Review

Review of Mental Health First Aid Programs

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Tiago Filipe Oliveira Costa[1,2,3], Francisco Miguel Correia Sampaio[3,4,5], Carlos Alberto da Cruz Sequeira[2,3], Isilda Maria Oliveira Carvalho Ribeiro[2], and Vitor Sérgio de Oliveira Parola[4,6]

Abstract

Mental health first aid programs are interventions to empower the community to help people with mental health problems/crises. A review of these programs was conducted in accordance with the guidelines of the Joanna Briggs Institute. Published and unpublished works from 2009 to 2019 were considered. The review included 252 studies. Several Mental Health First Aid programs were identified, with varying characteristics, participants, and contexts of implementation. These group interventions were carried out among lay people to health professionals, and in adolescents to the elderly. Additionally, they were conducted in-person and/or virtually, using psychoeducational methods and informational materials. The programs ranged from 30 minutes to 24 hours. These interventions can address nursing foci, and the characteristics of the facilitators are similar to those of mental health nurses. Therefore, this review highlighted the opportunity for nurses to explore Mental Health First Aid programs.

Keywords

Mental health, first aid, nursing, programs, review

Mental health is a priority area for international health policies (World Health Organization [WHO], 2013). Mental health refers to "a state of well-being whereby individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities" (WHO, 2003, p. 7). In contrast, a mental disorder is a clinically significant disturbance in an individual's cognition, emotional regulation, or behavior that causes dysfunctionality (American Psychiatric Association, 2013). A mental health problem is a broader term that includes both mental disorders and the symptoms of a mental disorder that do not yet justify the diagnosis of a disorder (Kitchener et al., 2017).

The high worldwide prevalence of mental health problems increases the likelihood that people will have contact with individuals with these problems (Morgan et al., 2018). While treatments exist, only a minority of individuals with mental health problems receive help (Hadlaczky et al., 2014). Furthermore, it is more likely that these individuals would seek professional or formal help at the suggestion of others (Cusack et al., 2004). Thus, the provision of mental health first aid (MHFA) is vital. MHFA is defined as the help given to a person who is in a crisis or develops a mental health problem, until the person receives professional help or the crisis is resolved (Kitchener et al., 2017).

First aid provision requires people to play an active role in the health of others. Thus, citizens can engage more actively with their personal and community health by improving their health literacy (WHO, 2016). Mental health literacy incorporates five components: the recognition of problems and mental disorders; knowledge regarding available professionals and treatments; knowledge of effective self-help strategies; knowledge of mental disorder prevention; and knowledge and skills to provide support and first aid to others (Jorm, 2012). Globally, mental health literacy is low and requires specific interventions, including educational interventions (Taya et al., 2018). Therefore, the WHO emphasizes the

[1]EspinhoCentro Hospitalar de Vila Nova de Gaia Espinho EPE, Vila Nova de Gaia, Portugal
[2]Nursing School of Porto, Porto, Portugal
[3]Center for Health Technology and Services Research (CINTESIS), Porto, Portugal
[4]Faculty of Health Sciences, University Fernando Pessoa, Porto, Portugal
[5]Faculty of Medicine, University of Porto, Porto, Portugal
[6]Portugal Centre for Evidence-Based Practice: A Joanna Briggs Institute Centre of Excellence, Health Sciences Research Unit: Nursing

Corresponding Author:
Carlos Alberto da Cruz Sequeira, Full Professor, Nursing School of Porto, Rua Dr. António Bernardino de Almeida, S/N, Porto, 4200-072, Portugal.
Email: carlossequeira@esenf.pt

relevance of community-based mental health interventions (WHO, 2018a), including the promotion of mental health literacy, such as MHFA programs.

MHFA programs aim to disseminate basic first aid skills in the community, and are not focused on developing clinical skills (Kitchener & Jorm, 2017). These programs involve the training of individuals to assist with mental health problems. They do not include the direct interventions of the therapist toward people with mental health problems and/or in crises. Thus, MHFA programs should not be confused with crisis interventions.

Health professionals, especially nurses, are vital in the promotion of health and health literacy (Ordem dos Enfermeiros, 2011; WHO, 2018b). Therefore, MHFA programs are pertinent to mental health nursing. In fact, mental health nurses have advanced expertise in mental health and provide psychoeducational care (International Council of Nurses, 2009; Ordem dos Enfermeiros, 2011). Thus, it is essential to investigate interventions that may enable patients to access, understand, and use information regarding mental health issues.

Dispersion of Evidence on MHFA Programs

Other interventions that may be included in the concept of MHFA programs (Kitchener & Jorm, 2017) were sought. A preliminary exploratory search revealed numerous studies describing several intervention programs with the same concept. These included terms such as "Mental Health First Aid" (Morgan et al., 2018), "Psychological First Aid" (McCabe et al., 2011), and "Emotional First Aid" (Jetten, 2011), among others. In addition, these programs had distinct structures and contents, foci of positive results, evaluation methods, and facilitators. For example, Haggerty and colleagues' (2018) program is eight hours in duration, uses roleplaying and simulations, and addresses on initial help for teenagers and young people with various mental health problems. Mental health literacy, confidence in performing helping behaviors, and mental health stigmas are assessed via a survey taken before and after the intervention, and again three months later (Haggerty et al., 2018). It is performed by instructors certified in Youth Mental Health First Aid (Haggerty et al., 2018). In contrast, the intervention mentioned by Cerel et al. (2012) lasts between 0.5 and 3 hours, and uses presentations, videos, and roleplaying to address suicidal crises. Perceived knowledge about suicide and self-efficacy to assist someone who shows signs of suicidality are assessed with a questionnaire taken before and immediately after the intervention (Cerel et al., 2012). Instructors certified by the Question, Persuade, and Refer Institute implement the program (Cerel et al., 2012).

Furthermore, these intervention programs are targeted at participants of different age groups and levels of mental health expertise, as well as in diverse geographical contexts and delivery settings. For example, in the program described by Lamis et al. (2017), the participants are education professionals aged between 18 y and 70 years. The intervention is delivered virtually in the USA (Lamis et al., 2017). In contrast, the program described by Gibson et al. (2010) targets community-level health workers in India and is implemented in-person (Gibson et al., 2010).

Thus, it is essential to identify an evidence base to examine the extent (size), range (variety), and nature (characteristics) of MHFA programs. Additionally, a comprehensive summary of the different MHFA programs is currently lacking. Therefore, it is crucial to synthesize and disseminate research results, and to identify gaps in the literature to guide future research.

Information on interventions that have been implemented and evaluated are dispersed in the literature. This impedes the construction of precise questions regarding the effectiveness of such interventions across various contexts and/or populations, and consequently, the conduction of a systematic review. According to the Joanna Briggs Institute, "scoping reviews undertaken with the objective of providing a map of the range of the available evidence can be undertaken as a preliminary exercise prior to the conduct of a systematic review" (Peters et al., 2017, p. 6). Thus, this study can determine the value of undertaking a systematic review.

Furthermore, according to the guidelines of the UK Medical Research Council, the construction of a basis of evidence is an important stage in developing a complex intervention (Craig et al., 2008).

Purpose

This study thus aimed to map the MHFA programs. The review questions were as follows: "What are the characteristics of MHFA programs (structure and content of interventions, foci of positive results, evaluation methods, facilitators)?"; "Which participants have been included in the MHFA programs?"; and "In which contexts/settings have the MHFA programs been implemented?".

Methods

A scoping review was conducted in accordance with the Joanna Briggs Institute methodology for scoping reviews (Peters et al., 2017). This study used the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist as a guide for reporting of the review (Tricco et al., 2018). This review was conducted in accordance with an a priori protocol (Costa et al., 2020), which describes the methodological procedures used.

Inclusion Criteria

Using the Participants, Concept, Context strategy (Peters et al., 2017; Tricco et al., 2018), the review considered

studies that describe MHFA programs, without restricting participants and contexts. This review included all published, unpublished, primary, and secondary studies. It comprised studies conducted in English, Portuguese, and Spanish. Furthermore, the review included works carried out over a 10-year period, from 2009 to 2019.

Search Strategy

A search was conducted in databases (Web of Science Core Collection, MEDLINE® with Full Text, CINAHL complete, PsychInfo, SciELO, Scopus, Cochrane library, and JBI Database of Systematic Reviews and Implementation Reports) and scientific repositories (Repositório Científico de Acesso Aberto de Portugal and OpenGrey). An initial limited search and analysis of the text words used to describe the articles was developed (Costa et al., 2020). A second search was then conducted using all identified keywords and index terms via the included databases and repositories (January 31, 2019). The Boolean phrase was synthesized and used in database searches (Online Supplementary Table 1). However, we experienced difficulty obtaining unpublished studies from the repositories, although the Boolean phrase yielded pertinent studies in the preliminary exploratory search. Thus, multiple searches were conducted using broader Boolean phrases in the languages considered in the review (Online Supplementary Table 1). Lastly, the reference lists of all identified reports and articles were searched for additional studies.

Study Selection

All identified records were loaded and processed (duplicates removed) through Endnote X8 Software (Clarivate Analytics, 2017) and Microsoft Excel 2016. Two independent reviewers analyzed the relevance of articles for review based on the titles, abstracts, and full-text information. Thus, studies were considered when they met the inclusion criteria. Any disagreements that arose between the reviewers at each stage of the selection process were resolved through discussion or via a third reviewer. Obtaining access to the full text of several studies required contacting the authors and/or related persons. It should be noted that a justification was attached for each excluded article.

Data Extraction

Data extraction identified the general data of the studies and specific aspects of the intervention programs. Data were extracted from papers included in the scoping review by two independent reviewers using a data extraction tool (Costa et al., 2020) developed by the reviewers. This was based on the Joanna Briggs model instrument for extracting details of the studies, characteristics, and results (Peters et al., 2017). Any disagreements that arose between the reviewers were resolved through discussion, or via a third reviewer. Authors of papers were contacted to request missing or additional data where required. However, inconclusive, and unclarified aspects were not extracted.

Data Management

Data on studies and programs were synthesized. The number of studies by year of publication and place of origin were counted. In addition, the references of the included studies were listed. For each reference, the names of the described programs were matched. The distinct characteristics of the MHFA programs, participants, and contexts of implementation were cumulatively identified. Each of these aspects were supported by exemplar study citations. The synthesis of the results was presented via visual representations, in narrative format, and tables.

Results

Study Inclusion

The search and selection process for evidence occurred as planned, and the results were synthesized in a PRISMA-ScR flow chart (Online Supplementary Figure 1).

The publication dates of the studies ranged from 2009 to 2019: 6.7% of the studies were from 2009 (n=17), 10% from 2010 (n=25), 8.3% from 2011 (n=21), 6.3% from 2012 (n=16), 6% from 2013 (n=15), 11.1% from 2014 (n=28), 10.7% from 2015 (n=27), 13.9% from 2016 (n=35), 9.1% from 2017 (n=23), 15.9% from 2018 (n=40), and 2% from 2019 (n=5). The studies had various origins. In America, 38.5% of the studies were found (n=97) to be distributed by the United States (n=83), Canada (n=13), and Haiti (n=1). In Oceania, 35.7% (n = 90) of the studies were found to be developed in Australia (n=89) and New Zealand (n=1). In Europe, 20.2% of the studies were found (n=51), located in England (n=22), Wales (n=6), Portugal (n=5), Sweden (n=4), Ireland (n=3), Netherlands (n=3), Belgium (n=2), Denmark (n=2), Scotland (n=2), Switzerland (n=1), and Greece (n=1). In Asia, 5.2% of the studies (n=13) were found to be distributed in Japan (n = 6), China (n = 5), South Korea (n=1), and Lebanon (n=1). Only one study (0.4%) was conducted in Africa, namely, in South Africa.

Published and unpublished primary and secondary studies with quantitative, qualitative, and mixed methodologies were included to address a variety of objectives. Online Supplementary Table 2 includes the list of studies reviewed. Intervention programs were identified among the included studies.

Considering the high volume of information obtained regarding the MHFA programs, a scheme was developed to summarize the main findings (Online Supplementary Figure 2). This indicated an educational process between the facilitators and the participants. Facilitators were experienced in

education and mental health. Thus, they planned and implemented educational interventions for groups with varying ages and levels of expertise. The program contents comprised first aid for cognitive, behavioral, emotional and/or relational problems, and crises. Interventions were developed with flexible durations, frequencies, and delivery methods. They had various foci, and the facilitators evaluated the results at different time points. A more detailed description of the findings is given further.

Characteristics of Intervention Programs

Structure. The designs of the intervention programs varied (Online Supplementary Table 2). The total durations ranged from 30 minutes to 24 hours, to between 1 to 6 days (Table 1). In addition, the interval between sessions of up to one week and the possibility of reinforcement and/or consultation sessions were described (Table 1). Psychoeducation and/or informative materials were employed as intervention methods (Table 1). Furthermore, psychoeducation used expository (e.g. lectures), demonstrative, participatory (e.g. discussions), experimental learning (e.g. role-play), and/or contact-based education strategies.

Content. All intervention programs covered support and first aid. Some of these programs also included mental health problems and disorders, available professionals and treatments, effective self-help strategies, and the prevention of mental disorders (Table 2).

Regarding support and first aid, interventions addressed the definition, importance, target audience, and when and where it should be implemented. In addition, the role of the "first aider" was explained, along with information on how to help children, adolescents, youth, adults, and the elderly. Regarding the action plan proposed to the participants, the intervention programs suggested four actions: approach the individual and evaluate the situation, help the individual and encourage the use of self-help strategies, assist in formal and informal help-seeking, and self-care. When presenting action plans, mnemonics were often used.

On the subject of mental health problems and disorders, MHFA programs included definitions, signs and symptoms, incidences and prevalence rates, and potential associated crises. The experiences and impact of mental health problems were also highlighted. These interventions focused on one or more mental health problems, especially pathologies. The nature of these mental health problems were cognitive (e.g. psychosis and dementia), behavioral (e.g. eating problems, substance abuse, and pathological gambling), emotional (e.g. mood problems, and anxiety) and/or relational (e.g. hetero-aggression and bullying).

Regarding available professionals and treatments, these programs addressed formal (professional) and informal help (family and friends), and available and effective interventions. In addition, facilitating and hindering factors to help and seeking help were addressed. Aspects related to recovery and relapse were considered.

In relation to effective self-help strategies, the MHFA programs focused on self-care and adaptive coping mechanisms. The content of the interventions included the definition of mental health and mental health promotion behaviors.

Regarding the prevention of mental disorders, the MHFA programs addressed the etiology of mental health problems and their risk and protective factors.

Foci of Positive Results. As shown in Table 3, MHFA programs were described as having the following intervention foci: (behavioral) intention, behaviors, (behavioral) actions, application, provision, use, likelihood of providing, social connectivity, interaction, involvement, social distance, and capacity/capability. They further included ability, skill, empowerment, competence, literacy, attitude, empathy, sensitivity, stigmatizing attitudes, negative attitudes, willingness, motivation, efforts, beliefs, and concordance. Additional aspects were personal views/opinions, stereotypes, norms, stigmatizing beliefs, stigma, barriers (psychological), discrimination, self-efficacy, comfort, knowledge, mastery of information, and understanding. Finally, they addressed feelings, sense of responsibility and permission, confidence, optimism, fear, awareness, perception, preparation, readiness, mental health/ general health, and (psychological) wellness. The specifications of intervention foci were related to mental health, seeking help (for oneself), and providing first aid to others.

A concept map was developed (Figure 1) to illustrate the foci of positive results. The International Classification for Nursing Practice terms (International Council of Nurses, 2019) and the respective definitions were utilized in this information synthesis.

Evaluation Methods. The evaluation of program results varied in frequency. Results were evaluated before and immediately after the intervention; before the intervention, in the middle and immediately after the intervention; before and immediately after the intervention and at follow-up; before the intervention and at follow up; and after the intervention (in retrospect; Online Supplementary Table 3). Interviews, observation, and evaluation instruments were used to assess the results of the programs (Online Supplementary Table 3). However, a limited number of valid evaluation instruments were found (Table 4).

Facilitators. Facilitators of the interventions were adults with varying levels of academic qualifications and occupations. This highlighted the importance of having work experience in education/implementation of intervention programs and work/specialization in mental health (Online Supplementary Table 4). Previous experience with mental health (and recovery) problems, and familiarity with the implementation context were considered useful characteristics of the facilitators

Table 1. Structure of Intervention Programs.

Structure of Intervention Programs			Exemplar Study Citations
Duration of intervention	30 minutes		Cerel et al., 2012
	Between 30 minutes and 24 hours		Booth et al., 2017; Carpenter et al., 2018; Hadlaczky et al., 2014; Happell et al., 2015; Mo et al., 2018
	24 hours		Gibson et al., 2010
Frequency of intervention	1 day		Cheung et al., 2011; Errasoul et al., 2015; Jones et al., 2015; Lee et al., 2017; Wei & Kutcher, 2014
	Between 1 and 6 days		Armstrong et al., 2011; Borrill, 2011; Gould et al., 2013; Jensen et al., 2016; Mendenhall & Jackson, 2013
	6 days		Moll et al., 2015; Moll et al., 2018
	Interval between sessions of up to one week		Byrne et al., 2015; Campos et al., 2018; Ojio et al., 2015
	With reinforcement / consultation sessions		Booth et al., 2017; Lipson, 2014
	No reinforcement / consultation sessions		Allen et al., 2010; Lubman et al., 2016
Intervention methods	Psychoeducation	Expository strategies (e.g. lectures)	Cross et al., 2011; Everly et al., 2014; Massey et al., 2014; Nakagami et al., 2017; Sareen et al., 2013
		Demonstrative strategies	Walsh et al., 2013; WHO, 2013
		Participatory strategies (e.g. discussions)	Hart, Jorm & Paxton, 2012; Lewis et al., 2013; Teo et al., 2016; Tsai et al., 2011; Vella et al., 2018
		Experimental learning strategies (e.g. role-play)	Haggerty et al., 2018; Johnson & Parsons, 2012; Lee & Tokmic, 2019; McCormack et al., 2018; Subedi et al., 2015
		Contact-based education strategies	Calear et al., 2017; Hofmann-Broussard et al., 2017; Moll et al., 2015; Moll et al., 2018
	Informative materials		Davies et al., 2018; Jorm, Kitchener, Fischer et al., 2010; Lamis et al., 2017; Thombs et al., 2014; Reavley et al., 2018

Note. The complete list of studies included in the review can be found in the Online Supplementary Table 2.

Table 2. Content of Intervention Programs.

Content of Intervention Programs			Exemplar Study Citations
Support and first aid for others	For children		Akoury-Dirani et al., 2015; Chandra et al., 2014; Eustache et al., 2017; Glasper, 2017; Story et al., 2016
	For adolescents		Freedenthal, 2010; Ghoncheh et al., 2014; Hart, Cox et al., 2018; Hart et al., 2016; Hart, Morgan et al., 2018
	For youth		Aakre et al.; 2016; Bean & Baber, 2011; Errasoul et al., 2015; Haggerty et al., 2018; Rose et al., 2019
	For adults		Allen et al., 2010; Bovopoulos, LaMontagne et al., 2016; Jorm & Ross, 2018; Oklahoma Medical Reserve Corps, 2009
	For the elderly		Brown et al., 2009; Svensson & Hansson, 2016
	Action plan	Approach the individual and evaluate the situation	Guajardo et al., 2018; Kubo et al., 2018; McCabe et al., 2014; Tompkins & Witt, 2009; WHO, 2013
		Help the individual and encourage the use of self-help strategies	Akoury-Dirani et al., 2015; Corrigan, 2018; Everly et al., 2014; National Council For Behavioral Health, 2014
		Assist in formal and informal help-seeking	Cleary et al., 2015; Crooks et al., 2018; Hambrick et al., 2014; Mellanby et al., 2010; Ploper et al., 2015
		Self-care	Lee et al., 2017; Schafer et al., 2010
Mental health problems and disorders	One mental health problem / disorder		Katz et al., 2013; Mclean & Becker, 2018; Muehlenkamp et al., 2010; Sutton et al., 2017; Walsh et al., 2013
	Various mental health problems / disorders		Anderson & Pierce, 2012; Armstrong et al., 2011; Burns et al., 2017; Hossain et al., 2009; Lam et al., 2010
	Cognitive problem(s)		Armstrong et al., 2018; Bond, Jorm, Kitchener, Kelly et al., 2016; Jorm & Wright, 2009; Monette, 2012
	Behavioral problem(s)		Gratwick-Sarll & Bentley, 2014; Kingston et al., 2009; Kingston et al., 2011; Lubman et al., 2017; Roche et al., 2019

(continued)

Table 2. (continued)

Content of Intervention Programs	Exemplar Study Citations
Emotional problem(s)	El-Amin et al., 2018; Graham et al., 2010; Jetten, 2011; McCormack et al., 2018; Ziedonis et al., 2016
Relational problem(s)	Calear et al., 2017; Jha et al., 2012
Mental health crises	Crisanti et al., 2015; Kitchener et al., 2017; Loureiro, 2014; Loureiro et al., 2014; Rebecca, 2013
Available professionals and treatments	Booth et al., 2017; Chowdhary et al., 2018; Hadlaczky et al., 2014; Hurley et al., 2018; Morrissey et al., 2017
Effective self-help strategies	Campos et al., 2018; Jacobs et al., 2016; Lewis et al., 2013; McCabe et al., 2011; Vella et al., 2018
Prevention of mental disorders	Brandling & Mckenna, 2010; Jones et al., 2015; Lamis et al., 2017; Marzano et al., 2016; Senate, 2015

Note. The complete list of studies included in the review can be found in the Online Supplementary Table 2.

Table 3. Foci of Positive Results.

Foci of Positive Results	Exemplar Study Citations
(Behavioral) intention	Hashimoto et al., 2016; Rose et al., 2019
Behaviors	Hadlaczky et al., 2014; Kanowski et al., 2009
(Behavioral) actions	Davies et al., 2018; Jha et al., 2012; Lipson, 2014
Application	Crooks et al., 2018; De Silva et al., 2015
Provision	Morgan et al., 2018; Svensson & Hansson, 2014
Use	Haggerty et al., 2018; Johnson & Parsons, 2012
Likelihood of providing	Aakre et al., 2016; Mellanby et al., 2010
Social connectivity	Wyman et al., 2010
Interaction	Schafer et al., 2010
Involvement	Gryglewicz et al., 2018; Juhnke et al., 2011
Social distance	Britt et al., 2018; Graham et al., 2010
Capacity/Capability	Chandra et al., 2014; Schafer et al., 2010
Ability	Crisanti et al., 2015; Sutton et al., 2017
Skill	Kubo et al., 2018; Mo et al., 2018
Empowerment	Mendenhall et al., 2013; Mendenhall & Jackson, 2013
Competence	Hashimoto et al., 2016; Wei & Kutcher, 2014
Literacy	Costa, 2018; Hurley et al., 2018; Lee & Tokmic, 2019
Attitude	Chowdhary et al., 2018; Joyce et al., 2011
Empathy	Ashoorian et al., 2018; Hossain et al., 2010
Sensitivity	Massey et al., 2014
Stigmatizing attitudes	Byrne et al., 2015; O'Reilly et al., 2011; Terry, 2010
Negative attitudes	Corrigan, 2018; Guajardo et al., 2018; Lam et al., 2010
Willingness	Kelly & Birks, 2017; Tsai et al., 2011; Walsh et al., 2013
Motivation	Roche et al., 2019
Efforts	Thombs et al., 2014
Beliefs	Ojio et al., 2015; Subedi et al., 2015; Wong et al., 2015
Concordance	Morawska et al., 2012; Wong et al., 2017
Personal views / opinions	Roche et al., 2019
Stereotypes	Campos et al., 2018
Norms	Teo et al., 2016; Wyman et al., 2010
Stigmatizing beliefs	Hart, Morgan et al., 2018; Moll et al., 2018
Stigma	Happell et al., 2015; Morrissey et al., 2017
Barriers (psychological)	Lubman et al., 2016; Lubman et al., 2017
Discrimination	Kroll, 2015
Self-efficacy	Auger et al., 2019; Lipson et al., 2014

(continued)

Table 3. (continued)

Foci of Positive Results	Exemplar Study Citations
Comfort	Banh et al., 2018; Carpenter et al., 2018
Knowledge	Coppens et al., 2014; Isaac et al., 2009
Mastery of information	Ploper et al., 2015
Understanding	Jordans et al., 2012; Terry, 2009; Svensson et al., 2015
Feelings	Borrill, 2011; Walsh et al., 2013
Sense of responsibility and permission	Lucksted et al., 2015
Confidence	Indelicato et al., 2011; Wade et al., 2013
Optimism	Cleary et al., 2015; Jorm & Kitchener, 2011
Fear	Borrill, 2011; Throgmorton, 2017
Awareness	Fessey et al., 2016; Tsai et al., 2011
Perception	Brandling & Mckenna, 2010; Sousa, 2015
Preparation	Ghoncheh et al., 2016; Johnson & Parsons, 2012
Readiness	Booth et al., 2017; Svensson & Hansson, 2016
Mental health / health	Hart et al., 2010; Hart, Jorm, Kanowski et al., 2009
(Psychological) wellness	Bonnar, 2015; Cheung et al., 2011
Specifications of Intervention Foci	**Exemplar Study Citations**
Mental health	Bovopoulos et al., 2018; Eustache et al., 2017
Seeking help (for oneself)	Berridge et al., 2011, Lubman et al., 2017
First aid to others	Akoury-Dirani et al., 2015; Kato et al., 2010

Note. The complete list of studies included in the review can be found in the Online Supplementary Table 2.

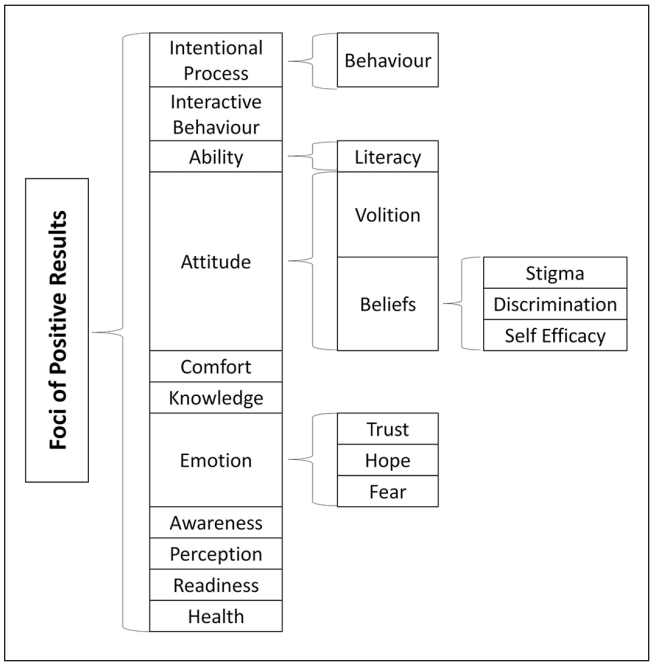

Figure 1. Concept map of Foci of positive results.
Source. Adapted from International Council of Nurses (2019).

(Online Supplementary Table 4). Program implementation required a lead facilitator and, where possible, co-facilitator(s). Supervision of program development was also required (Online Supplementary Table 4). The use of the "train-the-trainer" method to promote the dissemination of intervention programs was verified (Online Supplementary Table 4).

Participants of Intervention Programs

Expertise in mental health varied from lay people to health-care students and professionals (Online Supplementary Table 5). The participants' age groups ranged from adolescents/teenagers and youth to adults and the elderly (Online Supplementary Table 5).

Contexts of Implementation of Intervention Programs

Interventions were generally developed in groups (Online Supplementary Table 6). The programs were conducted in-person and/or virtually in most countries (Australia, Bangladesh, Belgium, Cambodia, Canada, China, Denmark, England, Finland, Georgia, Germany, Greece, Haiti, Hungary, India, Ireland, Israel, Japan, Lebanon, Malta, Nepal, Netherlands, New Zealand, Norway, Pakistan, Philippines, Portugal, Saudi Arabia, Scotland, Singapore, South Africa, South Korea, Sri Lanka, Sweden, Thailand, the United Arab Emirates, the United States, and Wales). The programs were held in urban and rural environments, reaching individuals, groups, families, organizations (public and private, and social and economic), and various populations and communities (Online Supplementary Table 6).

Discussion

The multiple denominations of interventions reflect the various existing MHFA programs. The variations in the total duration of the interventions (30 minutes to 24 hours) and the

Table 4. Outcome Evaluation Instruments.

Evaluation Focus	Evaluation Tool	Exemplar Study Citations
Mental health literacy	QuALiSMental	Costa, 2018; Sousa, 2015
	Mental Health Literacy tool for the Workplace (MHL-W)	Moll et al., 2018
	Mental Health Literacy Scale (MHLS)	Hurley et al., 2018; Lee & Tokmic, 2019
	Mental Health Literacy questionnaire (MHLq)	Campos et al., 2018
Workplace and mental health perceptions	Mental Health Problems Perception Questionnaire (MHPPQ)	Brandling & McKenna, 2010
Perceived competence in psychological first aid ability	Disaster Mental Health Competency Scale	Lee et al., 2017
Management knowledge/skills/abilities of people with suicidal tendencies	Suicide Intervention Response Inventory (SIRI) – SIRI-1	Isaac et al. 2009; Kato et al., 2010,
	Suicide Intervention Response Inventory (SIRI) – SIRI 2	Harrod et al., 2014; Hashimoto et al., 2016; Pasco et al., 2012; Sareen et al., 2013
Willingness to intervene with individuals at risk of suicide and attitudes towards the use of mental health services	Inventory of Attitudes toward Seeking Mental Health Services (IASMHS)	Harrod et al., 2014
Help seeking attitudes/behaviors	Attitudes Toward Seeking Professional Psychological Help Scale–short form (ATSPPHS)	Calear et al., 2017; Moll et al., 2015; Moll et al., 2018
Barriers/beliefs about seeking professional help	Barriers to Adolescents Seeking Help questionnaire (BASH)	Lubman et al., 2016
Help seeking intentions/behaviors	General Help Seeking Questionnaire (GSHQ)	Lubman et al., 2016; Lubman et al., 2017
Stigmatizing behaviors in mental health	Attitudes to Mental Illness Questionnaire (AMIQ)	McCormack et al., 2018
Stigma in seeking help	Self-Stigma of Seeking Help Scale (SSOSH)	Calear et al., 2017
Stigma towards people with mental illness	Opening Minds Scale for Health Care providers (OMS-HC)	Lee & Tokmic, 2019; Moll et al., 2015; Moll et al., 2018,
	Link's Devaluation-Discrimination Scale	Kubo et al., 2018
Well-being	Warwick Edinburgh Wellbeing Scale (WEMWBS)	Anderson et al., 2018; Kidger, Stone et al., 2016
Depression	Patient Health Questionnaire (PHQ-9)	Anderson et al., 2018; Kidger, Stone et al., 2016
Stress, anxiety, and depression symptom levels	Depression Anxiety Stress Scales (DASS-21)	Lubman et al., 2016
Eating psychopathology	The Eating Disorders Examination Questionnaire (EDE-Q)	Hart, Jorm, & Paxton, 2012
Mental health/psychological distress/health behaviors	Kessler Psychological Distress Scale (K6)	Hart, Cox et al., 2018; Hurley et al., 2018; Jorm, Kitchener, Sawyer et al., 2010; Lipson et al., 2014; Sareen, et al., 2013
Mental health/mental distress	Kessler Psychological Distress Scale (K10)	Hart, Jorm, & Paxton, 2012; Jorm, Kitchener, Fischer et al., 2010
Health condition	MOS QOL Questionnaire-Short Form (SF-8)	Kato et al., 2010; Suzuki et al., 2014
Alcohol use	Alcohol Use Disorder Identification Test (AUDIT)	Sareen et al., 2013
Non-suicidal self-injurious thoughts and behaviors	Self-Injurious Thoughts and Behaviors Inventory	Muehlenkamp et al., 2010
Resilience	Connor-Davidson Resilience Scale	Sareen et al., 2013
Adequacy of the perceived role/ability to respond to people with mental health problems (related to alcohol and drug use)	Role Adequacy subscale of the Work Practice Questionnaire	Roche et al., 2019
Motivation to respond to people with mental health problems (related to alcohol and drug use)	Individual Motivation and Reward subscale of the Work Practice Questionnaire	Roche et al., 2019
Views/stereotyped views on people with mental health issues (related to alcohol and drug use)	Personal Views subscale of the Work Practice Questionnaire	Roche et al., 2019
Ideology of community mental health	Community mental health ideology subscale of Community Attitudes to the Mentally Ill (CAMI)	Graham et al., 2010

Note. The complete list of studies included in the review can be found in the Online Supplementary Table 2.

frequency of sessions (1 to 6 days) indicate that this intervention is temporally flexible, which helps facilitate implementation. Additionally, intervals between sessions and/or supplementary sessions allow participants to recognize and apply concepts in their daily lives, and to review their experiences in repeated contact with the facilitator(s) (Byrne et al., 2015; Lipson, 2014).

The findings of the review showed that MHFA programs use expository, demonstrative, participatory, experimental learning, contact-based education strategies, and/or informational materials. The different teaching methods and strategies can be used in isolation or in complementarity. Expository methodologies allow an easy and efficient transfer of large amounts of information and are useful for large groups. Demonstrations activate the senses and clarify underlying principles. Discussions allow for continuous feedback and are flexible and encourage networking. The use of simulated environments, games, activities, and role-playing enable a more transferable practice. Contact/modeling education facilitates active learning and bypasses defenses. Finally, the use of informational materials enables an individualized learning pace (Townsend, 2014).

Furthermore, results showed that MHFA programs address support and first aid for others, mental health problems and disorders, available professionals and treatments, effective self-help strategies, and prevention of mental disorders. Therefore, the contents of the programs seem to reflect the components of Jorm's mental health literacy (2012). Notably, MHFA programs that employ psychiatric terms and structures promote the medicalization and psychiatrization movement of human suffering (DeFehr, 2016). Therefore, intervention programs with a salutogenic perspective of mental health literacy should be considered.

Additionally, results showed that MHFA programs have multiple foci of positive results. They reflect nursing foci, present in the International Classification for Nursing Practice (International Council of Nurses, 2019). Nursing foci are relevant attention areas for Nursing (International Council of Nurses, 2019). The International Classification for Nursing Practice is a standardized, broad, complex, and dynamic language system that represents the domain of Nursing practice worldwide (International Council of Nurses, 2018; WHO, 2017). It provides terminology intended to represent nursing diagnoses, nursing interventions, and nursing outcomes (International Council of Nurses, 2018; WHO, 2017). There are clear examples of converting the intervention foci to those of nursing, including behavior-behavior, ability-ability, attitude-attitude, and knowledge-knowledge. Thus, the positive response of educational interventions to nursing foci seems to justify its autonomous use by nurses. Foci of intervention were associated with providing first aid to others, but also with seeking help for oneself. Thus, MHFA programs can positively influence community conditions (including families and friends), the broader society, and the personal conditions of people who suffer from mental health problems.

The findings of the review indicated five time points for evaluating the results of the programs: before, midway, immediately after the intervention has been completed, and at follow-up. Interviews, observation, and evaluation instruments were used as assessment methods. However, some measures for intervention foci lacked construct validity. Validity ensures that an instrument measures the construct(s) that it is intended to measure (Mokkink et al., 2010).

Furthermore, specialized training and experience in mental health, psychoeducational skills, and proximity to the implementation context were MHFA program facilitator characteristics identified in this study. However, these are also characteristics of mental health nurses (International Nurses Council, 2009; Ordem dos Enfermeiros, 2018). Therefore, mental health nurses should consider MHFA programs as potential interventions within their capabilities. In addition, cofacilitation can assist the implementation of interventions (Byrne et al., 2015). Supervising the development of MHFA programs is crucial to ensure their reliability (Moll et al., 2015).

Although these programs disseminate basic first aid skills, they were aimed at people with varying levels of health expertise (lay people to healthcare students and professionals), these programs may be too simple for mental health professionals with advanced skills in the field (Haggerty et al., 2018). The wide age range of the participants (adolescents to elderly) highlights the importance of intervention programs throughout people's life cycles.

It was further found that MHFA programs were conducted in groups, and that they were delivered virtually and/or in-person. Conducting group sessions allows facilitators simultaneous access to more people, and enables mutual help and sharing between individuals (Townsend, 2014). While face-to-face delivery facilitates inter-personal interactions and relationships in the learning process, the virtual delivery of programs allows greater accessibility to participants, flexibility in administration, and cost-effectiveness (Lamis et al., 2017; Nakagami et al., 2017).

This review had several limitations. Access to full-text articles was not always possible. Additionally, the language proficiency of the reviewers restricted the inclusion of articles to guarantee the quality of the review. Furthermore, the included studies were limited to a certain period to account for the changes that have occurred in health and health literacy. Thus, although the methodological procedure is justified, relevant studies may have been excluded. Finally, the large volume of identified articles made it difficult to present the findings of individual studies. For example, the description of the effectiveness and participant influences produced by each program could provide important guidelines in the creation of MHFA programs.

Despite these limitations, this review provided an evidence base for MHFA programs, thereby contributing to the

development of this type of intervention. Therefore, implications for nursing (clinical practice, research, and education) can be identified.

In clinical practice, an understanding of the characteristics of existing intervention programs, their participants, and their implementation contexts allows for a more directed approach in adopting an intervention or developing a new one. Mental health nurses have an opportunity to disseminate and explore these interventions within their populations and contexts. This study can inform these professionals about MHFA programs.

Furthermore, this evidence base can enhance the practice of MHFA programs, thus benefiting the patients and those around them. These interventions can promote the timely and appropriate identification, assistance, and/or referral of people with mental health problems. Moreover, training the social networks of people with these problems, such as their families, can increase and improve first aid resources. Referrals can facilitate seeking professional help, for example, from mental health nurses. Thus, professionals can easily access and evaluate people with problems, and plan and implement psychotherapeutic interventions in a timely manner.

Additionally, a lack of exclusive focus on non-medicalized mental health needs was found in the identified MHFA programs. These programs are sensitive to nursing foci and nurses' competencies. In combining these two premises, it is important to develop a program with a salutogenic perspective of literacy, that is, an exclusive approach to mental health nursing problems. For example, using the term "anxiety" instead of the medical diagnosis of "anxiety disorder," It is thus pertinent to create and model an MHFA nursing program (Craig et al., 2008) with groups of experts, using focus groups to discuss the characteristics of the intervention and Delphi to validate them. These interventions must be applicable for specific participants and implementation contexts. Moreover, it is essential to explore other valid assessment tools in the literature to measure the varied results of these programs. If necessary, the construction of assessment tools and/or the development of studies regarding their psychometric properties and cultural adaptations should be considered.

The development of mental health nursing programs and their inclusion in nurses' training curricula may be significant to expand nurses' intervention skills. The development of clinical supervision and a guidance manual for the implementation of MHFA programs are important to promote the quality and standardization of future interventions, and the subsequent comparability of their effectiveness.

In summary, various MHFA interventions were identified. Their characteristics ranged in duration and frequency from 30 minutes to 24 hours, and 1 to 6 days, respectively. These should be considered by nurses for public health actions due to their wide variety of participants (from lay people to health professionals, from adolescents to the elderly) and contexts (in person and/or virtually, internationally). The implementation of these educational interventions can promote a more active role for people to engage in mental health issues.

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ORCID iD

Tiago Filipe Oliveira Costa https://orcid.org/0000-0002-6379-7390

Supplemental Material

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