95%CI [0.75;1.20] I^2 = 0%, p = 0.65 Narrative conclusion[b]	Very low	2 [c], (Evans et al., 2005; Portzky et al., 2008) + 1 (Latina et al., 2015)	709–8889
Not able to talk to a teacher	Risk factor	Non-suicidal self-injury (see meta-analysis), Thoughts of self-injury, self-injury repetition	OR[c]: 1.63, 95%CI [1.28;2.09] I^2 = 22%, p < 0.0001 Narrative conclusion[b]	Very low	2 (Evans et al., 2005; Portzky et al., 2008)	5737–8889
Not able to talk to someone else	Risk factor	Non-suicidal self-injury (see meta-analysis), Thoughts of self-injury, self-injury repetition	OR[c]: 1.20, 95%CI [1.01;1.43] I^2 = 63%, p = 0.04 Narrative conclusion[b]	Very low	2 (Evans et al., 2005; Portzky et al., 2008)	367–8889
Stress complaints						
Communication avoidance	Risk factor	Stress (DASS)	Narrative conclusion[b]	Very low	1 (Yu & Sherman, 2015)	338
Emotional/ informational support	Association not shown	Stress (DASS)	r: –0.14, p > 0.05	Very low	1 (Soo & Sherman, 2015)	185
Suicidality						
Sending postcards	Effective	Suicidal death after x years, suicidal ideation, suicide attempt	Narrative conclusion[b]	Low	3 (Carter et al., 2013; Hassanian-Moghaddam et al., 2017; Motto & Bostrom, 2001)	772–2300
Befriending	Effective	Psychological distress (CORE) post-intervention and 3m follow-up	MD: –1.42, p < 0.001 MD: –1.65, p < 0.001	Very low	1 (Briggs et al., 2007)	24
Appraisal/having a confidant	Protective factor	Suicidality, Suicide	MD[c]: –1.04, 95%CI [–1.68;–0.40] I^2 = 0%, p = 0.001 Narrative conclusion[b]	Very low	3 [c], (Harrison et al., 2010; Szanto et al., 2012; Vanyukov et al., 2017) + 1 (Hawton et al., 2002)	62–135
Traumatic event						
Talking to others about the traumatic event	Risk factor	Post-traumatic stress disorder (PTSD) resilience, caseness or symptom severity	Narrative conclusion[b]	Very low	3 (De Brier et al., 2021)	85–2627
Communication in general	Protective factor	PTSD symptom severity or caseness	Narrative conclusion[b]	Very low	4 (De Brier et al., 2021)	72–528

(Contd.)

INTERVENTION EXPOSURE FACTOR	TYPE OF ASSOCIATION [a]	OUTCOMES	RESULTS	CERTAINTY OF THE EVIDENCE (GRADE)	NUMBER OF INCLUDED STUDIES	NUMBER OF PARTICIPANTS PER STUDY (RANGE)
Expressive coping	Protective factor	PTSD (and other posttrauma) symptom severity	β: −0.62, p = 0.0002	Very low	1 (De Brier et al., 2021)	119
Social-emotional coping	Risk factor	PTSD symptom severity	r: 0.50, p=0.005	Very low	1 (De Brier et al., 2021)	270

Table 3 Association between communication strategies and mental health outcomes.

[a] 'Effective'(statistically significant)/'not effective'(not statistically significant, no imprecision according to GRADE)/'effect not shown' (not statistically significant, imprecision according to GRADE) in case of experimental studies; 'protective factor'/'risk factor'/'association not shown' in case of observational studies. Protective factor: a statistically significant negative association between the factor and the mental health problem was shown (i.e., when the factor increases, the mental health problem decreases); Risk factor: a statistically significant positive association between the factor and the mental health problem was shown (i.e., when the factor increases, the mental health problem increases).

[b] Narrative conclusions due to large heterogeneity in study methods and reporting (narrative conclusions are detailed in Supporting Information S3).

[c] Studies combined in a meta-analysis; studies that could not be included in the meta-analysis due to heterogeneity were narratively summarized (narrative conclusions are detailed in Supporting Information S3).

I^2: measure of heterogeneity, β: parameter estimate in regression model, r: correlation coefficient, MD: mean difference, CI: confidence interval, OR: odds ratio, GAD2: Generalized Anxiety Disorder Scale-2, MASC: Multidimensional Anxiety Scale for Children, CES-D8: 8-item Centre for Epidemiological Studies Depression Scale, HADS: Hospital Anxiety and Depression Scale, SCOS: Strauss-Carpenter Outcome Scale, DASS: Depression Anxiety Stress Scale.

TRANSLATION OF THE EVIDENCE TO GUIDANCE MATERIALS

In total, 33 unique actions on how to provide communicative first aid to people experiencing mental health problems were formulated (Table 4). These first aid actions were based on the best available evidence, and on the input from other sources, as well as content experts and mental health peer workers in training (GPPs), as described in more detail in the Methods section. The actions were integrated into a manual ("Luister! Eerste hulp bij psychische problemen" (Belgian Red Cross-Flanders, 2019a), in Dutch), and later into a mobile application ("Houvast" (Belgian Red Cross-Flanders, 2020), in Dutch), in which each mental health topic was accompanied by relevant background information (e.g., definition, prevalence, risk factors, ...).

Based on both scientific evidence and expert input, 14 actions seemed applicable to multiple mental health topics and were combined as overarching advice. Eighteen additional actions were restricted to one or few mental health topics and were either very specific (e.g., "Do not talk excessively about food, weight or appearance" for the topic 'eating disorders') or considered to require specific emphasis and/or guidance (e.g., "Estimate the seriousness" for the topic 'suicidality'). All quoted first aid actions (Table 4) are core messages that are further clarified in the manual and contextualized to the specific topic where appropriate.

Below, we describe some examples to illustrate the complementary role of the evidence identified and the clinical expertise and practical experience of experts in the field.

The best available evidence was not always able to inform clear-cut interventions, as interventions or factors extracted from the studies were sometimes ambiguous concepts or contained multiple components, while good guidance ideally consists of clear and single actions. For example, there was moderate certainty evidence in support of "listening visits" as an effective layman intervention in the context of depression (Table 3; (Kentish-Barnes et al., 2017; Kim & Lee, 2009; Nagel et al., 1988)). This intervention consisted of repeated visits focusing on empathic listening and collaborative problem-solving. Hence, this evidence – among other sources – contributed to the first aid actions "Provide time and space to talk," "Listen without judging," "Offer support and show compassion," "Limit advice but look for solutions together," and "Stay in touch."

The expert panel critically revised the draft manual and was responsible for formulating additional GPPs. For example, for the advice "Encourage them to talk about their issues with people who are close to them," the expert panel agreed to clarify that this action is recommended at the end of a conversation after the first aid provider has offered a listening ear. An example of a GPP formulated by the expert panel is "Maintain your role as a family member, friend, colleague, ..." The expert panel reached a consensus to recommend that first aid providers keep communicating from their natural role, staying in contact with everyday life, and taking sufficient time to talk about other subjects. This advice was considered broadly applicable to different mental health problems.

RECOMMENDATION	OVERARCHING ADVICE	ADDICTION	AGGRESSION	ANXIETY	BURNOUT	DEPRESSION	EATING DISORDER	GRIEF FOLLOWING BEREAVEMENT	PSYCHOSIS	NON-SUICIDAL SELF-INJURY	STRESS COMPLAINTS	SUICIDALITY	TRAUMATIC EVENT
Engage into conversation	EB	GPP	EB	EB	EB	GPP	GPP	EB	GPP	GPP	EB	GPP	EB
Provide time and space to talk	EB	GPP		EB	GPP	EB	GPP	GPP	GPP	GPP	GPP	GPP	GPP
Stay calm	EB	GPP	EB	GPP	GPP		EB		EB	GPP	GPP	GPP	GPP
Say that you are worried	GPP	GPP		GPP	GPP	GPP	EB	GPP	GPP	GPP	GPP	GPP	GPP
Listen without judging	EB	EB	EB	EB	EB	EB	EB	EB	GPP	EB	EB	EB	EB
Be conscious of your body language	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP
Offer support and show compassion	EB	GPP	GPP	EB	GPP	EB	EB	EB	EB	GPP	GPP	EB	EB
Respect privacy, but do not promise confidentiality	GPP	GPP		GPP	GPP	GPP	GPP			GPP		GPP	GPP
Limit advice, but look for solutions together	EB	GPP	EB	GPP	GPP	EB	GPP	GPP			GPP	GPP	GPP
Offer (limited) practical help	GPP				GPP	GPP		GPP					GPP
Encourage them to talk about their issues with people who are close to them	EB	EB		EB	EB	GPP	EB	EB	GPP	EB	EB	GPP	GPP
If the person does not wish to talk, respect this	GPP	GPP		GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP
Stay in touch	EB	GPP		GPP	EB	EB	GPP	EB	GPP	GPP	GPP	EB	EB
Maintain your role as a family member, friend, colleague, ...	GPP	GPP		GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP
Be alert for suicidal thoughts				GPP		GPP	GPP			GPP			
Avoid criticism or accusations						GPP			EB				
Do not support the maintenance of the behavior		GPP		GPP									
Estimate whether the person is willing to change their behavior		GPP					GPP						
Do not argue about what is real or not									EB				

(Contd.)

RECOMMENDATION	OVERARCHING ADVICE	ADDICTION	AGGRESSION	ANXIETY	BURNOUT	DEPRESSION	EATING DISORDER	GRIEF FOLLOWING BEREAVEMENT	PSYCHOSIS	NON-SUICIDAL SELF-INJURY	STRESS COMPLAINTS	SUICIDALITY	TRAUMATIC EVENT
Acknowledge the ideas and experiences, but do not confirm them									GPP				
Talk clearly			GPP						EB				GPP
Be honest									GPP				GPP
Encourage a healthy lifestyle									GPP				
Ensure the safety of yourself, the person, and others			GPP						GPP				GPP
Do not talk excessively about food, weight and appearances							GPP						
Estimate the seriousness												GPP	
Do not focus on the wounds or how they were caused										GPP			
Do not force the person to stop self-injury										GPP			
Together with the person, try to come up with different ways to deal with negative emotions and encourage them										GPP			
Keep a safe distance			GPP										
Get help from others			GPP										
Take an open posture			GPP										
Provide a calm and peaceful environment													GPP

Table 4 Recommendations included within the evidence-based manual on how to help people experiencing mental health problems.

GPP: Good Practice Point; EB: Evidence-based.

DISCUSSION

This project aimed to develop guidance materials for Flanders, Belgium, with specific advice for laypeople on providing first aid to people experiencing mental health problems, based on the best available evidence and input from experts and relevant stakeholders. In a systematic literature search, we identified 90 individual studies that evaluated different types of communication, either as a concrete intervention (in experimental studies) or as exposure or risk factor (in observational studies), for 12 mental health topics (Table 3). These studies predominantly informed to recommend providing the opportunity to talk, listening to the person's concerns, and offering empathic support as actions to help people experiencing mental health problems. Based on the scientific evidence and additional GPPs, a draft first aid manual was written and presented to a multidisciplinary expert panel involving both content experts and people with lived experience. In total, 33 unique first aid actions were integrated into the manual (Table 4), embedded in a dynamic framework including four key components: recognizing mental health problems, providing informal support, guiding towards more help, and taking care of themselves while helping others. Guidance is provided in the context of daily life as well as crisis support. The manual is currently available for purchase (as standalone guidance), and training based on the manual was implemented by the Belgian Red Cross (Belgian Red Cross-Flanders, 2019b). A mobile application based on the content of the training manual was launched in November 2020 and is freely available for download (App "Houvast", available via the App stores, content in Dutch). Our evidence summaries and guidance were also used as a scientific foundation for the "mental distress" section of the IFRC "International first aid, resuscitation, and education guidelines 2020" (International Federation of Red Cross and Red Crescent Societies, 2020). This project has several strengths. First of all, we systematically searched several scientific databases to collect the best available evidence, and study quality was thoroughly examined using the GRADE methodology. In addition, content experts and mental health peer workers with lived experience had a complementary role within the expert panel and ensured that the manual was adapted to the Flemish context and meaningful for practice. Finally, based on the extensive experience of the Belgian Red Cross with the organization of (physical) first aid training, these new materials were immediately implemented. The training was piloted internally with Red Cross volunteers and externally with members of the general public in the closing months of 2019. Training is currently organized as four 3-hour sessions and can be followed free of cost by people from the general public (Belgian Red Cross-Flanders, 2019b). The mobile application, which can be downloaded for free, was launched as a low-threshold initiative against the Covid-19 context at the end of 2020 and was further disseminated and promoted in 2021 (Belgian Red Cross-Flanders, 2020). At present, the number of downloads is approaching 20,000.

There are limitations to consider as well. First, the systematic literature searches we performed are not full systematic reviews: no protocols were registered beforehand, only one reviewer conducted the study selection and data extraction (however, a second reviewer was consulted in case of uncertainties), and a focused set of selection criteria was used. This methodology is being used by many practice guideline developers because of feasibility reasons, given that developing a guideline requires many different evidence reviews in parallel (De Buck et al., 2014). However, as part of the guideline methodology, this is always done in combination with consulting a multidisciplinary expert panel, which was also the case in the current project.

Second, the available scientific evidence is currently limited, both in quantity and quality. For six mental health topics in particular, the scientific evidence was based on five studies or less. In addition, the certainty of the evidence was generally considered to be very low, and causal relationships could not be inferred due to the frequent use of cross-sectional study designs. By design, cross-sectional studies cannot prove the temporality of association since the relevant exposures and outcomes are collected simultaneously. As a consequence, we had to rely more heavily on expert opinion and practice experience, and many additional GPPs had to be formulated with the help of the expert panel to inform the guidance materials. Although several efforts were made to compose a representative expert panel and to limit the impact of the bandwagon effect (the tendency of an individual to acquire a particular opinion because everyone else has this opinion) or social desirability bias during the expert meetings, a formal consensus method, as used in several existing mental health first aid guideline projects (Jorm & Ross, 2018), was not used. When planning the update of the current materials (which is done every 5 years), our methods could be further improved by focusing more elaborately on expert input and exploring possibilities of formal consensus methods, such as the Delphi method, the nominal group technique, the RAND/UCLA method, or a consensus conference, all methods for obtaining expert consensus when developing guidelines in the health field (Black et al., 1999; Fitch et al., 2001; Hasson et al., 2000; Murphy et al., 1998). With the Delphi method, participants never meet or interact directly, but can provide their input through different rounds of questionnaires. This rigorous methodology to obtain expert consensus has been used widely in the field of mental health research when evidence is not available, incomplete, not directly applicable, or too complex, particularly in the topic of

mental health first aid (Jorm, 2015; Jorm & Ross, 2018). Third, the guidelines were developed to be implemented in a Flemish, or more generally, a Western context and might be less applicable in other countries or cultures. However, we gathered evidence without geographical limitations and key first aid actions could be largely transferrable beyond Flanders (International Federation of Red Cross and Red Crescent Societies, 2020).

Our systematic literature search identified several research gaps in communicative actions that are feasible for laypeople to help others experiencing mental health problems. More specifically, high-quality, experimental research on the identification of communicative actions is currently lacking. In addition, it would be valuable to know whether training laypeople in communicative actions effectively improve the mental health outcomes of people receiving help. In this regard, several studies have already shown that training laypeople in psychosocial support resulted in an increase of general mental health and first aid knowledge (Burns et al., 2017; Jensen et al., 2016; Jorm, Kitchener, Sawyer, et al., 2010; Kidger et al., 2016; Svensson & Hansson, 2014), improved recognition of mental disorders (Burns et al., 2017; Jensen et al., 2016; Jorm, Kitchener, Fischer, et al., 2010; Jorm et al., 2004; Jorm, Kitchener, Sawyer, et al., 2010; Kitchener & Jorm, 2004; O'Reilly et al., 2011; Wong et al., 2015), and increased confidence in and intention of helping (Burns et al., 2017; Davies et al., 2018; Jensen et al., 2016; Jorm, Kitchener, Fischer, et al., 2010; Jorm et al., 2004; Jorm, Kitchener, Sawyer, et al., 2010; Kidger et al., 2016; Mohatt et al., 2017; Morgan et al., 2018; Svensson & Hansson, 2014), improved people's attitudes towards mental disorders (Kidger et al., 2016), and was associated with a reduction of stigma (Burns et al., 2017; Davies et al., 2018; Jensen et al., 2016; Jorm, Kitchener, Fischer, et al., 2010; Jorm et al., 2004; Mohatt et al., 2017; Svensson & Hansson, 2014). Although existing results on the effectiveness of mental health literacy training are thus promising, they largely focused on short-term results and it is difficult to assess the impact of such training on the actual mental health outcomes of people receiving help, in essence, the real targets of such programs (Mei & McGorry, 2020). A recent systematic review found insufficient evidence that Mental Health First Aid improves the helping behaviors of trainees or the mental health of aid recipients (Forthal et al., 2022). Therefore, a long-term, controlled study on the effectiveness of training with our materials could provide useful insights into the impact of our work in Flanders.

In conclusion, a guidance manual on how to provide communicative first aid to people experiencing mental health problems was developed based on the best available evidence and the input of a multidisciplinary expert panel. Training based on the manual is currently implemented by the Belgian Red Cross, and a mobile application based on the content of the manual is currently freely available for download.

ABBREVIATIONS

Centre for Evidence-Based Practice (CEBaP)
Confidence Interval (CI)
Disability Adjusted Life Years (DALYs)
Good Practice Point (GPP)
Grading of Recommendations Assessment, Development and Evaluation (GRADE)
Mean Difference (MD)
Odds Ratio (OR)
Population, Intervention, Comparison, Outcome (PICO)
Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)
Post-Traumatic Stress Disorder (PTSD)
Randomized Controlled Trial (RCT)
Risk Ratio (RR)
Standardized Mean Difference (SMD)

ADDITIONAL FILES

The additional files for this article can be found as follows:

- **S1.** PRISMA checklist. DOI: https://doi.org/10.25894/ijfae.6.1.8.s1
- **S2.** Search strategy for systematic literature search. DOI: https://doi.org/10.25894/ijfae.6.1.8.s2
- **S3.** Evidence summaries per mental health topic. DOI: https://doi.org/10.25894/ijfae.6.1.8.s3
- **S4.** Narrative description of evidence conclusions. DOI: https://doi.org/10.25894/ijfae.6.1.8.s4

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COMPETING INTERESTS

The activities of the Belgian Red Cross include the provision of psychosocial first aid to laypeople.

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