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#### NARRATIVE REVIEW

## Mental health in the Covid-19 pandemic: possible contributions from Functional Analytic Psychotherapy

Saúde mental na pandemia da Covid-19: possíveis contribuições da Psicoterapia **Analítica Funcional** 

Salud mental en la pandemia Covid-19: posibles contribuciones de la Psicoterapia **Analítica Funcional** 

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#### **Abstract**

Several studies point out problems in interpersonal relationships as precipitating or aggravating mental health issues. Especially in the Covid-19 pandemic scenario, which requires isolation and social distance, it is necessary to pay attention to the issues that emerge in interpersonal relationships. Functional Analytic Psychotherapy (FAP), a form of behavioral therapy that emphasizes the role of the therapist-client interpersonal relationships in improving client problems, can contribute to the proposition of interventions to address mental health issues in this pandemic. This study aimed to describe a perspective about the application of FAP on the treatment of mental disorders, mainly with anxious or depressive symptoms, and correlate such findings with interventions aimed at the Covid-19 pandemic. A narrative review of the literature was carried out based on bibliographic searches on the "Portal de Periódicos da CAPES". The review materials were organized into (a) treatment of mental health problems using FAP, sorted into themes of anxiety, depression, and a combination of them; (b) FAP, mental health, and the Covid-19 pandemic. It is concluded that FAP can be used as an essential theoretical and methodological framework for planning interventions during and after the Covid-19 pandemic, minimizing its possible harmful effects.

**Keywords:** Coronavirus infeccions; Mental health; Psychotherapy; Interpersonal relations

#### Resumo

Vários estudos demonstram como dificuldades no relacionamento interpessoal podem precipitar ou agravar problemas de saúde mental. A emergência dessas questões merece mais atenção, principalmente no cenário de isolamento e distanciamento social imposto pela pandemia do Covid-19. A Psicoterapia Analítica Funcional (FAP), uma forma de terapia comportamental que enfatiza o papel do relacionamento interpessoal na melhoria dos clientes pode auxiliar na proposição de intervenções destinadas a abordar questões de saúde mental durante o cenário atual. Este estudo objetivou descrever uma perspectiva sobre a utilização da FAP no tratamento de transtornos mentais que têm como foco a sintomatologia ansiosa ou depressiva, relacionando esses achados a intervenções voltadas para a pandemia da Covid-19. Foi realizada uma revisão narrativa da literatura a partir de buscas bibliográficas no Portal de Periódicos da CAPES. Os materiais da revisão foram organizados em: (a) tratamento de problemas de saúde mental usando a FAP, agrupados a partir dos temas ansiedade, depressão e uma combinação desses temas; (b) FAP, saúde mental e a pandemia de Covid-19. Conclui-se que a FAP pode ser utilizada como um referencial teórico-metodológico importante para o planejamento de intervenções durante e após a pandemia de Covid-19, minimizando seus possíveis efeitos negativos.

Palavras-chaves: Infecções por coronavírus; Saúde mental; Psicoterapia; Relações interpessoais

#### Resumen

Varios estudios demuestran cómo los problemas de relación interpersonal pueden precipitar o agravar los problemas de salud mental. La emergencia de estos problemas merece mayor atención, especialmente en el escenario de aislamiento y distanciamiento social impuesto por la pandemia de Covid-19. La Psicoterapia Analítica Funcional (FAP), una forma de terapia conductual que enfatiza el papel de las relaciones interpersonales en la mejora de los clientes, puede ayudar a proponer intervenciones destinadas a abordar los problemas de salud mental en el escenario actual. Este estudio tuvo como objetivo describir una perspectiva sobre el uso de la FAP en el tratamiento de trastornos mentales que se centran en síntomas ansiosos o depresivos, relacionando estos hallazgos con intervenciones dirigidas a la pandemia de Covid-19. Se llevó a cabo una revisión narrativa de la literatura a partir de búsquedas bibliográficas en el "Portal de Periódicos da CAPES". Los materiales de revisión se organizaron en: (a) tratamiento de problemas de salud mental utilizando FAP, agrupados en función de los temas ansiedad, depresión y una combinación de estos temas; (b) FAP, salud mental y la pandemia de Covid-19. Resulta que se puede utilizar FAP como un marco metodológico teórico importante para planificar intervenciones durante y después la pandemia de Covid-19, minimizando sus posibles efectos nocivos.

Palabras clave: Infecciones por coronavirus; Salud mental; Psicoterapia; Relaciones interpersonales

The coronavirus disease pandemic, identified in 2019 (*COrona VIrus Disease* – Covid-19), has transformed our daily experience due to restrictions on movement, changes to funeral service rules, among other impositions. Medical or government determinations regarding confinement, voluntary isolation, and social distancing can

adversely affect people's mental health. These effects depend on a series of factors, including those existing before the pandemic, for instance, the quality of people's interpersonal relationships and their repertoire of skills for coping with such determinations<sup>1</sup>. As such, in pandemics, the general population's social behavior changes can precipitate or exacerbate mental disorders.

The main impacts arising from the adverse conditions caused by the Covid-19 pandemic, according to a review conducted by Brooks et al.<sup>2</sup>, include the following: frustration, mainly related to loss of routine involving other people; difficulty in accessing essential supplies and regular medical care; insufficient, confused or unclear information about the pandemic, which generates interpersonal conflicts; long duration of the quarantine or social isolation period; and fear of being contaminated or contaminating people with whom one has close contact. Based on these impacts, Bavel et al.3 have listed gaps that scientists need to fill with rapid government and society answers. These include disseminating interpersonal connection interventions and intimacy, such as the behavioral psychotherapy proposed by Kohlenberg and Tsai<sup>4</sup> and focused on this study, the Functional Analytic Psychotherapy (FAP).

FAP is a form of contextual behavior therapy<sup>5</sup> because it emphasizes the use of functional analysis of behavior to understand human behaviors in their context, emphasizing the role of language, cognition, and other private events<sup>6</sup>. FAP proposes that the therapeutic relationship facilitates the clinical intervention and it is also a therapeutic instrument itself. The therapeutic relationship is given through constructive interpersonal variables, such as self-revelation and acceptance, generally involved in the genesis and maintenance of a large part of the client's mental health problems. Technically, accordingly to Kohlenberg and Tsai<sup>4</sup>, FAP is based on the concept of clinically relevant behaviors (CRBs), which can be a problem (clinically relevant behavior Type 1 - CRB1 - avoidance that should reduce in frequency) or a solution (clinically relevant behavior Type 2 - CRB2 - behaviors that should increase in frequency). Based on FAP principles, the client's behavior observed in interpersonal relationships outside of the therapy session also occurs in the interpersonal relationship in the session with the therapist. Such behaviors are clinically relevant because they share, in the session, the same functions that they share outside of the session as a response class.

The rules that define the intellectual and theoretical aspects of FAP<sup>4</sup> are characterized, therefore, as being: (a) paying attention to CRBs; (b) evoking CRBs; (c) releasing consequences to CRB2 contingentially and naturally; (d) observing the effect of consequences on the client's behavior; (d) providing functional explanations and promoting generalization. The Awareness, Courage and Love (ACL) Model<sup>7,8</sup> has simplified these rules: (a) to be aware of what happens in the session as being a problem or a solution; (b) to have the courage to instantiate CRBs; (c) to be loving in the election of those CRB2s, that will be improved; (d) to be aware of the effect of your courage and love on the client; and (e) to be a good behaviorist when doing functional analysis of the client's behavior. The ACL model has been used to address mental health issues in populations not doing psychotherapy but that needs interventions to improve relationships.

In a pandemic context, it is essential to re-establish social connections because the pandemic can be anxiogenic3. Anxiety can become chronic for some people, depending on government policies. For example,

lockdown, quarantine, and social isolation can aggravate social disconnection or make farewell rituals between people when death is imminent or has occurred impossible. It can intensify the trauma of separation and prolong the suffering of mourning<sup>9,10</sup>. Without social ties, poor relationships, and prolonged lack of affective relations, some people may have difficulties regulating their emotions and remaining healthy and resilient in difficult times such as a pandemic.

Quality of relationships affects not only mental health<sup>11</sup>, but also increases the risk of falling ill or dying. Holt-Lunstad et al.<sup>12</sup> carried out a meta-analysis, concluding that problematic interpersonal relationships or lack of positive relationships affect the risk of death to the same extent as more severe risk factors (tobacco and alcohol) and to a greater extent than less critical risk factors (sedentarism and obesity). Therefore, interpersonal relationship problems should be taken more seriously when discussing public health promotion and prevention, especially in a pandemic scenario.

Given the urgency for studies on the effects of the Covid-19 pandemic on mental health, a publication in The Lancet Psychiatry<sup>13</sup> emphasizes that: "There is an urgent need for the discovery, evaluation, and refinement of mechanistically driven interventions to address the psychological, social, and neuroscientific aspects of this pandemic" (p. 574). In this context, various social groups require different analyses, such as infected and quarantined patients or health professionals who work in settings of a high risk of contamination and the general population in social isolation or distancing.

About the general population, a study led in China by Tian et al.<sup>14</sup>, between January 31<sup>st</sup> and February 2<sup>nd.</sup> 2020, performed a survey of psychological symptoms among ordinary Chinese citizens through a 90-item symptom checklist. The sample comprised 1060 participants, separated into high and low-risk groups based on their answers to the list. Of the total, "29.91% had some symptoms, 49.81% had symptoms, 18.96% had many symptoms, and 1.23% had extreme symptoms" (p. 5). Specifically, elevated scores were found for obsessive compulsion, phobic anxiety, psychoticism, and interpersonal sensitivity. The results led Tian et al.<sup>14</sup> to conclude that Covid-19 had significant adverse socio-psychological effects on ordinary Chinese citizens. Also, concerning the general population, the first phase of longitudinal monitoring undertaken in Brazil by Calegaro et al.<sup>15</sup> has revealed that of the total of 3633 participants, 86% of those who were in social distancing presented more symptoms of stress, anxiety, depression, and posttraumatic stress than those who were not.

The forecast of increased post-pandemic mental disorders<sup>16,17,18,19</sup>, the relevance of studies that focus on interpersonal relationships in the current context of the Covid-19 pandemic, and the gap in studies that discuss ways of minimizing the burden of social disconnection (accompanied by anxiety and depression) during pandemics justify the present study. Its objective is to describe perspectives of application of FAP in treating mental disorders focused on anxiety or depression symptoms, relating these findings and interventions directed towards the Covid-19 pandemic situation.

### Method

A narrative literature review (non-systematic literature review) was performed through bibliographical searches on the "Portal de Periódicos da CAPES" because this platform includes many databases, accessed via institutional login, which allow increasing the possibility of locating material for the review. The survey was carried out in July 2020. We choose a non-systematic literature review to have articles with no a priori exclusion criteria. According to Ferrari<sup>20</sup>, this is the main feature of a non-systematic review: "the selection criteria for inclusion of the articles may not be specified explicitly" (p. 231). However, the following inclusion criteria were used to identify articles: published in a peer-reviewed journal, published in English or Portuguese between 2011-2020. The primary search term "Functional Analytic Psychotherapy" was combined with boolean operator AND to "anxiety", "depression", "stress", "posttraumatic stress disorder", and "substance abuse" (those search terms were defined from the main symptoms of mental disorders in pandemics<sup>21</sup>). We define the inclusion criteria as broad as possible, so we did not restrict our sample to studies that, for example, used a randomized clinical trial methodology. Studies were only excluded if they were: literature reviews, theoretical articles, articles about instruments or did not focused on psychotherapy.

The search carried out on the "Portal de Periódicos da CAPES" allowed us to locate 23 records. Six were excluded after the title and abstract reading. The remaining 17 articles were read, and the FAP applications were identified. Also, we analyzed the references of these 17 articles, and if they contained another material that fits our inclusion criteria, regardless the date of publication or type of material, it was also included on the review.

The material obtained through the review enabled the results and discussion section to be organized in the following manner: (a) treatment of mental health problems using FAP, grouped based on the themes of anxiety and depression, as well as a combination of these themes (and some subtypes of their disorders, such posttraumatic stress disorder, or comorbidities, such as substance use); and (b) FAP, mental health, and the Covid-19 pandemic. The results were discussed in order to integrate the study's findings and to relate them to the pandemic scenario.

#### **Results and Discussion**

Treatment of mental health problems using FAP

FAP, whether combined or not with other third-generation behavioral therapies, such as acceptance and commitment therapy - ACT<sup>22</sup>, dialectical behavior therapy - DBT<sup>23</sup>, and behavior activation - BA<sup>24</sup>, has been studied concerning its applications in several mental health problems. This analysis will focus on FAP applications in three groups of problems: anxiety, depression, and substance abuse, which can be common effects of pandemic contexts.

In the first group, the anxiety cases, the articles analyzed had in common descriptions of interventions focused on CRBs, such as clients' distancing from contact with their feelings in the relationship with the therapist.

There are studies of anxiety intensified to the level of panic, along with obsession-type concealments. Also, there are studies about posttraumatic stress, which can develop 30 days after a period of acute stress, generally marked by a severe emotional crisis caused by exposure to an aversive traumatic situation<sup>25</sup>. For example, abrupt separation due to death or the struggle for survival by patients in a hospital intensive therapy unit that happens in the Covid-19 pandemic.

About anxiety symptoms on the panic level, López-Bermúdez et al.<sup>26</sup> treated a 35-year-old woman for five months who had episodes of vomiting and nausea linked to panic crises not involving agoraphobia. The authors identified the client's CRB1s present in the session, such as avoidance of the therapist's questions, analogous to avoidance of social questioning in the client's everyday life; and frequent complaints made to the therapist about the past and the present, which indicate the client's difficulty, outside of the session, in asking for their needs to be met. They also defined the CRB2s targeted by the intervention. For example, acceptance of aversive experiences that occurred in the client's life (as well as the expressiveness of the emotions elicited by their memories) and their generalization to outside of the session, such as increased social interaction with meaningful people. In a follow-up session conducted six months after therapy had ended, the client reported that the therapeutic gains in reduced anxiety crisis had been maintained. In turn, Pezzato et al.<sup>27</sup>, in a case study of panic and agoraphobia in a 47-year-old woman who had panic attacks, fear of setting foot outside of her home, and nausea and vomiting resulting from anxiety, demonstrated reduction of CRB1s and increased CRB2s, as well as corresponding results outside of the session.

In the treatment of anxiety with obsessions, Vandenberghe<sup>28</sup> demonstrated the importance of using FAP with two female clients with obsessive-compulsive disorder, based on the analysis of the clients' problems in therapy sessions in their relationship with the therapist (CRB1s). For example, as *in vivo* learning opportunities through exposure and response prevention, techniques are part of the current treatment of this disorder. Vandenberghe<sup>28</sup> described that he shared feelings of "pressure" elicited by the client as part of her interpersonal relationship; this was done lovingly, differently from how people outside of the session generally reacted to her "pressure".

Among the applications of FAP in the treatment of posttraumatic stress, some articles describe trauma concerning two types of violence: war and sexual abuse. Pedersen et al.<sup>29</sup> conducted a case study with a 41-year-old female war veteran using two treatment stages: (a) use of standard cognitive-behavioral therapy (CBT) for posttraumatic stress disorder; and (b) use of FAP focused on client interpersonal difficulties (avoidance or CRB1s) and responses to target behaviors in the session (CRB2s). The result showed a more significant reduction in avoidance in Stage 2 (use of FAP) and maintenance of increased reduction of posttraumatic stress disorder symptoms through CBT in Stage 1.

In posttraumatic stress cases disorder related to sexual abuse, Lima<sup>30</sup>, using a multiple baseline design, investigated the processes and effects of FAP with three women as participants. The author proposed a functional analysis of avoidance and approach of interpersonal relations, in general, and of bonds of trust, in particular. Lima<sup>30</sup> supported the FAP proposal with the argument that functional analysis of this avoidance and approach

behaviors is absent in the three therapy models proposed for posttraumatic stress disorder (i.e., prolonged exposure, cognitive processing therapy, and eye movement desensitization and reprocessing) despite its base on imaginal exposure to an aversive or traumatic stimulus. During the FAP process, the three women avoided (in sessions) components of the relationships with the therapists that indicated intimacy and vulnerability. This avoidance was related to the increased possibility of being abused and victimized again. FAP successfully reduced these problems (CRB1s) and increased the frequency of improvements (CRB2s), which increased the chances of the clients solving their difficulties out of the sessions.

In the same group of studies on anxiety is the article by Reyes-Ortega et al.<sup>31</sup>, regarding the use of FAP with health workers suffering from burnout. This syndrome involves occupational overburdening, which can culminate in posttraumatic stress disorder, especially among health workers during a pandemic<sup>32</sup>. According to Leiter et al.<sup>33</sup>, a high level of anxiety in intimate relationships at work can be found in health workers, and some may develop burnout by tending to be more involved with their work and less involved with people at work<sup>34</sup>. As such, Reyes-Ortega et al.<sup>31</sup> postulated that burnout among health workers could be reduced through FAP interventions. The "taking care of those who care" program they developed to improve intimacy and connectedness between work team members. In addition to reducing burnout, the intervention improved the team's organizational climate. Interventions like this can be implemented to reduce the sensation of overburdening (present in the Covid-19 pandemic) of those who work in hospital environments.

Depressive disorders are another mental health problem for which FAP has been used for treatment. Ferro-García et al. 35 described the use of FAP in an intervention with a 36-year-old woman diagnosed as having major depressive disorder following the ending of a loving relationship. The functional assessment indicated a broad CRB1 class, with multiple responses, such as not explaining events, her behaviors and those of others, and complaining. One of the targets of the intervention was to interact with the therapist, demonstrating genuine acceptance of what had happened (CRB2). Functional analysis done through FAP enabled the choice of objectives (CRB2s), making the therapist-client relationship contingencies the means for change outside of the session. In another study, López-Bermúdez et al. 36 described, under the principles of FAP, the case of a 40-yearold woman with symptoms of major depressive syndrome. The client's depression score points (assessed using the Beck Depression Inventory) reduced after seven months of therapy, and these results were maintained in the long term. Besides, she managed to make changes to her daily life, including new social interactions, and develop a problem-solving repertoire, which did not exist before treatment.

FAP also improved the effects of behavioral activation (BA) in major depressive disorder in the study conducted by Montaño et al.<sup>37</sup> in the so-called functional analytic psychotherapy enhanced behavioral activation (FEBA). The FAP component of this mix enabled identifying social behaviors in the session that have the same function as social behaviors outside of the session. This fact enhanced BA component's effect, aimed to reduce depressive behaviors and increase the rate of healthy behaviors outside the session. In the FAP element, the therapist focused more on the interpersonal components of depressive behavior, assuming that they are directly influenced by responses emitted by him in the therapeutic setting when emitted in the session. When

he focused on BA components, the therapist intended that the client guided himself by choosing to emit any behavior with the potential of being reinforced outside of the session. FEBA significantly increased health behaviors in the repertoires of the four study participants who had depression, whereby FAP was coherent and oriented towards making the transition of the improvements that happened in the session to the outside of the session.

Given the recognition that the ACT places more emphasis on intrapersonal than interpersonal aspects and that it is effective in cases of transdiagnostic symptoms, such as anxiety and depression, Brem et al.<sup>38</sup> integrated ACT with FAP (FACT) in the treatment of a patient. According to these authors, the intrapersonal emphasis of ACT may be insufficient to achieve the treatment's interpersonal goals. Based on this argument, integrating ACT with FAP offers strategies for responding to specific ACT processes through the interpersonal relationship contingent created by FAP. In the study conducted by Brem et al.<sup>38</sup>, the participant, a 40-year-old man, despite feeling physiological arousal typical of anxiety, presented improvements in his symptoms of depression and developed self-compassion and interpersonal relationship skills. Exercises and metaphors regular of ACT favored the evocation of CRBs in sessions, which were worked on *in vivo* through FAP in the contingent therapist-client relationship.

Characteristics common to the group of articles on cases in which depression symptoms stand out are that intervention in CRBs using FAP focuses on clients' courage, in the presence of the therapist, in dealing with feelings that are a function of contingencies generically involving "losses". For instance, mourning in cases of deaths and missing loved people in relationships that have broken down or been altered by changes in routines. In an interpersonal relationship, the death of one person can be a traumatic event for the other. It can last to the point of becoming a posttraumatic stress disorder marked by depression. In studies of mourning in cases of significant affective losses, Montaño et al.<sup>37</sup> and Lima<sup>30</sup> point to the limitation of exposure therapies considered effective in treating posttraumatic stress disorder: the fact of these therapies not addressing contextual aspects of the relationship of the mourner with relations severed by death. In the case described by Montaño et al.<sup>37</sup>, a woman avoided situations in which others could be judgmental about behaviors and feelings about her mother, who had died and about a former fiancé, and avoiding activities she used to do with them. The focus of FAP was the reinforcement of her "courage repertoire" that arose from her loving social responsiveness. As such, generous vulnerability when expressing emotions, needs, and opinions initially in sessions with the therapist and, later, revealing them to other carefully chosen people outside of therapy produced security, acceptance, and empathy/sympathy in fostering interaction with these new and alternative sources of reinforcement. This process reduced the high level of relational anxiety, especially in relationships with "loss", which signaled the need for emotional vulnerability. In this scenario, the number of people who lost loved ones during this pandemic gives the possibility of using FAP to address people depressed and/or dealing with loss and mourning.

Another effect of pandemics can be emotional deregulation, and people can appeal to substance abuse to alleviate emotional states. Thus, emotional regulation can be obtained immediately after responses that

produce aversive consequences in the medium and long term, as is the case of using drugs. Some researchers have used FAP to alter the behavioral pattern characteristic of substance use disorder. Aranha and Oshiro<sup>39</sup>, based on articles on FAP combined with other procedures in cases of a substance use disorder, and articles on behavioral analysis of chemical dependency, analyzed the alteration, exclusively through FAP, of the alcohol use pattern of a 63-year-old man. According to Aranha and Oshiro<sup>39</sup>, given that drug use can have a social avoidance function, an increase in intra-session courage (CRB2) followed by the therapist's affective responsiveness can result in frequency reduction extra-session drug use, as illustrated in the case described by those authors. The therapeutic components of change through FAP in this case of alcohol use and another case involving cocaine/ crack use were assessed empirically by Aranha et al.<sup>40</sup> in a quasi-experimental design study. FAP was proven to enable identification and intervention (via the therapist's contingent and natural response to CRB2s) in the intra-session personal repertoire. Other repercussions were on the clients' extra-session repertoire, including reducing drug use. All these studies using FAP to address mental health issues allow us to understand the importance of this therapeutic approach to treat common mental health problems. Especially those related to anxiety and depression, which are the most common symptoms elicited by the atypical contingencies of this pandemic.

### FAP, mental health, and the Covid-19 pandemic

Pandemics have been shown to harm mental health, particularly major depressive disorder and posttraumatic stress disorder. There can also be dysregulation of emotional behavior, specifically anxiety, depression, and anger<sup>2,41</sup>, leading to an increase in substance abuse<sup>42</sup>. Emotional dysregulation is, generally, according to Charuvastra and Cloitre<sup>43</sup>, produced by difficulties in building affective ties of intimacy and is present in the genesis of many mental disorders, such as borderline personality disorder 44. Therefore, regulating emotions is a mental health criterion and depends on social support and intimate relationships that can be absent in some individuals in social isolation during a pandemic. As such, knowledge produced by behavioral sciences, including FAP, is crucial since it enables individuals to regulate anxiety and other emotions and cope with the consequences of social isolation.

During the Covid-19 pandemic, the FAP bases and principles can, therefore, be used to plan interventions (and in the online modality) that reduce the pandemic consequences through strategies that focus on aspects of interpersonal relationships, especially the sharing of feelings and thoughts, vulnerability and intimacy. These interventions can improve people's mental health in general by allowing the deepening of interpersonal relationships. An example of how laypeople can use FAP components in the pandemic context is the meetings of the ACL Global Project (https://www.livewithacl.org/). In this project, leaders trained in the FAP method (not necessarily therapists or psychologists) from 92 cities in 26 countries hold meetings (called ACL Meetups) in which the participants are encouraged to be present in an open manner, to express themselves, to listen attentively and to practice acceptance and sympathy. The meetings are held once a month and generally begin with in-depth meditation (mindfulness), followed by experience sharing and non-judgmental listening. In Brazil, these meetings took place face-to-face but are now being held online during the Covid-19 pandemic.

An example of an intervention planned based on FAP principles and specifically designed for the pandemic period is the study by Tsal et al45 with American couples. The authors developed a brief intervention (1 session of 2 hours), which consisted of activities to strengthen the bond and connection between the participating couples, using the ACL Model. 31 couples were randomly assigned to the experimental group (ACL intervention) or the control group (film). Couples answered two instruments that assessed the closeness and quality of the relationship between them, immediately before, immediately after, and one week after the session. Both measures increased from pre to post test, with statistical differences between groups (closeness p = .077, quality of relationship p = .004). In the follow-up, the difference between the group's measures remained statistically significant.

In the context of psychotherapy, the concepts of FAP can be discussed with clients, given the impacts the Covid-19 pandemic may be having on their relationships, helping them to recognize difficulties that may be getting worse. For example, a challenge in sessions is the feelings elicited by the therapeutic relationship interrupted due to face-to-face sessions' impossibility. Outside of sessions, a difficulty may be found in relations between couples, which may be experiencing increased conflicts in this period<sup>45</sup>. This happens because of the need to live together every day in the same physical space, apart from achieving a balance between domestic chores and caring for children and working at home and children's schoolwork at home.

Psychological interventions, therefore, need to be planned considering a broad range of risk factors for mental health problems that may be more in evidence during and/or after the pandemic<sup>46</sup>. In general, the most direct individual impacts of the Covid-19 pandemic can be seen to nearly always involve relationships with other people: (a) mourning because of the death of patients and family members; (b) imposition or overlapping of interpersonal roles outside of the usual routine, such as the mother who has to be her children's nanny at the same time as working from home as an employee; (c) interpersonal conflicts, such as husband-wife conflicts at home; and boss-subordinate conflicts in hospitals, for example; not to mention, as indicated by Bavel et al<sup>3</sup>., disputes in political polarization in social media.

In the first type of impact, according to the guidance given by Montaño et al<sup>37</sup>., when working with FAP, it is crucial to work on the context between the mourning relative and the person who died. This is also valid for a health worker traumatized by the deaths of patients, given that the imminence of death from Covid-19, as indicated by Reynolds et al.<sup>47</sup>, is a stress factor for health workers. In these cases, the "courage repertoire" includes the sharing of powerlessness and vulnerability, for example, when it is impossible to have a wake (in the case of a dead relative) or when uncertainties about the care and biosafety protocols (in the case of a health worker).

About the second type of impact, it is known that external social demands (neighborhood, municipal government, school, etc.) affect the intimacy of relationships, especially between couples<sup>48</sup>. In these cases, FAP could focus on acceptance of imposition or overlapping of roles, empathy, and sympathy concerning other people's difficulties because of these changes and improving intimacy in this new situation. This is indicated because, in agreement with Bavel et al<sup>3</sup>., the pandemic changes the content of social interactions at home,

leaving them more directed towards less agreeable logistics, such as spending more time helping with children's distance learning or getting meals ready, and this removes the focus of the romantic emotional connection.

Finally, interpersonal conflicts can be aggravated in pandemics because the changes require rapid responses to problems in several conditions. These conditions involve other people, e.g., health team workers being transferred to other places or sick family members in quarantine. Besides, these rapid responses are required by governments, which stirs up interpersonal hostility in ideological polarization<sup>3</sup>. In a study with college students, interpersonal hostilities between "right-wing" and "left-wing" ideological positions can be reduced in workshops with FAP and ACT components, as demonstrated by Manbeck et al.49, in a study with university students. However, this reduction is temporary because ideological polarization is a power problem that reflects the broader socio-political context. As described by Fryling and Hayes<sup>50</sup>, polarization and other forms of interpersonal conflicts exist when a person acts concerning an association of conditions, discusses their thoughts and feelings in several contexts, about topics that vary a great deal, and the other person in the relationship "fails to respond concerning this association of conditions (e.g., fails to observe and listen)" (p. 136). For example, the first person agrees with indiscriminate social isolation or with a type of medication being prescribed for someone who has Covid-19, while the second person fails to observe the association of conditions that were responsible for that agreement. They also fail to respond appropriately to the first person for the same reasons that generated the agreement in the first person's verbal repertoire. In these cases, FAP can be used to train the emission of communication responses with the awareness of the values involved in the association of conditions and also awareness of the need for expression of vulnerability based on analysis of the probability of the audience welcoming the message that is being communicated.

The results of this narrative review shows the potencial of using FAP to address mental health issues during this pandemic. However, some of the limitations of narrative reviews, pointed out by Ferreira<sup>20</sup>, are present in this study. Although we made explicit the assumptions and planning of the review, the selection and evaluation of the reviewed studies may have been influenced by the authors' perspective on FAP, as its practitioners. Therefore, these results are not reproducible.

## Conclusion

Applicability of FAP has been demonstrated in treating several mental disorders with anxiety and/ or depressive symptoms, either on its own or by potentializing the effects of other forms of therapy. Given its significant contribution to the field of behavioral psychotherapy, FAP can be used as a theoretical and methodological reference for planning preventive interventions during the Covid-19 pandemic.

It will also be an essential post-pandemic resource to minimize the possible harmful effects of this sanitary crisis on people's health by creating intense interpersonal relationships. Besides, as the impact of the Covid-19 pandemic on mental health are, in the majority, inferred from results of studies done after other epidemics, the postulates of FAP will also possibilities studies to assess the specific impact of the Covid-19 pandemic on the mental health of individuals, groups or populations.

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