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MOOD DISORDERS (E BACA-GARCIA, SECTION EDITOR)

Refining Suicide Prevention: a Narrative Review on Advances in Psychotherapeutic Tools

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Abstract

Purpose of Review Since psychotherapies for suicide prevention are receiving increasing attention, our purpose was to evaluate the related literature [meta-analyses and reviews on their effect on suicidal outcomes (A), perspective reviews concerning specific socio-demographic and clinical features (B), original studies with particular interest (C)] published over the last 3 years.

Recent Findings (A) Across different diagnoses, particularly, efficacious psychotherapies were cognitive behavioral therapy-based ones and interventions directly addressing suicidal thoughts and behaviors during the treatment. When the focus was restricted to specific diagnoses, results were different: for example, in borderline patients, dialectical behavior therapy and psychodynamic psychotherapies were the only efficacious interventions. (B) Family therapies for adolescents and treatments for elderly depressed patients with disability/cognitive impairment should be further developed. (C) General long-term effects seem to be present, but specific interventions and treatment duration should be considered.

Summary Results indicated the presence of a number of promising interventions.

Keywords Suicide · Suicide attempt · Suicidal ideation · Psychotherapy · Psychological treatment

Acronyms

ABFT	attachment-based family therapy
BPD	borderline personality disorder
CBT	cognitive behavioral therapy
CGT	complicated grief therapy
DBT	dialectical behavior therapy
GPM	good psychiatric management
IPT	interpersonal psychotherapy
MBT	mentalization-based treatment
NSSI	non-suicidal self-injury
PATH	problem adaptation therapy
PST	problem-solving therapy
RCT	randomized controlled trial
SA	suicide attempt
SFT	schema-focused therapy
SH	self-harm
SI	suicidal ideation
ST	supportive therapy
TAU	treatment as usual
TFP	transference-focused psychotherapy

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Introduction

Psychotherapies for suicide prevention are receiving growing consideration. Specific interventions have been primarily used in borderline personality disorder (BPD) samples: transference-focused psychotherapy (TFP) [1, 2], mentalization-based treatment (MBT) [3, 4], dialectical behavior therapy (DBT) [5, 6], and schema-focused therapy (SFT) [7]. Others have been mainly tested in depression: interpersonal psychotherapy (IPT) [8, 9] and cognitive behavioral therapy (CBT) [10, 11]. Moreover, a few studies have examined suicidal outcomes after psychotherapeutic interventions in other diagnoses: e.g., child- and family-focused CBT

[12] and adjunctive behavioral activation [13] in bipolar disorder; CBT in psychotic or schizophrenia patients [14, 15].

The need for treatment algorithms that provide a structured approach to each patient is extremely important, also in the case of psychotherapy. Psychotherapeutic programs for suicidal patients are heterogeneous [16], even within a single theoretical approach, and they become more and more eclectic. This is a notorious advance since some therapy designers assume implicitly that specific components coming from distant schools of thought can be subsumed into a more efficacious/effective therapeutic tool (eclecticism versus orthodoxy). However, the process of constructing evidence-based programs still needs to be refined by specific knowledge about efficacy and mode of use for each particular component and how to combine them.

A deeper clarification of differences and overlaps between techniques could be thus useful for both clinicians and patients. Four master clinicians provided a clinical comparative description of TFP (Frank E. Yeomans), MBT (Anthony Bateman), DBT (Charles Swenson), and good psychiatric management (GPM) (John G. Gunderson) in BPD [17•]. Concerning differences, the most evident one is related to theoretical orientation: TFP and MBT are both rooted in psychoanalytic models of intervention, DBT focuses on emotion regulation, while GPM integrates both behavioral and psychoanalytic features. Concerning shared features, the core is represented by the fact that "all emphasize the role of the therapist in providing some form of stable holding frame, including tolerance of the patient's negative affect and hostile or threatening behavior". More specifically, six common factors in the psychotherapy of BPD with specific reference to suicide (TFP, MBT, DBT, SFT, and GPM) have been identified [18•]: (1) negotiation of a specific treatment frame, (2) focus on the patient's responsibilities within the therapy, (3) coherent conceptual framework for the therapist to understand and intervene, (4) use of the therapeutic relationship to engage and address suicide risk, (5) prioritization of suicide as a topic to be actively addressed whenever it emerges, and (6) provision of support for the therapist (e.g., supervision, consultation, or peer support).

Moreover, reformulating Sledge's proposition, three indicators of effectiveness for psychotherapeutic approaches to suicidality could be used: (1) suicidal repetition (either in the form of suicide or suicide attempt or self-harm), (2) continuity of care, and (3) effect of psychotherapy on psychopathological state (e.g., feelings of worthlessness/hopelessness, and depression and anxiety scores could be good indicators, together with impulsivity) to sustain patient's view of having a life worth living [18•].

Our aim was to critically evaluate the literature on psychotherapies for suicide prevention published over the last 3 years, a period during which the literature on this subject has rapidly increased. In particular, we grouped meta-analyses and reviews observing the effect of psychotherapy on suicidal outcomes (A), perspective reviews concerning specific socio-demographic and clinical features (B), and original studies with particular interest (new orientations) (C).

Methods

A literature web search was performed to identify studies focusing on psychotherapies for suicide prevention. PubMed database was used to search articles using the broad search terms (suicid* OR self-harm) AND (psychotherap* OR psychosoc*). Any form of suicidal outcome was considered: suicide, suicide attempt (SA), self-harm (SH), and suicidal ideation (SI), but also non-suicidal self-injury (NSSI). Articles published between 2014 and 2017 were included. The search comprised meta-analyses, reviews, original quantitative studies, and qualitative ones. Studies were included if (1) they examined the effect of any form of psychotherapy, (2) they focused on any form of suicidal outcome: suicide, SA, SH, SI, and NSSI, and (3) they were written in English language. The reference lists of the identified studies and reviews were checked as well for further relevant articles. This was not a systematic review of the literature; our aim was to provide to the reader an as much as possible updated picture of the current evidence and a critical evaluation of the most recent findings. To this aim, we included the most representative studies (e.g., in terms of the impact factor of the publication, sample size, authority of the experts, type of publication, such as meta-analyses/reviews) investigating psychotherapeutic tools for suicide prevention published in the last 3 years. Further studies published before have been included if interesting for the aim of this review. We did not focus on specific interventions but we privileged studies pooling/comparing different ones.

Results

A) Meta-analyses and Reviews on the Effect of Psychotherapy on Suicidal Outcomes

All Mental Disorders

In the last years, the number of original studies on the topic reached a sufficient amount to be analyzed through meta-analytic techniques, and several interesting papers were recently published. We meta-analyzed 32 randomized controlled trials (RCTs) that compared different psychotherapies (among others, CBT, DBT, MBT, and IPT) to treatment as usual (TAU) on two different outcomes, SA and NSSI (strictly defined), in both adults and adolescents [16]. Psychotherapies, considered together, seemed to be efficacious in the reduction

of SA. Moreover, when, in subgroup analyses, we separately considered MBT and MBT-oriented partial hospitalization ($n = 2$), we found this approach to be particularly efficacious in the reduction of both SA and NSSI among BPD patients. It should be underlined that, in one [19] of the two considered studies [20], MBT was administered in the context of a multicomponent program during partial hospitalization and this could have influenced the results. Hence, future studies comparing MBT with other treatments on SA and NSSI outcomes are warranted.

The team of Keith Hawton recently produced a number of systematic reviews and meta-analyses, the first of which was focused on psychosocial interventions in children and adolescents who engaged in SH (non-fatal intentional acts of self-poisoning or self-injury regardless suicidal intent) [21••]. This Cochrane review included 11 RCTs on psychosocial interventions versus TAU, but meta-analyses were performed for two interventions only: DBT for adolescents and group-based psychotherapy [including the integration of different techniques such as CBT, DBT, or problem-solving therapy (PST)] [21••]. Also in this case, MBT seemed to be efficacious in the reduction of SH repetition among adolescents. Conflicting results were reported on DBT while mainly no effect was found on all the other considered treatments. However, in a further review in which 16 RCTs were analyzed, more promising findings were evidenced [22]. Among the evaluated treatments there were the following: CBT, IPT, PST, social support, and distal support methods (the provision of an emergency green card after a previous hospitalization for SH, which allows to be readmitted to the hospital, and regular receipt of postcards). CBT was the most common intervention applied ($n = 4$), with reported reduction in SH episodes and SI severity in comparison with TAU. Moreover, in three PST trials, a reduction of SI, even if not SA, was reported.

Hawton's team focused as well on adults who engaged in SH [23••, 24••]. Firstly, in a Cochrane review, they included 55 RCTs on psychosocial interventions versus TAU [23••]. Main treatments comprised: CBT-based psychotherapy (CBT and/or PST) ($n = 18$); interventions for personality disorders, comprising group-based emotion-regulation psychotherapy, MBT, and DBT ($n = 9$); case management ($n = 4$); and remote contact interventions (postcards, emergency cards, telephone contacts) ($n = 11$). CBT-based psychotherapy was found to be efficacious, compared with TAU, at final follow-up in terms of fewer participants repeating SH; however, SH frequency was not reduced. Moreover, group-based emotion-regulation psychotherapy and MBT were associated with reduced SH repetition in comparison to TAU. Compared with TAU, DBT reduced SH frequency at final follow-up but not the SH repetition. Concerning the other interventions, none was associated with fewer SH repetition. The second study on adults (29 RCTs) specifically focused on psychosocial treatments versus TAU following a recent episode of SH (within 6 months) [24••]. Among psychosocial treatments, CBT-based psychotherapy ($n = 18$), DBT ($n = 3$), case management ($n = 4$), and postcards ($n = 4$) were separately analyzed. CBT-based psychotherapy was associated with fewer participants repeating SH at 6 and 12 months' follow-up and improvement in SI. The other interventions (DBT, case management, and sending regular postcards) did not reduce repetition of SH; however, DBT was found to reduce SH frequency.

In the same year, a further meta-analysis has been published on the topic (44 RCTs), but with a different perspective: direct interventions addressing suicidal thoughts and behaviors during treatment were compared to interventions addressing symptoms indirectly associated with suicide (e.g., hopelessness, depression, anxiety, quality of life) [25••]. Direct interventions were mostly based on CBT or DBT while indirect ones were mainly skills training, case management, or active outreach. Interestingly, direct interventions succeeded to reduce both SA and suicide immediately and in the long term, whereas indirect interventions were only efficacious in the long term. Among indirect interventions, only active outreach had a significant effect.

Finally, a systematic review and meta-analysis investigated CBT efficacy in reducing SI and behaviors when delivered face-to-face or via e-health. The review included 26 RCTs and, among them, 19 RCTs that were meta-analyzed [26]. Face-to-face CBT showed a small-medium effect, with significant heterogeneity (effect size varied across studies). The presence of heterogeneity was explicable considering that different populations were assessed and different variants of intervention were considered. Web-based CBT studies were only described narratively, given their small number, and no effect was reported.

Borderline Personality Disorder

Interestingly, different results were reported for BPD patients. In a recent systematic review and meta-analysis considering different borderline outcomes (borderline symptoms, SH and parasuicidal behavior, and suicide), psychotherapies were found to be moderately more efficacious than control interventions [27••]. Control interventions could be (but were not restricted to) TAU or other treatments not specifically developed for BPD. In subgroup analysis, DBT ($n = 9$) and psychodynamic psychotherapies ($n = 7$) were the only approaches found to be more efficacious than control interventions [27••]. Surprisingly, CBT ($n = 5$) was not superior to control interventions, with no heterogeneity (i.e., with no effect size variation across studies).

B) Perspective Reviews

Gender

The study of gender differences and similarities in outcomes of psychosocial interventions for the prevention of suicide is relatively neglected. The gender paradox in suicidal behavior has been described decades ago [28], showing a consistent pattern across cultures, with a few exceptions. This paradox means that females have higher rates of SI and non-fatal suicidal behaviors than males, while suicide deaths are typically higher for males than for females. Within the concept of gender, not only biological differences but also social norms, cultural expectations, and identity differences between sexes are considered [29]. Silvia S. Canetto performed a comparative review focused on differences and similarities between suicide attempters and substance abusers (i.e., broadly defined as including alcohol and drug abuse and dependence) in the United States, with a specific focus on gender roles [30]. She underlined that suicide attempters were considered more feminine than those who died by suicide, suggesting a higher social acceptance of SA in women. On the contrary, substance abuse was considered a masculine activity. Concerning the etiology, but here we have to remember that this article was written more than 26 years ago, SA were seen at that time mainly as a result of a "frail" personality (immature, dependent, masochistic, borderline) while external factors (such as a pathological family) received a major attention in the study of substance abuse. Social norms were hypothesized to reinforce introspection in women and externalization and pragmatism in men, and consequently a different choice of self-destructive behaviors. But gender differences in the suicidal mind seem to go beyond the effect of culture [31] and warrant the need for gender-specific psychotherapeutic tools (or programs). This, also considering that males were found to be highly undertreated [32].

Gender differences in psychosocial treatment outcomes (suicidal thoughts and behaviors) were the focus of a recent systematic review of RCTs ($n = 17$): no differences between women and men (the majority of the studies) or higher efficacy in women ($n = 5$) were reported [33]. Authors suggested the development of interventions more appealing to men, i.e., with a practical emphasis, such as focused on cognitive strategies (problem-solving) and social benefits of help-seeking. Our proposal is that a focus on cognitive strategies could be useful for men in the first phase of the treatment. Secondarily, when possible, a more emotionally focused approach should follow.

Adolescents

The involvement of the family in the treatment of adolescents at suicidal risk is extremely important. attachment-based family therapy (ABFT) seems to be a promising treatment for depressed and suicidal adolescents (4 reviewed studies) [34•]. ABFT is a manualized treatment rooted in both attachment theory [35] and emotion-focused therapy [36]. Its focus is to strengthen the parent-adolescent relationship to serve as buffer against teen depression and suicidal risk. To this aim, ABFT comprises five tasks: (i) relational reframe, (ii) adolescent alliance, (iii) parent alliance, (iv) repairing attachment, and (v) promoting autonomy [37]. Its hypothesized mechanisms of change, that should be investigated in the future, are as follows: attachment changes, improved emotion regulation, improved interpersonal skills, and conflict resolution abilities.

Elderly

In two reviews focused on recent advances in psychotherapies and other interventions for the elderly [38, 39], three treatments have been mentioned concerning suicidal risk: the problem adaptation therapy (PATH) [40, 41•], the IPT [42•], and the PST [43•].

PATH has been developed for elderly depressed patients with disability and cognitive impairment (from mild cognitive impairment up to moderate dementia). It is focused on emotion-regulation improvement through a problem-solving approach, with the aim of compensating patients' cognitive, behavioral and functional decline; it also engages the caregiver in the treatment. PATH was compared to supportive therapy (ST) and both treatments had comparable improvement in SI over 12 weeks [40]. However, Raue et al. [39] reported that in patients with death ideation or active SI, PATH was linked to higher decrease in SI than ST. Moreover, IPT has been adapted for elderly at risk of suicide and it was found to reduce SI [42•]. Finally, Gustavson et al. compared PST to ST in elderly patients with major depression and executive dysfunction. Patients in the PST group showed higher SI reduction 12 and 36 weeks after the treatment [43•].

Post-suicide Grief

The loss of a loved one by suicide represents a risk factor for the development of complicated grief, which is different from the natural mourning process, and for which specific treatments are recommended [44]. In particular, an intervention is recommended in the presence of the following: (i) symptom severity and lack of improvement, (ii) functional impairment, (iii) treatment-seeking behaviors, (iv) hopelessness, and (v) suicidal thoughts or behaviors [44]. A meta-analysis suggested the efficacy of complicated grief therapy (CGT) [45]. CGT encompasses loss processing and restoration of life without the deceased, cognitive behavioral techniques (cognitive restructuring, positive memories), interpersonal techniques, motivational interviewing, psychoeducation, and telling the story of the death.

Grief caused by the suicide of a loved one could be complicated by specific feelings such as guilt/responsibility for what happened, shame, rejection, and stigmatization. Recently, specific interventions for people bereaved by suicide have been reviewed [46•]: seven studies were considered, including CBT ($n = 2$), bereavement groups ($n = 4$), and writing therapy ($n = 1$). The studies were focused on uncomplicated grief, suicide-specific aspects of grief, and complicated grief. Authors reported some positive effects of interventions in reducing grief intensity and suicide-specific aspects of grief. However, results related to complicated grief are less encouraging, even if only two studies were present. Hence, authors suggested that the individual risk must be evaluated with caution. According to Simon [44], beyond the nature of the death (due to suicide, violent, sudden, prolonged), there are further (1) pre-loss, (2) loss-related, and (3) peri-loss factors that could lead to complicated grief: (1) pre-loss factors are being female, early trauma, prior loss, insecure attachment, presence of mood and/or anxiety disorders, and the nature of the relationship; (2) loss-related factors are the nature of the relationship and caretaking roles; (3) peri-loss factors are social circumstances, available resources following the death, poor understanding of the circumstances of the death, and the interference with natural healing process (e.g., alcohol or substance use) [44]. In the case of the suicide of a loved person, clinicians must carefully consider all these further risk factors.

Mechanisms of Change

"The question of the mechanisms of change in psychotherapy seeks to learn how a particular therapy works, not what is the outcome of the treatment per se" [47]. Since the main focus of this review were suicidal-related outcomes, it would be interesting to discover as well mechanisms through which psychotherapeutic treatments result in diminished suicidal-related outcomes. A critical review has been recently performed on the mechanisms of change in DBT ($n = 12$) and CBT ($n = 2$) for BPD [48•]. Three categories of mechanisms were identified: (1) higher emotion regulation/self-control, (2) more adaptive skills use (e.g., acting with awareness and accepting without judgment), and (3) therapeutic alliance/investment in treatment. Concerning SH, DBT skills' use was found to partially mediate its decrease and DBT skills training was efficacious in reducing SH. Moreover, greater understanding and involvement of the therapist was found to be linked to SH reduction.

C) New Orientations: Original Studies with Particular Interest

Long-Term Effects

To our knowledge, the largest follow-up study on psychosocial therapy after deliberate SH was recently performed [49••]. Patients having received a psychosocial treatment ($n = 5{,}678$) were matched with individuals with no psychosocial treatment ($n = 17{,}034$) and followed for 1, 5, 10, and 20 years of follow-up. Each of the involved Danish clinics applied different psychosocial interventions or combined them depending on the particular needs of the patients (cognitive, problem-solving, crisis, dialectical behavior, integrated, psychoanalytic, psychodynamic, systemic, and support from social workers). Having received a psychosocial intervention was linked to lower SH risk and lower deaths by any cause within a year compared to individuals with no psychosocial therapy. Long-term effects were reported as well: lower deaths by any cause after 10 years of follow-up, reduced repeated SH and suicide death after 10, and even 20 years of follow-up. In particular, women, youngsters, and individuals with a first SH episode seemed to benefit especially from psychosocial interventions. The limitations of this study were mainly represented by the lack of randomization and the lack of information about treatment sessions and length. However, the lack of randomization could also have led to a higher representativeness of the sample. Future similar studies should further focus on specific treatments, and evaluate the number of sessions and the intervention length.

Trajectories of Suicidal Outcomes

Three different outcome trajectories in terms of suicide and SH behaviors were recently identified among BPD patients randomized to DBT or general psychiatric management [50•]. The two treatments were considered together since in a previous study no difference has been detected between them [51]. The largest part of the sample ($n = 138$) responded rapidly and reached a sustained recover. The second group ($n = 14$) responded slowly but maintained a favorable response. The third group ($n = 11$) responded rapidly but rapidly relapsed. Of note, the third group was characterized by the highest baseline rates of unemployment, health care utilization, and depression severity. The next interesting step could be the evaluation of outcome trajectories in different psychotherapeutic treatments.

Qualitative Perspective

Twelve psychotherapists from a suicide intervention service in Ireland were interviewed on their understandings of suicide, also at the level of the therapeutic space, and in particular on

the link between connectedness and suicide [52•]. The considered definition of connectedness is a sense of interpersonal closeness with the social world [53]. Interviews were analyzed according to the Constructivist Grounded Theory. According to psychotherapists' interviews, the patient's self-disconnection was considered as a risk factor for suicide, together with pathological relationships. In the words of two psychotherapists: "They don't have a relationship with themselves and then as a result of that they're disconnected from family, disconnected from their wider peer group and society as a whole"; and again "If there isn't a connection in the room I get very very worried. That means that there's a very high risk". Interestingly, psychotherapists considered the therapy for suicidality as representing a paradox: the engaged patient want to die but he/she attend a therapy with the purpose to live. The sense of connectedness is often linked to the experience of a safe connection during the therapy. "The twice a week…it's about really connecting with the person…so that they feel that they're being held. We also give an option of holding sessions so if a client is very suicidal we can see them 6 days a week if needs be…the purpose of that is that initial holding to try and get some light into the darkness…".

Discussion - "After everything else fails, nations as well as individuals become reasonable"

We have read with great interest the guidelines for suicide prevention for psychoanalytic institutes and societies delineated by Otto F. Kernberg [54•]. His main stimulating message is condensed in Abba Eban's statement at the United Nations (1967), shown as the title of this paragraph. We think that these guidelines could be directed to the broader community of mental health professionals dealing with suicidal prevention programs, with some minor changes. (1) The first point, "Establish a lifeline with local universities", could be considered for every clinician, working in the public or in the private sector: the psychotherapist facing with severe patients at suicide risk should be connected with the scientific world and not isolated, and participate to academic activities, group seminars, supervisions, etc. (2) The second guideline could be simply modified in "Develop psychotherapy programs": the psychotherapist should stimulate the development of specific psychotherapeutic programs for suicidal patients. (3) "Inject a research orientation into your organizational life", which means to not be afraid to test new theories and to develop new knowledge in the field of suicide understanding and prevention. (4) "Present a realistic public image of your scientific achievement and concerns and your clinical and professional contributions": psychotherapists should hence inform the cultural community and communicate new results concerning suicide and its prevention. (5) "Innovate"; some linked suggestions are: to organize conferences on controversial issues, to invite outside experts, and to be actively involved in the development of professional standards. (6) "Familiarize yourselves with typical expressions of patient's opposition: "Don't worry, leave me alone, I just want to sleep!"": this means not only to familiarize with manifestations of resistance of the suicidal patient but also to the same manifestations in ourselves as psychotherapists.

Summarizing and Future Directions

See Fig. 1 for a graphic summary of the main results of this review.

A) Psychotherapies seem to be efficacious for the prevention of suicidal behaviors, in particular CBT-based psychotherapy and interventions directly addressing suicidal thoughts and behaviors during the treatment. However, we have to underline that, aside from CBT and DBT, the other promising interventions have been investigated only in a few trials and not all in RCTs. Hence, other less investigated forms of psychotherapy could be efficacious as well. In particular, MBT seems to be a particular promising intervention, both in adolescents and in adults and both on SA and NSSI. In children and adolescents, however, the picture is less clear, also considering the fewer number of trials. When the focus has been restricted to specific diagnoses, results were different: in fact, in BPD patients, DBT and psychodynamic psychotherapies were the only efficacious interventions. Concerning web-based interventions for the reduction of suicidal thoughts and behaviors, web-based CBT seemed to have no effect, but, at the moment, the number of studies is not sufficient to draw definite conclusions.
B) More systematic reporting of suicidal outcomes in female/male sub-groups after psychotherapeutic interventions would be of great interest to better understand gender differences and which treatment works better for each group. Concerning specific populations, since some promising results were reported, particular treatments could be further developed, such as family therapies for adolescents and treatments addressed for depressed patients with disability and/or cognitive impairment for elderly. Post-suicide complicated grief needs further attention. Finally, concerning mechanisms of change in psychotherapy, DBT skills training and therapeutic alliance were particularly linked to SH reduction.
C) General long-term effects seem to be present but specific interventions and information about treatment duration

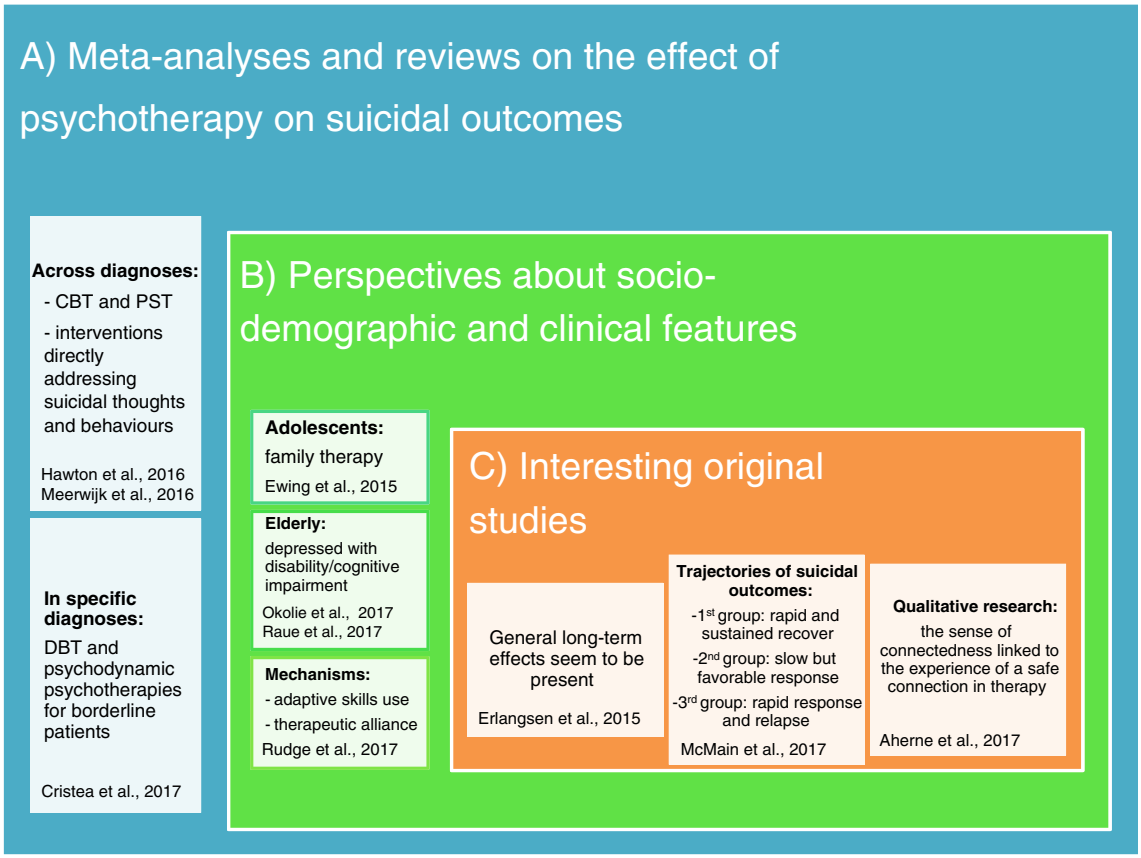

Fig. 1 Graphic summary of the results

should be considered in future studies. In fact, it would be interesting to investigate which treatment works better after long time and which is the minimum length for a treatment to be efficacious/effective even at long term. A better understanding of the trajectories of suicidal outcomes is of extremely high interest to personalize the treatments on the basis of individual patient's characteristics. Finally, additional qualitative studies not only on suicidal individuals or SA survivors but also on psychotherapists/professionals are needed.

To refine suicide prevention, both *efficacy*—the ability of the treatment to produce effects in RCTs —and clinical *effectiveness*—the ability of the treatment to produce effect during its routine clinical use—studies are needed. In fact, evidence-based treatment guidelines assigned the highest empirical evidence to treatments with several RCT comparison studies available (e.g., DBT for BPD). However, promising treatments may have never been investigated in RCTs. Other approaches, such as psychoanalytic, psychodynamic, and family-based ones should be considered as well as more recent treatments, such as mindfulness-based interventions [55] and acceptance and commitment therapy [56]. Moreover, further effectiveness studies are needed because RCTs may not capture the variability of clinical practice. Finally, a methodological challenge to be considered in future studies is the use of a consensual terminology about suicidal behaviors.

Conclusions

A number of promising psychotherapeutic interventions appear to prevent suicidal behaviors, also in the long term. Those interventions probably need to be adapted depending on diagnosis (e.g., DBT and psychodynamic psychotherapies in borderline patients), and target population (e.g., family therapies for adolescents and treatments focused on depression and disability/cognitive impairment for elderly).

Compliance with Ethical Standards

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Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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- • Of importance
- •• Of major importance

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