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# Pandemic Stress from COVID-19: Psychosomatic Support for New Forms of Adaptation

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## **Abstract**

The present work intends to describe a psychosomatic orientated intervention initiated through an online platform during the first "lockdown" in Italy and carried out through a "Psychoeducational Protocol" for COVID-19 pandemic stress adopted by SIMP (Società Italiana di Medicina Psicosomatica, Italian Society of Psychosomatic Medicine) and firstly developed by Dr Greg Crosby (International Association for Group Psychotherapy and Group Processes). In the immediate and short term, free support was offered both to health workers, exposed to great professional risks, and to individuals presenting forms of discomfort and suffering, in order to cope with the first phase of "Pandemic Fatigue" by teaching/learning self-help tools and activating or reactivating a process of acceptance of reality. The paper shows how the course allowed them to obtain significant results in facing an anxious-depressive state, process anger and hostility with greater awareness, envisaging new forms of adaptation, thanks to the acquisition of greater emotional and relational skills and, at the same time, with the representation of a different future through the use of imagination and positive, proactive thinking.

## **Keywords**

COVID-19, Pandemic Fatigue, Psychological Support, Psychoeducational Protocol, Imagination, Adaptation, Teleconsulting

## 1. Introduction

The COVID-19 pandemic has caused a specific stress leading to a complex physi-

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cal and mental situation that has been classified by the World Health Organisation (WHO) as "Pandemic Fatigue". This is a collective psychological condition, largely determined not only by the real threat that the virus represents, but also—specifically in Italy—by the lockdown and containment measures put in place to counter the pandemic starting in February 2020.

A recent research published shows an increase in cases of anxiety and depression, sleep disorders, alterations in appetite and libido, with a high level of concern for health and safety of oneself and interpersonal contacts. Out of a total of 1215 subjects interviewed, these problems were found to be present in between 32% and 36% (Fiorenzato et al., 2021).

Moreover, excessive attention given to mass media in search of news about the pandemic (infodemia), as well as being a resident in areas with a high rate of contagion, led to a further amplification of depressive disorders and anxiety, often correlated with pathophobic traits.

Unfortunately, Pandemic Fatigue has eroded the already precarious collective sense of security, challenging the ability to modulate/remodel personal identity in order to sustain the continuous changes required, but without the necessary determination needed to achieve such a goal. People, whose social identity (friendships, roles) was eroded, had to face a time of uncertainty alone during isolation, with the fear of being unable to cope with a reality that was too hard to tolerate, leading to a sense of their own inadequacy (Farinelli, 2020).

Studies carried out by World Health Organization (WHO) after the first lock-down reveal a sequelae of pathological behaviour, triggered by the virus and a significant exacerbation of psychological and organic symptoms, which were probably pre-existent, in the subjects examined (Ghebreyesus, 2020).

In addition, home confinement and quarantine led to prolonged separation from relatives and loved ones, raising the levels of distress also for people with no pre-existing mental disorders (Fiorillo et al., 2020). A recent review of psychological sequelae in samples of quarantined people revealed numerous emotional outcomes, including stress, depression, irritability, insomnia, fear, confusion, anger, frustration, boredom and stigma associated with quarantine, some of which persisted after the quarantine was over. Specific stressors included greater duration of confinement, having inadequate supplies, difficulty securing medical care and medication and resulting financial losses (Brooks et al., 2020; Rubin & Wessely, 2020).

Numerous scholars and researchers have encouraged the advisability of early psychological support interventions to define specific guidelines. COVID-19 constitutes "a unique, composite, multidimensional stressor that will create a vast need for intervention and necessitate new paradigms for mental health service delivery and training". COVID-19 may represent a "perfect storm" of stress, with high potential for adverse mental health consequences" (Gruber et al., 2020).

Therefore, many authors recommend pursuing new research directions, to create an updated field of intervention to address the burden of mental illness

and distress through new clinical approaches, with the implementation of telemedicine and at distance consultation.

Health care providers have an important role in monitoring psychosocial needs and offering psychosocial support to their patients, as public services that should be integrated into general pandemic health care (Pfefferbaum & North, 2020). The application of Psychological First Aid (PFA) through training people in psychological intervention, coupled with the implementation of technology to enhance socialization and support, will help people cope better during and after the pandemic (Shah et al., 2020).

In this regard, an important result has been reported, obtained by the psychological staff of Azienda USL-IRCCS di Reggio Emilia, a local health system conglomerate in Emilia Romagna, Region of Italy, during the coronavirus (COVID-19) pandemic, free telephone-based psychological support for the community was provided, with the specific aim of reducing stress caused by the COVID-19 pandemic and its consequences, such as quarantine and lock-down (Ghiretti et al., 2020).

Common practices for coping with the consequences of COVID 19 at the psychological level should be quickly developed by mental health experts and groups of clinicians. The interconnectedness of the world made society vulnerable to virus, but it also offers the possibility of diffuse good practices that can be useful in providing equitable mental health-care action plans. "A focus on accountability based on routine measurement of meaningful and valued outcomes, co-production of service design and evaluation with expansion of health insurance coverage of mental health, and promotion of primary care support and its greater integration with secondary care, could further help to sustain mental health care in the aftermath of the pandemic" (Moreno et al., 2020).

In November 2020, at the request of Parliament's Committee on the Environment, Public Health and Food Safety (ENVI), the Policy Department for Economic, Scientific and Quality of Life Policies organized a webinar on "Mental health during the COVID-19 pandemic". According to the proceedings, key takeaways include: the level of priority of mental health was already increasing before the coronavirus pandemic; the impact of COVID-19 on health services saw a dramatic reduction in accessibility and availability of mental health care; the impact of COVID-19 on health care and social workers was severe; the future strategy for health care systems should focus on a whole health systems approach, with attention to the health care workforce; mental health digital solutions should be integrated in national healthcare systems, avoiding regulatory fragmentation (Ciucci, 2020).

With regard to this, an important scientific research goal could be achieved through large-scale psychologically active interventions to build resilience and reduce the risk of exacerbation in large segments of the population who have never taken part in a traditional psychotherapy session (Gruber et al., 2020).

At this particular point in time, the complexity of human variability and the

incidence of numerous risk factors for different categories of people cannot be underestimated. In particular, adverse life conditions can lead to increased vulnerability on a psychosomatic level and negatively influence methods of coping with negative experiences, to the extent that it hinders the possibility of overcoming of problematic conditions. An in-depth analysis of the use of mental health services during the COVID-19 pandemic is necessary, in order to delineate new supportive interventions for the general population (Fiorillo & Gorwood, 2020; Gorwood & Fiorillo, 2021). Xiang et al., (2020) suggested three important steps: the institution of multidisciplinary mental health teams, clear communication with constant updates about sudden COVID-19 outbreaks and the establishment of dedicated services of psychological counseling through telemedicine.

Short-term, low-intensity interventions should be considered as a priority within clinical practices. In particular, single-session, clinical approaches with a standardized intervention programme are strongly recommended for the research samples examined (Schleider et al., 2020).

The objective of this intervention was to assess the promotion of psychophysical well-being during the COVID-19 pandemic, aimed at assisting individuals in a recovery-oriented approach towards overcoming distress. This approach included self-help tools administered by psychotherapists by means of teleconsulting, to encourage a greater adaptation to stressful events and overcoming adverse situations, in a manner similar to that of a grieving process.

#### 2. Methods

## 2.1. Preliminary Considerations

#### 2.1.1. COVID-19 and the Grieving Process: Similarities and Analogies

The COVID-19 pandemic brings us back to think about where we come from, overcoming national barriers, and the concept of human health as a "circular system" that cannot be separated from the survival of all living things in the ecosystem (Battaglia, 2020).

When we speak of mourning, in the context of this research, we are not referring to the loss of loved ones, but to the loss of an inner well-being that we thought we had acquired, an internalized "well-being" that suddenly fails, as part of our existence giving us "freedom" of action, also referring to being able to treat and heal ourselves thanks to scientific progress. Unfortunately, this is not yet the case, and only now can we hope to eradicate the threat thanks to vaccines. In the meantime, the changed quality of our lives underlines the malaise that grips every individual in every area of their lives.

We speak of "pandemic stress" when we highlight the fragility of the human species, which has been unable to meet the challenges posed by nature throughout history and in which scientific culture, despite its constant efforts to find solutions, is "floundering", moving ahead through "trial and error". It will certainly succeed, as it always has. But other challenges will come.

Recalling the common symptoms of bereavement, we observe that the process manifests itself through precise phases, even if, in this situation, in different ways.

It is possible to refer to the four phases theorized by Kubler-Ross (1969). In the first phase, the person refuses to accept the situation and tends to deny the reality of what he is experiencing, activating defence mechanisms. In the second phase, "negotiation", pain emerges, producing anger towards oneself or towards the people with whom one comes into contact, and possible explanations are sought to explain what has happened. The third phase, "depressive", is where feelings of sadness prevail, one surrenders to what cannot be changed. The final phase, "acceptance", takes place through a succession of more moderate passages of anger and depression, with the possibility of new perspectives on life, to which one should necessarily adhere and adapt.

The variables that can affect this process are many and can be influenced by the type of relationship (Parkes, 1980) and attachment styles (Bowlby, 1980).

The following are the cognitive-behavioural and somatic symptoms that occurred in most people during the Coronavirus emergency period:

- 1) States of anxiety and depression,
- 2) States of anger-hostility, associated with a sense of loneliness, lack of interest in activities,
  - 3) Insomnia,
  - 4) Restlessness,
  - 5) Altered immune activity.

The COVID-19 pandemic, in many cases, produced the perception of a collective loss, of an intolerable renunciation of a life rich in interconnected physicality and corporeity, due to the limitations and prohibitions imposed to cope with the COVID-19 contagion: humanity was forced to confront the sudden abandonment of certainties and social habits, even though always illusory, to which it had attributed the role of existential foundation for a long period of time.

It is a renunciation of parts of oneself for which no one had been properly prepared. Each individual has been called upon to adapt, to be ready, to have to modulate/remodulate his or her personal identity and to withstand constant changes in order to protect himself or herself and other people, but without any certainty of being able to achieve the goal (Bauman, 2000).

Deprived of the constituent elements of personal and social identity, people were forced to face a time of uncertainty, with the fear of being unable to sustain the impact of a reality that was too difficult to tolerate, of being inadequate with respect to the very high risks of contagion.

It goes without saying that there are those who have truly had to deal with absence, the sudden disappearance of important people, family members and friends, without even being able to say goodbye with a gesture or a word.

However, "analysing loss" means realizing how it is inextricably linked to growth. The "idea of loss" should be central during psychological support inter-

ventions for "Pandemic Fatigue", to encourage awareness of the deep "feeling of loss", letting go of much of what was lost during the lockdown, even in the inevitable pain of saying goodbye to something that no longer exists.

#### 2.1.2. Mourning and Attachment Systems

With reference to the processes of the elaboration mourning and the psychological support interventions used to deal with distress and help a person maintain balance and a perception of his or her own well-being, the work of several researchers is of interest.

Viorst (1986), in his work "Necessary Losses", underlines how mourning constitutes the foundation of human existence. Losses are part of life, universal, inevitable, inexorable. And these losses are necessary because in order to grow we must lose, abandon and let go". Bowlby (1973) highlighted how a person with problems of attachment to the mother figure has a greater predisposition towards pathological mourning and encounters serious difficulties in managing painful emotions, related to experiences of loss.

At birth a human being not only possesses the characteristics of an isolated organism at the mercy of its own drives, but also the predisposition to live relational experiences. The relationship with the surrounding world is determined in the child both by unconscious fantasies and by Internal Operating Models (IOM), organized on the basis of experiences already lived, capable of regulating emotions and attachment behaviour.

In a one-year old child, within the experimental condition of a "Strange Situation", the attachment bond of the "insecure-ambivalent" type is characterized by marked anxiety and uncontrollable crying, when faced with the removal of the mother (Ainsworth, 1978).

It is a condition of suffering due to the impossibility of tolerating the separation after numerous episodes of absence of the caregiver who is perceived as an unreliable parent. Subsequently, when the mother returns, the child continues to cry, and is not able to resume exploring the room.

The "insecure-ambivalent" attachment style has inevitable consequences on the regulation of emotions, on the sense of self-efficacy and on the capacity to process grief. Affected individuals, as adults, maintain a pessimistic view of life, develop distortions in the way they evaluate themselves and their environment, feel lonely and vulnerable, with a tendency towards isolation or excesses of uncontrollable anger (Cassidy & Shaver, 1999).

IOM will also tend to influence physical health perceptions, representations and behaviour during illness.

However, the child may acquire the ability to resist stress and family tension and this element could represent a self-protective factor against a pathological evolution. The characteristics of this attachment style can also play a decisive role in the onset of depression (MacLeod & Bucks, 2011; Williams et al., 2007); and in the processing of grief (Bowlby, 1980). In this process, the overcoming of the loss becomes more complex, since the individual with an "insecure-ambivalent"

attachment style presents a difficulty in adapting to the new existential condition and a tendency to maintain moments of sadness and nostalgia over time, with limited activation of inner resources.

In order to solve a "complicated bereavement" (Dell'Osso et al., 2013; Kersting et al., 2011) it is necessary to review the structure of the IOM, in order to intervene on emotional regulation and to reach the stage of "integrated mourning", that is the phase in which mourning has not completely passed, but is tolerable.

The proximity of a therapist becomes important in order to stimulate the patient to develop positive emotions, through reflection and the progressive acquisition of a basic security. During the COVID-19 pandemic, effective treatment therefore requires an approach based on the integration of symptom improvement, environmental modification and support towards and by the patient himself, since the expression of the disease itself is linked to a combination of inflammatory, immune, endocrine and psychological manifestations.

The biopsychosocial model of Engel (1977) challenged the traditional linear causality model and is based on the assumption that each disease constitutes a multifactorial entity. This view is important not only for defining the characteristics of individual disease, but also to better understanding the epidemiological changes in disease over time.

New epidemic models are increasingly based on a social network of interventions and on the capacity of the community to modify the course of events, also on the basis of the subjective perception of risk (Brewer et al., 2007).

It follows from these considerations that biological factors alone are no longer sufficient to define the concept of pathology, as psychosocial factors must always be recognized and included (Engel, 1977; Schwartz, 1982).

## 2.1.3. Forms of Psychosomatic Adaptation during the COVID-19 Pandemic

Distress caused by the constant condition of "loss" and "mourning" during the COVID-19 pandemic has, in many cases, negative consequences that have given rise to a strong "allostatic load".

According to Selye (1974), distress is an adaptive response impaired by excessive psychophysical activation. The term allostatic load indicates the condition of severe attrition that must be sustained to maintain adaptation to complex and constantly changing life conditions.

In order to achieve a precarious stability in times of change, it is necessary to modify various internal parameters in order to ensure the smooth functioning of organs and systems. The allostatic load thus causes an overproduction of stress mediators, such as hormones and neurotransmitters (cortisol, catecholamines, dehydroepiandrosterone sulphate, prolactin) and inflammatory cytokines. These substances can alter reactivity simply through their continued presence in the body, regardless of the body's actual needs (Selye, 1971).

Over time, a situation of distress could lead to major damage to health, espe-

cially when the conditions of continuous change are maintained and lead to an "allostatic overload", capable of progressively destroying cells, tissue and organs.

However, the response to events is not the same for all individuals, and depends upon the "coping" style, i.e. the ability to react to stressful events. Coping is linked not only to genetic factors, but also to negative experiences in the first years of life, when the CNS is in a growth phase and can therefore undergo changes, predisposing the patient to exaggerated reactions, as in the case of attachment disorders. Early suffering may hinder a healthy reaction to new stressful life conditions (maladaptive coping), as interpreted by Lazarus & Folkman (1984). According to these authors, conditions of bereavement and loss may represent an obstacle, since coping is understood as the set of cognitive and behavioural resources available to respond to internal or external demands determined by the distressing condition, in a perspective of "interaction" and not only of "reaction". It has been seen the way in which, during the pandemic, different attachment styles influenced responses to stress (Farinelli, 2020).

Since stress is necessary for survival, as it aims to create an adaptation to the surrounding environment and it is necessary to try to deal with difficult conditions effectively. In the case of eustress, which is considered the opposite of distress, the level of stress and tension is moderate and can therefore lead to the goal in an appropriate way. When systems of energy recovery and psychophysical relaxation are activated, adequate productions of serotonin, oxytocin and endorphins are released to counteract the stress condition (Selye, 1974).

The latter, endorphins, have a powerful analgesic effect and increase the sense of well-being, satisfaction and self-esteem. They are particularly evident in the structures of the limbic system and, for this reason, can influence behaviour and the psychic resonance of emotions (Pert et al., 1985).

#### 2.1.4. Resistance to Stress

The term "stress resistance", extrapolated from engineering, indicates how much a material is able to resist before reaching a breaking point, when subjected to bending, torsion and traction tests. The "pandemic stress" from COVID-19 went from acute, during the first Italian lockdown, to chronic over time, as the situation of alarm extended beyond a foreseeable timeframe, causing difficulties for many people in switching off their reactions of alarm.

"The pandemic situation resulted in a set of psychosocial stressors which are toxic to mental health (and therefore also to physical health) that exacerbated pre-existing psychopathologies and amplified the risk factors already present" (De Luca, 2020).

The prefrontal cortex plays a crucial role in determining a reduction in the perception of the stressful stimulus, especially in safe living contexts. If, on the other hand, we find ourselves in an uncertain or completely new life context, such as during a pandemic, the prefrontal cortex disinhibits the amygdala and fear is amplified. Under these conditions, the secretion of CRH, norepinephrine and cortisol increases (O'Donovan et al., 2013), substances that lead to a reduc-

tion in satisfaction in the reward systems, with uncontrollable search for food for gratification and an increase in sleep disorders, characterized by insomnia and frequent awakenings (Thayer et al., 2021).

According to Pert (1999), endorphins help to overcome conditions of life with a high emotional impact and, for this reason, it is necessary to learn to remodel the biochemical parameters involved in the stress response, to decrease the perception of pain, activate a deep sense of well-being, satisfaction and self-esteem.

Stress resistance is important as a constructive reaction and can be exercised during the possible intervals between one stressful stimulus and another (Esch & Stefano, 2010). It depends on an individual's ability to train one's organism to tolerate the cyclicality between moments of destruction and moments of construction, which is an intrinsic feature of the current COVID-19 pandemic. The act of constructing produces satisfaction, but also errors, doubts and rethinking of the behaviours implemented, while the act of destroying inevitably entails loss, but can at the same time trigger reflections, repair strategies and contribute to rebirth.

"Contrary to popular belief, we do not have to, and in fact cannot, avoid stress, but we can encounter it effectively and benefit from it by learning more about its mechanisms and adapting our philosophy of existence to it" (Selye, 1974).

According to Selye, each person has a reservoir of energy to cope with external stimuli (stressors) and the level of resistance to stress depends on the size of the reservoir possessed.

The resolution of a stressful situation produces in the individual a feeling of pleasure, gratification and becomes a positive reinforcement for the future, able to increase the resources contained in the reservoir of energy. Therefore, techniques based on meditative practice are extremely useful, such as mindfulness (Siegel, 2007), which in Zen Buddhism represents the ability to "know how to keep one's awareness alive in the present reality", and self-hypnosis, which enhances the recovery of energy and promotes the change of mental patterns.

In order to activate empowerment paths, it is necessary to understand, first of all, how each subject is able to respond to stress (Muscatell & Eisenberger, 2012), also on the basis of membership of social groups, personal experiences and personality characteristics, with the awareness that subjects marked by various risk factors (such as a particular nervous reactivity to emotional stimuli) tend to maintain symptoms for longer, even when danger has been removed (Bonanno et al., 2010).

Moreover, being able to think together allows the recovery of imagination and symbolic aspects that are often submerged by fear and negative expectations. Dialogue, listening to music and sharing images full of deep symbolic meanings can be effective tools for the anchorage given by an association between different sensory systems, between image and body sensation, which will remain effectively connected in time and space.

It is important to search for a new dimension of "positive consciousness", characterized by the development and perception of one's own psychophysical well-being, which translates into the tendency towards balance and mind-body harmony.

Positive consciousness can be traced back to euthymia, i.e. to serenity of mind in facing and tolerating psychological and physical tensions, capable of awakening the strength to live, despite all the difficulties, with the aim not only of reducing symptoms, but also of bringing about an overall improvement in quality of life (Fava, 2016).

## 2.2. Previous Research on Emotionality at the Beginning of the COVID-19 Pandemic

In various research studies worldwide the negative impact of COVID-19 on mental health has been noted particularly for the most vulnerable groups (economically disadvantaged social classes, ethnic minority groups). Among these social groups, the severity and duration of mental distress were directly proportional to the duration and severity of stressors.

An initial sample of 1,200 nurses and doctors in the Wuhan area who experienced symptoms of anxiety (12%), depression (15%) and general distress (36%), ranging from moderate to severe, was examined in early 2020 (Lai et al., 2020). An international review of 28 articles on mental health problems related to the COVID-19 pandemic, highlighted the presence of symptoms of anxiety, depression and stress perception associated with sleep disturbances. In this research, samples of subjects from China, Iran, Canada, Brazil, Singapore, India and Japan were studied. This study found that being female, a student, having suspected COVID-19 symptoms, and poor health were associated with higher anxiety and depression scores. Other characteristics that contributed to the comorbidity of stress and mental distress included unpredictability, uncertainty, severity of illness, confusing information and social isolation (Rajkumar, 2020).

A study including 18,147 Italian subjects showed high levels of symptoms related to post-traumatic stress (37.14%), depression (17.3%), anxiety (20.8%), sleep disorders (7.3%), and perceived stress (21.9%). The main psychological risk factors included being female, under 40 years of age, having a discontinuous job or being subjected to other stressful events (work, financial, relationship or home-related). Data were recorded in 10 days during the height of the COVID-19 pandemic (27 March to 6 April 2020), from voluntary online questionnaires (Rossi et al., 2020). These results were largely confirmed in another questionnaire based Italian study (Short Mood and Feelings Questionnaire), administered to 6700 individuals. The research was conducted in June 2020, immediately after the initial lockdown phase, aimed at assessing immediate reactions to the emergency. Higher scores for depressive and anxious symptoms were again found in women, young people, people experiencing job uncertainty (because they were or became unemployed) and individuals with lower economic status (Delmastro & Zamariola, 2020).

Another study aimed at identifying variables that could alleviate mental distress was carried out during the initial Italian lockdown (Spring 2020) on a sample of 1035 participants. While reporting a percentage of anxiety-related symptoms (12.3% moderate and 3% severe) and depressive symptoms (15.5% moderate and 6.2% severe), the study found that many subjects had a particular psychological flexibility, described by the authors as the ability to adapt to a changing situation. This represented a protective factor that helped to mitigate the negative effects of the COVID-19 pandemic and isolation from lockdown in terms of anxiety, depression and distress (Pakenham et al., 2020).

Anxiety in the form of feelings of distress (18.18%) was also reported in another group of Italian participants, contacted in Spring 2020. However, the lockdown also appears to have favoured family relationships (57.14%) and the ability to find enjoyment and relaxation in daily activities, confirming the ability to adapt to the negative situation (Durosini et al., 2021).

Finally, a survey conducted using the Questionnaire Coping Inventory for Stressful Situations by the Italian Society of Emergency-Urgency Medicine, in June 2020, involving a sample of 1855 doctors and 618 nurses engaged in emergency health services, examined the characteristics of responses to stress conditions, organized according to three main coping styles: a) task-oriented b) emotion-oriented c) avoidance-oriented (Fabbri et al., 2021). The research revealed a prevailing tendency to adopt task-oriented, rather than emotion-oriented, coping strategies, despite the overload of work and distress. Defining these particular modes of resistance can promote positive action and be useful in preventing burn-out syndrome.

## 2.3. The "SIMP for Italy" Project

Founded in 1966, SIMP (Società Italiana di Medicina Psicosomatica, Italian Society of Psychosomatic Medicine), a scientific society with the aim of studying and carrying out research and training in the field of psychosomatic treatment and practice, is active through local sections with workshops, professional training courses and congresses.

During the initial COVID-19 emergency, SIMP activated a free support desk, aimed at both health workers and citizens, the "SIMP for Italy" Project.

Thanks to the collaboration with the Department of Informatics of the University of Milan, the SIMP Project also made use of a suitably adapted telematic platform to provide free support throughout Italy, both to health workers, who are exposed to great professional risks and exceptional physical and psychological stress, and to citizens with forms of discomfort and suffering.

The desk, as well as the platform, were active from 15 April to 15 June 2020 and each person was offered from 1 to 4 sessions, each lasting 45 minutes, spread over a period of about 2 weeks.

The web platform (Telepsy-COVID19, no longer active) was developed as an evolution of a previous teleconsulting project funded by the Municipality of Mi-

lan and conducted in collaboration with the Infectious Diseases Division, L. Sacco Hospital-University of Milan (Pizzi et al., 2015).

The platform allowed patients to book their sessions and to receive and send their informed consent easily. The interface allowed therapists to view and administer tests for psychophysical assessment of the subjects and record the session data at the same time as the video consultation session with the patient.

In order to support health workers and citizens of Wuhan during the initial phase of the COVID-19 epidemic, SIMP adopted the protocol "Integrative Cognitive Behavioral Therapy: skills to manage anxiety surrounding COVID-19" created by Dr Greg Crosby (IAGP) (Crosby & Altman, 2012).

A dedicated, technical-scientific committee was established to modify the protocol according to the Italian cultural reality, with Dr Greg Crosby's authorization. This protocol was subsequently shared with the association's psychotherapists who agreed to make themselves available. Then, the procedural development of the group work continued through some online meetings dedicated to training before the operational phase.

A crucial point for the adaptation of the protocol, from the SIMP psychosomatic perspective, was the choice of the psycho-educational model: the assertive and directive tone of the intervention was made compatible with empathic listening. Furthermore, concepts and results of research in affective neuroscience and subjectivity, discussed among the scientific committee and during training courses, were introduced and integrated. Health and disease are seen as unified process in the continuum resources vulnerabilities.

These principles helped in the understanding and practice of the protocol for psychotherapists and individuals. Furthermore, regarding the integration of change assessment, Dr Greg Crosby's protocol was translated in the Italian version as "SIMP for Italy: Psychoeducation Protocol with Psychosomatic Orientation" (see **Appendix A**).

The focus of the psychoeducation was on the stress induced by adaptation to the restrictions for the COVID-19 pandemic, during the lockdown period, with the intention of limiting manifestations of distress and encouraging well-being.

In short, the psychoeducational interventions based on the mentioned protocol were an opportunity for participants to reacquaint themselves with the unifying principles of psychosomatics. Psychosomatics is a comprehensive and integrative holistic approach to people, clinical practice and research. The psychosomatic perspective aims to understand the complex and dynamic interactions of biological, psychological and social factors involved in health and illness, considered as a unified process of a continuum made up of vulnerabilities and resources.

In particular, in the Italian tradition of SIMP, the centrality of the relationship is recognized in practice and research; subjectivity and intersubjectivity are considered to be the core of a human being and of experience. Psychodynamics plays a crucial role in theory and practice concerning individuals, groups and society,

while body-mediated practices for emotional and behavioural regulation are widespread and often complement the different psychotherapeutic approaches.

A recent SIMP cultural reflection concerns the relationship between psychosomatics and neuroscience, based on developments and numerous innovative results of research in the field of neuroscience itself. In particular, the prospective evidence is that of the neurobiological predisposition and neuroplasticity of the Self (Colonnello et al., 2017; Northoff et al., 2014). According to such models, the Self is not a fixed entity, but changes throughout life, although some nuclear parts persist. The Self can undergo evolutionary transformations over the course of existence as well as other adaptive forms to different environmental contexts of life. The interactions of different body/brain and psychosocial relational components emerge as being particularly evident.

Assuming that this interactive complexity, in the time of COVID-19, has intensified implicitly and explicitly enough to require a rapid adaptation within the IAGP protocol, useful practices are identified to support it, prevent dysfunctional outcomes (Colonnello et al., 2020) and their consequences. This implies a change in personal and family lifestyles, but also some changes in ourselves (Farinelli, 2020).

For example, interesting elements for understanding the "predisposition to change" on which adaptation is based, come to us from the view of the autonomic nervous system proposed by Porges and his model known as "Polyvagal Theory" (Porges, 2018). It shows us how prosocial functions are embodied in the autonomic nervous system. In particular, research and practice highlight how under conditions of safety (Bowlby, 1989) the more evolved myelinated part of the vagus nerve modulates the attack and escape response activated by the orthosympathetic system. This is useful in understanding the bottom-up/top-down modulation related to grounding, breathing and awareness. Such simple actions can help to implement the sense of security, to react positively and limit the negative experience of COVID-19.

Still concerning the bodily Self, the discoveries regarding "mirror neurons" (Rizzolatti & Sinigaglia, 2005) help to understand both empathic experiences and those of emotional contagion, which are very widespread during the COVID-19 pandemic. It is also interesting how, in the practice indicated in the IAGP protocol, we can facilitate our functional adaptation by deeply sharing or naturally imitating good experiences. It is possible to counteract the natural and inevitable phenomena of contagion, limiting the consequences with more reflective and positive responses to be shared with others.

Another crucial contribution to the study of adaptation, comes from the "affective neuroscience" coined by Panksepp (Northoff et al., 2014; Alcaro & Panksepp, 2014; Alcaro & Carta, 2019; Panksepp & Biven, 2014; Panksepp & Farinelli, 2015). It is useful for understanding and guiding the application of our protocol. Basic emotions (positive: exploration, search, play, care and sexuality; negative: fear, anger and sadness/separation anxiety) are generated by the intrinsic activity

of the subcortical circuits of our brain, supported by specific and complex neurochemistry. The basic emotions correspond to our instinctual resources connected to spontaneous and/or reactive affective behaviour that has a strong adaptive potential. Their connotation, positive or negative, concerns the colour of the experience: we usually tend to repeat the positive ones and avoid the negative ones. It is interesting and useful to recognise the basic emotions in the protocol and how to guide them in the adaptation process.

Further particular considerations, worthy of interest for the neuroplasticity of the Self and for our purposes, must be addressed regarding the role of the Default Mode Network (DMN) neuronal network, which is very active when we rest and do not handle specific tasks, especially if they are externally oriented (Northoff et al., 2014; Farinelli et al., 2020a; Northoff, 2019). When we rest, dream or wander freely with the mind, the characteristics of the resting state of our brain, in particular of the so-called cortico-subcortical midline structures, tell us something about "our Self". This is important because it is through the Self that we perceive ourselves and the world of which we are a part. There are conditions in which resting state activity may be impaired, for example in states of anxiety and depression or in cases of brain injury. Thus, resting state activity, which is too high in DMN as well as in depression, corresponds to an excessive and dysfunctional concentration on past affections and memories, with a limited capacity for attention, concentration and processing of stimuli from the environment and present life. In fact, a part of DMN called the Posterior Cingulate Cortex and its activeness play a role in regulating attention. For example, in our IAGP protocol, the practice of grounding and breathing with eyes open is useful. In fact, by not leaving the house during lockdown, we automatically and unconsciously risk concentrating too much on ourselves and less on the environment, increasing the risk of maladjustment: hence the need to encourage appropriate practices of remodulation, with the specific measures required.

#### 2.4. Methodology of Intervention

As indicated in the mentioned Protocol (**Appendix A**, point 1), the eligibility criterion for accessing the psychoeducational intervention, established through a preliminary interview, was to include in the protocol only healthy subjects who felt a discomfort related exclusively to pandemic stress, excluding all the others.

The method of recruitment was self-selection: by means of radio and web announces, SIMP spread the notice of the opening of the "SIMP for Italy" Project and the dedicated telephone number to dial in order to start the on-line support sessions.

Among the subjects who contacted the dedicated number looking for support, only those who fell within the requirements of the Protocol resulted to be suitable to attend the psychoeducational sessions. The other subjects were listened with an initial interview and addressed to other services specific for their pathologies.

The method of intervention, implemented in the "SIMP for Italy" Project to

assist with adaptation to the COVID-19 pandemic, identified the following main objectives:

- 1) To interrupt the condition of distress, creating a greater resistance to stress.
- 2) To generate a state of calm, through specific techniques, first hetero-induced and then self-induced (breathing and grounding), taken from the Wuhan Protocol for Psychologists and adapted to Western culture by G. Crosby.
- 3) To restore a psychophysical balance, with control of psychosomatic symptoms.
- 4) To favor the recovery of an acceptance of reality, through the search for solutions that may favor a greater adaptation to the conditions of life determined by the first lockdown of 2020.

In order to validate the obtained results, we adopted both a protocol of administration of the breathing and grounding techniques and a protocol of evaluation of the results obtained, using the Symptom Questionnaire (SQ), the Subjective Units of Distress Scale (SUDS) and the WELL-BEING Scale (calm and relaxation), for a detection of the variation of the states of well-being and the levels of symptoms. These scales were chosen because they enable the subject to consciously perceive a transition from a state of discomfort to one of well-being.

The procedure used is of the test-retest type (pre-intervention detection/after-intervention detection), through the identification of a factor within.

## 2.4.1. The Symptom Questionnaire (SQ)

Derived from the Symptom Rating Test of Kellner & Sheffield (1973) and validated in Italy by Fava (Fava & Kellner, 1982; Fava et al., 1983), this test is used as a self-evaluation of the level of suffering and/or well-being felt in the principal psychosomatic illnesses. It is composed of 92 items that can be answered with YES/NO or TRUE/FALSE (Kellner, 1987).

Within the SQ, the 92 items are grouped in four scales (depression, anxiety, anger-hostility and somatic) divided in turn into 8 sub-scales of which 4 refer to items which indicate symptoms and 4 to items which reveal states of well-being with the aim of lifting the internal consistency of the test results. The answers are all dichotomous (yes/no or true/false). Therefore, each scale is divided into two sub-scales; one sub-scale that groups the symptoms (17 items) and a corresponding subscale that measures well-being (6 items) (Table 1). For this reason, the scale for depression is divided into two subscales "depression symptoms" and "contented"; the scale for anxiety is divided into "anxiety symptoms" and "relaxed"; the scale for anger-hostility is divided into "anger-hostility symptoms" and "friendly"; the scale for somatization is divided into "somatic symptoms" and "somatic well-being" (Table 2).

For each subject, one point is calculated for each symptom, when responding affirmatively, and one point for each expression of well-being, when responding negatively. The ability to investigate both distress and well-being makes this test extremely topical and valid for studies focused on euthymia (Fava, 2016; Fava & Guidi, 2020).

**Table 1.** The symptom questionnaire: 92 Items according to the 4 scales of depression, anxiety, anger-hostility and somatic.

Scales (92 items)	Symptom subscales (68 items)	Well-being subscales (24 items)
Depression	Depression symptoms	Contented
Anxiety	Anxiety symptoms	Relaxed
Anger/hostility	Anger-Hostility symptoms	Friendly
Somatic	Somatic symptoms	Somatic well-being

Table 2. The symptom questionnaire: the 4 scales and 8 subscales.

Depression	Anxiety	Anger-Hostility	Somatic
item 2: Weary	item 1: Nervous;	item 3: Irritable	item 10: Feeling healthy
item 4: Cheerful	item 5: Tense, tensed up;	item 11: Losing temper easily	item 12: Feeling of not enough air
item 6: Sad, blue	item 8: Frightened:	item13: Feeling kind toward people	item 14: Feeling fit
item 7: Happy	item 9: Feeling calm;	item 17: Feeling warm toward	item 15: Heavy arms of legs
item 24: Feeling unworthy	item 16: Feeling confident;	people	item 19: No pains anywhere
item 27: Cannot enjoy yourself	item 18: Shaky;	item 20: Angry	item 21: Arms and legs feel strong
item 39: Feeling guilty	item 23: Feeling paceful;	item25: Annoyed	item 22: Appetite poor
item 40: Feeling well	item 29: Relaxed;	item 26: Feeling of rage	item 28: Thig head or neck
item 43: Contented	item 30: Restless	item 31: Feeling friendly	item 33: Choking feeling
item 45: Feeling desperate, terrible	item34: Afraid	item 32: Feeling of hate	item 41: Feeling of pressure in
item 47: Thinking of death or dying	item 36: Scared	item 35: Patient	head or body
item 51: Enjoying yourself	item42: Worried	item 37: Furious	item44: Weak arms or legs
item 58: Depressed	item 49: Terrified	item 38: Feeling charitable,	item 46: No aches anywhere
item 60: feeling a failure	item 50: Feeling of courage	forgiving	item 52: Breathing difficult
item 61: Not interested in things	item 54: Takes a long time to	item 48: Hot tempered	item 53: Parts of the body feel
item 66: Blaming yourself	fall a sleep	item 55: Feeling hostile	numb or tingling
item 67: Thoughts of ending your life	e item 59: Jumpy	item 56: Infuriated	item 57: Heart beating fast or
item 71: Looking forward toward the	titem 62: Highly strung	item 69: Enraged	pounding
future	item 63: Cannot relax	item 70: Irritated by other people	item 65: Pressure of head
item 73: Feeling that life is bad	item 64: Panicky	item 80: Feel like attacking people	item 72: Nauseated, sick to stomach
item 75: Feeling inferior to others	item 68: Frightening thoughts	s item 81: Shaking with anger	item 74: Upset bowels or stomach
item 76: Feeling useless	item 86: Feeling that	item 82: Mad	item 77: Muscle pain
item 84: Feeling like crying	something bad will happen	item 83: Feeling of goodwill	item 78: No unpleasant feeling in
item 91: Feeling of hopelessness	item 87: Wound up, uptight	item 88: Get angry quickly	head or body
	item 89: Self confident	item 90: Resentful	item 79: Headaches
			item 85: Cramps
			item 92: Head pains

The score for each symptom subscale ranges from 0 to 17; for each WELL-BEING subscale it ranges from 0 to 6. The higher the score, the greater the perception of psychological distress.

Because of its sensitivity (Benasi et al., 2020), the SQ functions well for the study of small or medium samples and, in particular, for research in the field of psychosomatics, where specific changes in the psychological condition of patients must be investigated (Fava & Guidi, 2020).

## 2.4.2. Subjective Units of Distress Scale (SUDS)

Also referred to as the Subjective Units of Disturbance Scale, it is a scale ranging from 0 to 10 that serves to measure the subjective intensity of the distress expe-

rienced by a given individual. The patient independently assesses the score that he or she believes corresponds to the degree of perceived discomfort (Wolpe, 1969).

### 2.4.3. WELL-BEING Scale (Calm and Relaxation)

This scale (Odum, 1972) was constructed ad-hoc on the basis of 5 variables that were considered significant during the period of the COVID-19 pandemic: sleep, nutrition, news reports exposure, planning of the day and performance of exercises. The answers were subjected to the objective evaluation of the operator, according to a scale from 0 to 4 (0 = absent; 1 = poor; 2 = fair; 3 = good; 4 = excellent).

## 2.5. Research Hypothesis

The three instruments used for the validation of the research (SQ, SUDS, WELL-BEING Scale) aimed at detecting somatic and psychological changes, based on self-perception of the subjects, before and after the administration of the IAGP Protocol. In particular, the SQ was administered at the beginning of the first interview and at the end of the last interview, while the SUDS and WELL-BEING Scale were always administered at the beginning and at the end of each interview.

Therefore, the aim was to verify whether the method used, with regard to the quality of the health service and of the timely delivery according to the request of the patient, could positively influence psychophysical well-being, leading to a significant recovery oriented towards greater stability, despite the constant presence of the COVID-19 pandemic.

## 3. Results

## **Statistical Analysis**

Many people have benefited from the Service offered by the Project "SIMP for Italy", both through direct participation and indirect participation, as the exercises of the Protocol have often been taught and shared with other family members, with a positive fallout on the domestic situation.

But since our first aim was to provide a psychosomatic oriented intervention during the first Italian lockdown, many operators did not enter or partially entered data of their psychoeducational sessions using the ad hoc input form arranged on the telematic platform.

The number of samples collected was further reduced by the need to limit the analysis to those subjects for whom at least one complete series of observations was taken on entry (first session) and another on exit (second or subsequent sessions). Following selection, 16 subjects were evaluated with complete QS tables, 13 subjects with complete surveys of the WELL-BEING scales, and 7 subjects with objective surveys by the operator.

The possibility to access the data was obtained by approval of the Ethics Com-

mittee University of Milan N. 108/21.

The low number of subjects made it necessary to perform a normality test, which was carried out using the Shapiro-Wilk test, whose result led to the use of non-parametric tests.

However, the homoscedasticity of the variances was checked by means of Levene's test. The testing of the hypothesis was then carried out from the raw scores to reveal any significant differences between the medians of the scores at the first survey and those at the last survey for each type of survey. The Wilcoxon test for the single cumulative scores proved that subjects showed a significant improvement in depression and a highly significant improvement in anxiety (Table 3).

Disaggregated symptoms examined with Wilcoxon's test revealed a significant improvement in subjects' depression, anxiety and somatic well-being, and a highly significant improvement in depression (Table 4).

However other symptoms, in particular anger/hostility scores, don't show a significant change. But it must be outlined that the non-parametric Friedman test showed a decidedly statistically significant improvement across the cumulative symptom area of the four scales (p = 0.01706), indicating that this area as a whole validates the hypothesis expressed in the body of the paper, that considers "pandemic stress" as a "mourning" to be processed in the succession of phases as described by Kubler-Ross (1969).

The evident improvement for the anxiety symptoms and the depression symptoms indicates the effectiveness of the psycho-educational intervention, of short duration, aimed at providing immediate psychological support during a situation that produced a high level of stress.

Table 3. Statistical changes in scale median scores from the first to the final survey.

Symptom	<i>p</i> -value
Depression	0.03238
Anxiety	0.009716
Anger/hostility	0.1826
Somatic	0.07787

**Table 4.** Statistical changes in symptoms and WELL-BEING subscale median scores from the first to the final survey.

Symptom	<i>p</i> -value	
Depression symptoms	0.002388	
Contented	0.8324	
Anxiety symptoms	0.0144	
Relaxed	0.06268	
Anger-Hostility symptoms	0.2455	
Friendly	0.2396	
Somatic symptoms	0.1327	
Somatic well-being	0.04413	

In the same way, the scores on the WELL-BEING scales were analyzed, assessing the subjects' behaviours with regard to sleep, nutrition, news reports exposure, planning of the day and performance of exercises.

The individual behaviours in some cases showed a significant improvement on discharge; a significant improvement in subjects' sleep and daily programming was noted (Table 5).

Finally, the objective findings of the operators at admission and discharge were considered regarding the following behaviours of the subject: perceived discomfort (SUDS), relaxation, calm, ability to calm down, ability to relax (WELL-BEING scale). The individual behaviours, again according to the Wilcoxon test, showed a significant improvement on discharge for perceived discomfort, a highly significant improvement for calm and ability to calm down (**Table 6**).

#### 4. Discussion

Although the statistical significances reported in the above paragraph should not be directly generalized on the population, they allow us to draw some conclusions on the perception of pandemic stress by the examined subjects and on the efficacy of the proposed method of intervention.

Comparing the evaluations reported by the operators of the "SIMP for Italy" Project, in particular the 33 records compiled by the operators, it was possible to observe how pandemic stress, like any other type of stress, was experienced by the subjects examined from a psychological and physiological and behavioural point of view.

The perceptual filter made it possible to evaluate the event as threatening, perceiving it as a situation of real danger both at an individual and collective level. It was seen as a "social system that no longer contains", does not protect and, therefore, elicits maladaptive behaviour in the individuals who constitute the

**Table 5.** Statistical changes in scale median scores from the first to the final survey.

Behaviour	<i>p</i> -value
Sleep	0.04611
Nutrition	0.08326
News reports exposure	1
Planning of the day	0.01635
Performance of exercises	0.129

**Table 6.** Statistical changes in operators' perception of subjects' scale median scores from the first to the final survey.

Symptom	<i>p</i> -value
Perceived discomfort	0.04056
Relaxation	NA
Calm	0.007058
Ability to calm down	0.007349
Ability to relax	0.1797

group, which tend to encourage and increase the perception of threat. This has resulted in various harmful physiological reactions, to the detriment of the innate capacity for adaptation and emotional regulation (Alter & Sugarman, 2017) and, therefore, new forms of adaptation of the "individual-system", capable of resisting change, while remaining in a condition of equilibrium (Odum, 1972).

The meetings showed to have a relevant impact in the presence of a psychopathological state characterized by an anxious-depressive state due to the loss of an "asset" that involved, for many subjects, the perception of real mourning to be elaborated.

In moments of great anxiety, the sharing of experiences and the analysis of dysfunctional thoughts with the Psychotherapists of the support desk were crucial, especially for those subjects who had been affected by experiences of loss because "the knowledge of personal emotions favors the mentalization of events and prevents the acts" (De Mori, 2019).

In fact, the method used during the meetings favored a state of serenity in the subjects, with an improvement in the condition of malaise.

Thanks to the psycho-physical exercises presented (breathing and grounding), the ability to calm down was progressively acquired, until a more constant state of calm was achieved over a period of about two weeks. It proved possible to train subjects to improve breathing efficiency with positive effects, so that resistance to stress was enhanced, benefiting the immune function, biorhythms and mood.

Grounding, in turn, enabled awareness of being located in the 'here and now', through the feeling of contact of the feet with the ground, with earthly roots. Through this exercise, it was possible to recover energy and maintain a constant relationship with the outside world. In fact, an anchorage with the somatic dimension and, consequently, with reality, stimulates the perception of feeling alive and allows "the retrieval of and access to positive, stable and coherent images of oneself" (Faretta, 2020).

For many people, the exercises of the protocol have become an integral part of the day, positively marking time and offering emotional support in the most difficult moments, thanks to the progressive acquisition of the ability to process environmental stimuli.

The consolidation of control and mastery skills, resulting from the pro-prioceptive feeling of well-being, obtained thanks to the sessions with SIMP therapists, led the subjects to a new psychological representation of the Self, based on the recognition of the possibility of regulating their psychosomatic experiences.

This experience was decisive in increasing the sense of self-efficacy, i.e. the awareness of being able to overcome discomfort through inner resources, feeling that they are the protagonists of their own actions and able to regulate their own sleep/wake rhythms through calm and the ability to calm down.

In fact, sleep deprivation and alteration, which are characteristic of lockdown periods, can lead to depression, fatigue, irritability and lack of concentration, with negative consequences on the quality of life and the functioning of organs and systems (Espie, 2006; Casagrande et al., 2020). The sleep/wake rhythm spontaneously regularized after the psycho-education intervention, returning to its usual characteristics. The improvement in insomnia immediately had a positive effect on the day's activities.

As mentioned in the Results paragraph, the ability to plan one's day also improved. The acquisition of self-agency made it possible to mobilize energies that were more appropriate to the situation and to make a greater commitment to time management, in order to improve the quality of daily life.

Thanks to the three tools of the Protocol for the evaluation of results, it was possible to analyze and frame the subjectively perceived well-being. The contribution offered by the Protocol of the "SIMP for Italy" Project, aimed at overcoming the negative consequences of the pandemic, acted directly on the psychosomatic dimension of the people who benefited from it, but it is possible to imagine an indirect relapse of the advantage at a family and social level. Often the effectiveness of a protocol is all the more relevant the more the intervention is considered from an intersubjective perspective of positive transformation of relationships, especially in a period characterized by a strong amplification of conflict.

Some subjects, after the intervention with the SIMP psychotherapists, were able to adapt to the events of the pandemic with greater awareness and to plan, according to standards of greater normality, above all in the organization of their day. Even if difficult and painful, the acceptance of renunciation has also offered the opportunity to look at life with a hopeful and planning look, with the possibility of limiting the negative experience of COVID-19.

For some it was also possible to imagine new projects to be carried out in the immediate future, re-establishing new forms of adaptation, never experienced before, and achieving a new balance, thanks to the activation of self-regulating mechanisms.

It is to be hoped that scientific research can continue in the direction highlighted by the "SIMP for Italy" Project, given the extreme versatility of the results, as demonstrated by this study.

In order to meet the needs of the population, it is necessary to continue experimenting with new strategies and self-help tools aimed at achieving a state of well-being and preventing conditions of discomfort and distress, even when the COVID-19 Pandemic is over.

## 5. Conclusion

The work of research and support with the population carried out by the "SIMP for Italy" Project, in a moment characterized by chaos and crisis both at an individual and an institutional level and an impossible situation with regard to control and safety, focused on techniques of "psycho-education". This is a method aimed at helping people who are suffering from deep, disabling distress. The protocol created ad hoc gave information and instruction to all those who asked

for assistance to deal with their disturbances and symptoms, as well as the underlying causes connected with their problems. They were offered methods that actively provided intervention making sense of what was happening so that they were able to regain an improved state of equilibrium and well-being, as rapidly as possible.

The psychoeducational protocol used was designed also taking into account the definition of good health as given by the World Health Organization (1946) according to whom "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Each individual must therefore search for positive experiences and optimal lifestyles and seek adequate environmental characteristics, in terms of physical liveability, capable of amplifying the positive dimension of existence.

According to the philosopher Canguilhem (1998), health is precisely the individual's margin of tolerance to the unfaithfulness of the environment, and being well means being the bearer of new values in terms of skills, competences and actions that predispose the individual to change and can promote adaptability.

During the COVID-19 pandemic, it has become essential to pursue a social ethic, which is able to promote actions and interventions that are useful for the health of individuals, groups and communities. In particular, priority should be given to all empowerment projects, based on a multidimensional and multidisciplinary approach, which can enhance the strengths of each person (Prezza & Santinello, 2002).

The "SIMP for Italy" Project intended to pursue these aims, promoting the enhancement of the individual in the search for well-being, despite the general situation of uncertainty and individual and collective vulnerability determined by the COVID-19 Pandemic.

The "SIMP for Italy" approach aimed at enhancing the individual's abilities at adaptation and emotional regulation. More precisely, we refer to the so-called homeostatic behaviour of the system-individual representing the well "balance", as the result of mechanisms of interaction between internal and external, between biological components and the influence of external factors through the mediation of emotional reaction (Cagiada & Pizzi, 2020).

According to Walsh (2003), in order to achieve homeostasis and activate resources, it is important to aim towards the integration of the personal dimension (individual achievements), the social dimension (extended family, community of belonging, socio-cultural context), the temporal dimension (the transgenerational model) and the spiritual dimension (faith, value and purpose systems).

The concept of resource, in this formulation, considers both the contribution of personal energies and the support from other people in overcoming conditions of inner suffering, aiming at the achievement of a condition of well-being, according to the biopsychosocial model of reference.

In the future, other challenges are foreseen, due to the lack of attention to all the components of the ecosystem in which we live (man-environment-animal) and the inability to grasp the link between the protection of the environment and individual (body-mind) and collective health. If in the short term, the whole of society does not intervene in favor of the balance of the ecosystem, it will be necessary to identify situations of greater vulnerability, so far placed in the background with respect to physical balance, consequently greater attention must be paid to mental health (Battaglia, 2022).

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#### **Author Contributions**

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## **Institutional Review Board Statement**

The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Ethics Committee of the University of Milan N. 108/21, October 28, 2021.

#### **Informed Consent Statement**

Informed consent was obtained from all subjects involved in the study.

## **Data Availability Statement**

The data presented in this study are openly available in Zenodo at <a href="https://doi.org/10.5281/zenodo.6571644">https://doi.org/10.5281/zenodo.6571644</a>.

#### **Conflicts of Interest**

The authors declare no conflict of interest.

## References

- Ainsworth, M. D. S. (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Lawrence Erlbaum Associates.
- Alcaro, A., & Carta, S. (2019). The "Instinct" of Imagination. A Neuro-Ethological Approach to the Evolution of the Reflective Mind and Its Application to Psychotherapy. *Frontiers in Human Neuroscience, 12,* Article No. 522. https://doi.org/10.3389/fnhum.2018.00522
- Alcaro, A., & Pankesepp, J. (2014). Le radici affettive e immaginative del Sé: un'indagine neuroetologica sulle origini della soggettività. In G. Northoff, M. Farinelli, R. Chattat, & F. Baldoni (Eds.), La plasticità del Sé. Un approccio neuropsicodinamico (pp. 65-89). Il Mulino.
- Alter, D. S., & Sugarman, L. I. (2017). Reorienting Hypnosis Education. *American Journal of Clinical Hypnosis*, *59*, 235-259. <a href="https://doi.org/10.1080/00029157.2016.1231657">https://doi.org/10.1080/00029157.2016.1231657</a>
- Battaglia, L. (2020). L'idea di salute globale. Una sfida per la Bioetica in "Il caso e la necessità. Covid 19, la (prima) pandemia del terzo millennio". Key Editions.
- Battaglia, L. (2022). Bioetica, Movimenti, Idee, fenomeni. Bibliografica.
- Bauman, Z. (2000). La solitudine del cittadino globale. Feltrinelli.
- Benasi, G., Fava, G. A., & Rafanelli, C. (2020). Symptom Questionnaire, a Highly Sensitive Patient-Reported Outcome Measure: Systematic Review of Clinimetric Properties. *Psychotherapy & Psychosomatics*, 89, 74-89. <a href="http://doi.org/10.1159/000506110">http://doi.org/10.1159/000506110</a>
- Bonanno, G. A., Brewin, C. R., Kaniasty, K., & La Greca, A. M. (2010). Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. *Psychological Science in the Public Interest, 11*, 1-49. https://doi.org/10.1177/1529100610387086
- Bowlby, J. (1973). Attachment and Loss. Vol. 2: Separation. Basic Books.
- Bowlby, J. (1980). Attachment and Loss. Vol. 3: Loss, Sadness and Depression. Basic Books.
- Bowlby, J. (1989). *Una base sicura. Applicazioni cliniche della teoria dell'attaccamento.* Raffaello Cortina Editore.
- Brewer, N. T., Chapman, G. B., Gibbons, F. X., Gerrard, M., McCaul, K. D., & Weinstein, N. D. (2007). Meta-Analysis of the Relationship between Risk Perception and Health Behavior: The Example of Vaccination. *Health Psychology*, 26, 136-145. https://doi.org/10.1037/0278-6133.26.2.136
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The Psychological Impact of Quarantine and How to Reduce It: Rapid Review of the Evidence. *The Lancet, 395,* 912-920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Cagiada, S., & Pizzi, R. (2020). Autoipnosi strumento per il mantenimento dell'omeostasi per la prevenzione della malattia attraverso l'attivazione delle risorse interiori. *IPNOSI*, 12, 25-36. https://doi.org/10.3280/IPN2020-002002

- Canguilhem, G. (1998). Il normale e il patologico. Einaudi.
- Casagrande, M., Favieri, F., Tambelli, R., & Forte, G. (2020). The Enemy Who Sealed the World: Effects of Quarantine Due to the COVID-19 on Sleep Quality, Anxiety, and Psychological Distress in the Italian Population. *Sleep Medicine*, *75*, 12-20. <a href="https://doi.org/10.1016/j.sleep.2020.05.011">https://doi.org/10.1016/j.sleep.2020.05.011</a>
- Cassidy, J., & Shaver, P. L. (1999). *Handbook of Attachment: Theory, Research and Clinical Applications.* Guildford Press.
- Ciucci, M. (2020). *Mental Health during the Covid-19 Pandemic. ENVI Webinar Proceedings. Directorate-General for Internal Policies.* European Parliament.
- Colonnello, V., Leonardi, G., Farinelli, M., Bertoletti, E., & Russo, P. M. (2020). Psychological Distress in Hospitalized Patients without COVID-19 Symptoms: The Role of Fear of Infection and Remote Contact with Informal Caregivers. *Psychological Medicine*, 1, 1-2. https://doi.org/10.1017/S0033291720005012
- Colonnello, V., Petrocchi, N., Farinelli, M., & Ottaviani, C. (2017). Positive Social Interactions in a Lifespan Perspective with a Focus on Opioidergic and Oxytocinergic Systems: Implications for Neuroprotection. *Current Neuropharmacology, 15*, 543-561. https://doi.org/10.2174/1570159X14666160816120209
- Crosby, G., & Altman, D. (2012). Integrative Cognitive-Behavioral Group Therapy. In J. L. Kleindberg (Ed.), *The Wiley-Blackwell Handbook of Group Psychotherapy*. Wiley-Blackwell. <a href="https://doi.org/10.1002/9781119950882.ch5">https://doi.org/10.1002/9781119950882.ch5</a>
- De Luca, M. L. (2020). Impatto psicologico del COVID-19 Traiettorie prototipiche, rischi e opportunità nei possibili percorsi di risposta psicologica all'emergenza pandemica. *Studia Moralia*, *58*, 315-330.
- De Mori, G. (2019). *Corpi diafani, corpi abusati*. Istituto Italiano di Bioetica. https://www.istitutobioetica.it/appuntamenti/193-news-liguria/804-corpi-diafani-corpi-abusati
- Dell'Osso, L., Carmassi, C., & Shear, M. K. (2013). Dal lutto complicato (Complicated Grief) al Persistent Complex Bereavement Disorder. *Journal of Psychopathology, 19*, 185-190.
- Delmastro, M., & Zamariola, G. (2020). Depressive Symptoms in Response to COVID-19 and Lockdown: A Cross-Sectional Study on the Italian Population. *Scientific Reports, 10,* Article No. 22457. <a href="https://doi.org/10.1037/0278-6133.26.2.136">https://doi.org/10.1037/0278-6133.26.2.136</a>
- Durosini, I., Triberti, S., Savioni, L., & Pravettoni, G. (2021). In the Eye of a Quiet Storm: A Critical Incident Study on the Quarantine Experience during the Coronavirus Pandemic. *PLOS ONE, 16,* e0247121. <a href="https://doi.org/10.1371/journal.pone.0247121">https://doi.org/10.1371/journal.pone.0247121</a>
- Engel, G. L. (1977). The Need for a New Medical Model. A Challenge for Biomedicine. *Science*, *196*, 129-136. <a href="https://doi.org/10.1126/science.847460">https://doi.org/10.1126/science.847460</a>
- Esch, T., & Stefano, G. B. (2010). Endogenous Reward Mechanisms and Their Importance in Stress Reduction, Exercise and the Brain. *Archives of Medical Science, 30,* 447-455. https://doi.org/10.5114/aoms.2010.14269
- Espie, C. A. (2006). Superare l'insonnia. Eclipsi.
- Fabbri, A., De Iaco, F., Marchesini, G. et al. (2021). The Coping Styles to Stress of Italian Emergency Health-Care Professionals after the First Peak of COVID 19 Pandemic Outbreak. *The American Journal of Emergency Medicine*, *4*, 573-575. <a href="https://doi.org/10.1016/j.ajem.2020.12.054">https://doi.org/10.1016/j.ajem.2020.12.054</a>
- Faretta, E. (2020). EMDR e psicosomatica: Il dialogo tra mente e corpo. Edra.
- Farinelli, M. (2020). #Iorestoacasa #noirestiamoacasa: le forme e i tempi dell'adattamento al distanziamento sociale. *DNA*—*Di Nulla Academia, 1,* 49-67.

- Farinelli, M., Cevolani, D., Gestieri, L., Romaniello, C., Maffei, M., Agati, R., Leo, M. R., Huang, Z., Pedone, V., & Northoff, G. (2020). Brain and Behaviour in Post-Acute Stroke: Reduction in Seeking and Posterior Cingulate Neuronal Variability. *Journal of Clinical and Experimental Neuropsychology*, 42, 584-601. https://doi.org/10.1080/13803395.2020.1780417
- Fava, G. A. (2016). Well-Being Therapy: Current Indications and Emerging Perspectives. *Psychotherapy and Psychosomatics*, 85, 136-145. https://doi.org/10.1159/000444114
- Fava, G. A., & Guidi, J. (2020). The Pursuit of Euthymia. *World Psychiatry, 19*, 40-50. https://doi.org/10.1002/wps.20698
- Fava, G. A., & Kellner, R. (1982). Versione italiana del Symptom Questionnaire (S.Q.) di Kellner. In R. Canestrari (Ed.), Nuovi metodi in psicometria (pp. 51-54). O.S. Organizzazioni Speciali.
- Fava, G. A., Kellner, R., Perini, G. I., Fava, M., Michelacci, L., Munari, F. et al. (1983). Italian Validation of the Symptom Rating Test (SRT) and Symptom Questionnaire (SQ). *The Canadian Journal of Psychiatry*, 28, 117-123. https://doi.org/10.1177/070674378302800208
- Fiorenzato, E., Zabberoni, S., Costa, A., & Cona, G. (2021). Cognitive and Mental Health Changes and Their Vulnerability Factors Related to COVID-19 Lockdown in Italy. *PLOS ONE, 16,* e0246204. https://doi.org/10.1371/journal.pone.0246204
- Fiorillo, A., & Gorwood, P. (2020). The Consequences of the COVID-19 Pandemic on Mental Health and Implications for Clinical Practice. *European Psychiatry, 63*, e32. <a href="https://doi.org/10.1192/j.eurpsy.2020.35">https://doi.org/10.1192/j.eurpsy.2020.35</a>
- Fiorillo, A., Sampogna, G., Giallonardo, V. et al. (2020). Effetti del lockdown sulla salute mentale della popolazione generale durante la pandemia di COVID-19 in Italia: Risultati della rete collaborativa COMET. *European Psychiatry, 63,* e87. <a href="https://doi.org/10.1192/j.eurpsy.2020.89">https://doi.org/10.1192/j.eurpsy.2020.89</a>
- Ghebreyesus, T. A. (2020). Addressing Mental Health Needs: An Integral Part of COVID-19 Response. *World Psychiatry, 19,* 129-130. <a href="https://doi.org/10.1002/wps.20768">https://doi.org/10.1002/wps.20768</a>
- Ghiretti, F., Gildoni, G., Grassi, G. M., Torricelli, L., Benassi, E., Bonaretti, E. et al. (2020). Psychological Support to the Community during the COVID-19 Pandemic: Field Experience in Reggio Emilia, Northern Italy. *Frontiers in Psychology, 11*, Article ID: 561742. https://doi.org/10.3389/fpsyg.2020.561742
- Gorwood, P., & Fiorillo, A. (2021). One Year after the COVID-19: What Have We Learnt, What Shall We Do Next? *European Psychiatry*, *64*, e15. https://doi.org10.1192/j.eurpsy.2021.9
- Gruber, J., Prinstein, M. J., Abramowitz, J. S., Albano, A. M., Aldao, A., Borelli, J. et al. (2020). Clinical Psychological Science's Call to Action in the Time of Covid-19. *American Psychologist*, 76, 409-426. <a href="https://doi.org/10.1037/amp0000707">https://doi.org/10.1037/amp0000707</a>
- Kellner, R. (1987). A Symptom Questionnaire. Journal of Clinical Psychiatry, 48, 268-274.
- Kellner, R., & Sheffield, B. F. (1973). A Self-Rating Scale of Distress. *Psychological Medicine*, 3, 88-100. <a href="https://doi.org/10.1017/S0033291700046377">https://doi.org/10.1017/S0033291700046377</a>
- Kersting, A., Brähler, E., Glaesmer, H., & Wagner, B. (2011). Prevalence of Complicated Grief in a Representative Population-Based Sample. *Journal of Affective Disorders, 131*, 339-343. https://doi.org/10.1016/j.jad.2010.11.032
- Kubler-Ross, E. (1969). On Death and Dying. Macmillan.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N. et al. (2020). Factors Associated with Mental Health Outcomes among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Network Open, 3, e203976.

- https://doi.org/10.1001/jamanetworkopen.2020.3976
- Lazarus, R. S., & Folkman, S. (1984). Stress, Appraisal, and Coping. Springer.
- MacLeod, C., & Bucks, R. S. (2011). Emotion Regulation and the Cognitive-Experimental Approach to Emotional Dysfunction. *Emotion Review, 3,* 62-73. https://doi.org/10.1177/1754073910380970
- Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N. et al. (2020). How Mental Health Care Should Change as a Consequence of the COVID-19 Pandemic. *The Lancet Psychiatry*, *7*, 813-824. https://doi.org/10.1016/S2215-0366(20)30307-2
- Muscatell, K. A., & Eisenberger, N. I. (2012). A Social Neuroscience Perspective on Stress and Health. *Social and Personality Psychology Compass*, *6*, 890-904. https://doi.org/10.1111/j.1751-9004.2012.00467.x
- Northoff, G. (2019). *La neurofilosofia e la mente sana: Imparare dal cervello*. Raffaello Cortina Editore.
- Northoff, G., Farinelli, M., Chattat, R., & Baldoni F. (2014). *La plasticità del Sé. Un approccio neuropsicodinamico* (pp. 65-87). Il Mulino.
- O'Donovan, A., Slavich, G. M., Epel, E. S., & Neylan, T. C. (2013). Exaggerated Neurobiological Sensitivity to Threat as a Mechanism Linking Anxiety with Increased Risk for Diseases of Aging. *Neuroscience & Biobehavioral Reviews, 37*, 96-108. <a href="https://doi.org/10.1016/j.neubiorev.2012.10.013">https://doi.org/10.1016/j.neubiorev.2012.10.013</a>
- Odum, E. P. (1972). Ecosystem Theory in Relation to Man. In J. A. Wiens (Ed.), *Ecosystem Structure and Function* (pp. 11-24). Oregon State University.
- Pakenham, K. I., Landi, G., Boccolini, G., Furlani, A., Grandi, S., & Tossani, E. (2020). The Moderating Roles of Psychological Flexibility and Inflexibility on the Mental Health Impacts of COVID-19 Pandemic and Lockdown in Italy. *Journal of Contextual Behavioral Science*, 17, 109-118. <a href="https://doi.org/10.1016/j.jcbs.2020.07.003">https://doi.org/10.1016/j.jcbs.2020.07.003</a>
- Panksepp, J., & Biven, L. (2014). Archeologia della mente. Raffaello Cortina Editore.
- Panksepp, J., & Farinelli, M. (2015). The Instinctual Foundations of Infant Minds: How Primary Affects Guide the Construction of Their Higher Cognitive Proclivities and Abilities. In R. J. Noone, & D. V. Papero (Eds.), *The Family Emotional System* (pp. 123-138). Lexington Books.
- Parkes, C. M. (1980). Il lutto. Studio sul cordoglio degli adulti. Feltrinelli.
- Pert, C. (1999). *Molecules of Emotion: The Science between Mind-Body Medicine Scribner*. Pocket Books.
- Pert, C. B., Ruff, M. R., Weber, R. J., & Herkenham, M. (1985). Neuropeptides and Their Receptors: A Psychosomatic Network. *The Journal of Immunology, 135*, 820s-826s.
- Pfefferbaum, B., & North, C. S. (2020). Mental Health and the Covid-19 Pandemic. *The New England Journal of Medicine, 383,* 510-512. https://doi.org/10.1056/NEJMp2008017
- Pizzi, R., Oreni, L., Grassi, S., Ridolfo, A. L., Rusconi, S., Croce, F. et al. (2015). Telemedicine for Africa: Collaborative Action between Italy and Swaziland against HIV Infection. *International Journal of Biology and Biomedical Engineering*, *9*, 90-97.
- Porges, S. W. (2018). *La guida alla teoria polivagale. Il potere trasformativo della sensazione di sicurezza*. Giovanni Fioriti Editore.
- Prezza, M., & Santinello, M. (2002). Conoscere la comunità. Il Mulino.
- Rajkumar, R. P. (2020). COVID-19 and Mental Health: A Review of the Existing Literature. *Asian Journal of Psychiatry*, *52*, Article ID: 102066.

#### https://doi.org/10.1016/j.ajp.2020.102066

- Rizzolatti, G., & Sinigaglia, C. (2005). So quel che fai. Il cervello che agisce e i neuroni specchio. Raffaello Cortina Editore.
- Rossi, R., Socci, V., Talevi, D., Mensi, S., Niolu, C., Pacitti, F. et al. (2020). COVID-19 Pandemic and Lockdown Measures Impact on Mental Health among the General Population in Italy. *Frontiers in Psychiatry, 11*, Article No. 790. <a href="https://doi.org/10.3389/fpsyt.2020.00790">https://doi.org/10.3389/fpsyt.2020.00790</a>
- Rubin, G. J., & Wessely, S. (2020). The Psychological Effects of Quarantining a City. *British Medical Journal*, *368*, m313. <a href="https://doi.org/10.1136/bmj.m313">https://doi.org/10.1136/bmj.m313</a>
- Schleider, J. L., Dobias, M. L., Sung, J. Y., & Mullarkey, M. C. (2020). Future Directions in Single-Session Youth Mental Health Interventions. *Journal of Clinical Child & Adoles*cent Psychology, 2, 264-278. https://doi.org/10.1080/15374416.2019.1683852
- Schwartz, G. E. (1982). Testing the Biopsychosocial Model: The Ultimate Challenge Facing Behavioral Medicine? *Journal of Consulting and Clinical Psychology*, *50*, 1040-1053. https://doi.org/10.1037//0022-006X.50.6.1040
- Selye, H. (1971). Hormones and Resistance. Springer-Verlag. https://doi.org/10.1007/978-3-642-65192-2
- Selye, H. (1974). Stress without Distress. JB Lippincott Co.
- Shah, K., Bedi, S., Onyeaka, H., Singh, R., & Chaudhari, G. (2020). The Role of Psychological First Aid to Support Public Mental Health in the COVID-19 Pandemic. *Cureus*, 12, e8821. https://doi.org/10.7759/cureus.8821
- Siegel, D. J. (2007). *The Mindful Brain: Reflection and Attunement in the Cultivation of Well.* W. W. Norton & Company.
- Thayer, J. F., Ahs, F., Fredrikson, M., Sollers, J. J., & Wager, T. D. (2021). A Meta-Analysis of Heart Rate Variability and Neuroimaging Studies: Implications for Heart Rate Variability as a Marker of Stress and Health. *Neuroscience & Biobehavioral Reviews*, 36, 747-756. <a href="https://doi.org/10.1016/j.neubiorev.2011.11.009">https://doi.org/10.1016/j.neubiorev.2011.11.009</a>
- Viorst, J. (1986). Distacchi. Frassinelli.
- Walsh, F. (2003). Family Resilience: A Framework for Clinical Practice. *Family Process*, 42, 1-18. https://doi.org/10.1111/j.1545-5300.2003.00001.x
- Williams, J. M., Barnhofer, T., Crane, C., Herman, D., Raes, F., Watkins, E., & Dalgleish, T. (2007). Autobiographical Memory Specificity and Emotional Disorder. *Psychological Bulletin*, 133, 122-148. <a href="https://doi.org/10.1037/0033-2909.133.1.122">https://doi.org/10.1037/0033-2909.133.1.122</a>
- Wolpe, J. (1969). The Practice of Behavior Therapy. Pergamon Press.
- World Health Organization (1946). *Constitution.* <a href="https://www.who.int/governance/eb/who">https://www.who.int/governance/eb/who</a> constitution en.pdf
- Xiang, Y. T., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T. et al. (2020). Timely Mental Health Care for the 2019 Novel Coronavirus Outbreak Is Urgently Needed. *The Lancet Psychiatry*, 7, 228-229. <a href="https://doi.org/10.1016/S2215-0366(20)30046-8">https://doi.org/10.1016/S2215-0366(20)30046-8</a>

## Appendix A

## SIMP for Italy: Psychoeducation Protocol with Psychosomatic Orientation

Individual online intervention to control of emotions related to COVID-19 Protocol devised by Greg Crosby, MA, LPC, ICGP, FAGPA.

Adaptation of the Protocol and Guidelines: Italian version by the SIMP Board of Research Directors.

The three levels of psycho-education of the protocol:

- Level 1: Online transmission of information (meeting). Very useful for a rapid spread of information.
- Level 2: online group training sessions (lessons, group processes, problem solving with indications on how to use abilities)
- Level 3: Transformation (a shift in awareness of how to approach problems)
  Definition of Psycho-Education based on Transmission (meeting):
- It is structured around a defined problem
- The leader is active and gives directions
- Promotes equilibrium through rules, abilities and information, given that there is a need to face the adversity caused by health current health concerns.
   Why are these meetings helpful?

They are helpful because:

- Knowledge gives power
- The presence of universal aspects in any given problem
- A sense of belonging is fostered "We are in this together"
- The approach is not threatening: "You are being given new information and this makes it easier to try new ideas"
- The size of the groups can vary from few members to thousands.

### Guidelines of the "SIMP FOR ITALY" Intervention

- To whom is it directed: it is intended for health care workers who were directly involved in the health care interventions during the Covid-19 emergency, personnel in aged care institutions, ambulance staff, anyone involved in front-line health care, the general public.
- Duration of the intervention: from two to a maximum of four meetings at fortnightly intervals. The length of each meeting is 45 minutes.
- On-line systems: teleconsulting platform, Skype, FaceTime, Zoom, video calls via whatsApp.
- Objectives: psycho education and the stabilisation of emotional states to contain and prevent effects of traumatic events.
- To reinforce resilience.

The principal three phases of each on-line meeting:

1) Welcoming phase: introduction and empathetic listening to concerns specifically tied to the Covid-19 pandemic that has induced the caller to contact the service.

2) Transmission of abilities and skills

Seeking, discovering and reinforcing personal abilities to help deal with the triggers in the present moment

3) Closure phase: summing up and verification of the results of the online meeting, followed by instructions on how to proceed, based on what has been learned.

## 1. Welcoming Phase

1) Introduction to the caller who, of their own volition has contacted the staff of SIMP.

During a preliminary interview it is established that the caller has the requisite qualities to be part of the study sample. Requests regarding pathologies that are not "pandemic stress" related are not accepted. In this case, the SIMP staff direct the caller to the relevant services available in the area.

Following the interview, the therapist fills in an acceptance form regarding the program that has been decided upon. This will take place according to the methods described in this protocol

- 2) The SQ scale questionnaire is completed (starting point) and the therapist asks the caller to sign the Unimi form for authorisation to use personal information and the information sheet regarding the participation in the research project. (Both forms must be signed before beginning online consultations)
- 3) The presentation of the service offered and the therapist must show competence and empathy.
- 4) Empathetic listening to the request, which must be specific to the emotions and worries engendered by the Covid-19 pandemic.
  - 5) An explanation of the aims and objectives of the project.
- 6) The focus of the intervention is defined with regard to the problems presented.

Mission of the intervention

- Explain the aim of this intervention; for example "there is a need to manage the emotions and worries tied to the coronavirus"
- Make it clear that the intervention is based on learning new skills and understanding information aimed at increasing the ability to regulate emotions.
   Objective of the intervention:
- Identify the worries, dysfunctional emotions and the resources
- Understand which tools are useful for the individual to help manage emotions and worries
- Develop a plan for how skills and resources can be developed and maintained.

## 2. Phase during Which Abilities and Skills Are Taught

#### Guidelines for daily care

Seeking, identification and reinforcement of personal resources to deal with the triggers of the present moment.

#### General aims

- Focus on methods for managing the limits imposed by "quarantine" at home.
- Encourage the caller to stay in contact with friends and family (contacts and relationships)
- Establish a plan for limiting time spent on news consumption.
- Avoid overwork and over excitement

The intervention focussed on:

- Timetabling and daily planning
- Grounding through breathing exercises (creating a base)
- Pleasant activities
- Diet, food planning and cleaning
- Physical exercise
- Managing a tendency to postpone activities
- Care and maintenance of social network
- Sleep hygiene

## Guidelines for daily hygiene: organising time

- Suggest the organisation of a daily timetable (calendar, planner, telephone, computer etc.)
- Choose a time in the day for planning and in that way manage the daily rhythm
- Check your planner three times a day
- Focus on the time an activity begins, not on deadlines
- Add in behavioural activities, such as; pleasant activities, physical activities, volunteer work, time with family or friends, healthy eating habits etc as a way of managing moods better.
- Plan for the start of each activity to avoid a tendency to delay
- Identify tasks according to the time they begin

## Examples

- playing games
- making plans for the house
- cooking together
- doing something pleasurable together
- make a daily plan for the activities you want to do that day
- tidy up
- eliminate unnecessary objects and clothes, clear the house

## Guidelines for daily hygiene: evaluate the characteristics of sleep

- do you sleep well?
- how many hours do you sleep?
- what are your habits in the evening?
- have you any illnesses that disturb your sleep?
- hints for modifying bad habits that are an obstacle for sleep.

## Guidelines for daily hygiene: exercise thankfulness

- exercise thankfulness through stories
- be aware of the judgements you make of others

- learn Grounding skills (creating a base)
- stay connected

## How do you feel right now?

- administer the scale of Subjective Units of Distress (SUD). It subjectively evaluates the level of anxiety and negative feelings on a scale of 1 to 10: where 10 is high and 0 is low.
  - (first application of the scale) (during each meeting, before doing the exercises)
- Thanks to the answers given, the Objective Scale of Well-being Is compiled by the therapist (first use of the scale)(at each meeting before doing the exercises)

# Guidelines for daily hygiene: learning grounding and mindfulness techniques

- a) Demonstration of Grounding (establishing a base)
- Evaluate your mood before Grounding
- Remember to keep your eyes open during Grounding
- Concentrate on the exercises
- Count the chairs in the room
- Note the colours in the room
- Count the books, the windows and the curtains in the room Types of Grounding
- Mental Grounding
- Physical Grounding
- Reassuring Grounding
  - b) Demonstration of Breathing Techniques
  - Breathing from the abdomen is used to help with relaxation:
- Put your arms behind the chair for two minutes, then your hands behind your head for two minutes, in a comfortable position, while breathing from your abdomen.
- Lungs increase capacity by 10%.
- Remember that as the abdomen expands and seratonin is is released in your body

## Grounding-mindfulness: other experiences

For example:

- Move your toes
- Run fresh or tepid water over your fingers
- Touch different objects, noting if they are rough or smooth, warm or cold.
- Push your heels into the floor
- Practice abdominal breathing

Other examples:

- Touch pets or soft toys
- Do stretching
- Do physical exercises
- Dance, if it is possible.
- Create a list of songs, cities, animals or TV programs. Choose one or two

topics.

- Describe an activity in detail, for example a meal you have prepared. Describe the procedure: "I collected the ingredients, boiled the water, chopped the ingredients..."

## Grounding-mindfulness: how to continue to develop abilities and skills

- Do Mindfulness and breathing exercises daily
- Note which methods work best
- Limit negative sensations as soon as they arise
- Think of the reasons why specific grounding skills work for you
- Develop trust, a sense of security and hope
- Think of situations in the past when you have experienced these qualities or resources (bring them to mind/anchor yourself)

Develop resources and skills that are:

- Simple
- Realistic
- Achievable

## Guidelines for daily hygiene: internal and external resources

- Identify a simple, pleasant, realistic and achievable activity to suggest
- Make a list.
- Choose a date and time to do the activity
- Have a back-up time in case the activity is not completed
- Note how pleasant the activity is at the time. Write a list of the pleasant aspects of the activity such as your favourite colour or music etc.

## Practice loving kindness and reassurance

- Try saying kind things to yourself as if you were a teacher speaking to themselves "You can get over this". "You are a good person who is going through difficult times".
  - "It is just a moment in time, lit will pass. Don't lose courage and keep going". "You can do it".
- Think of favourite perfumes, films, people, colours and animals.
- Chose a favourite positive phrase to use when facing problems. I can get through this. I can face adversity. This will pass.
- Remember a story, a song, a quotation an image or a colour that you find reassuring
- Imagine yourself doing something in the future; learn to enjoy art, doing a
  project, connecting with other people. Visualise yourself after having faced
  this adversity in health and moved beyond it. Use your strong points to your
  advantage.
- Identify and acknowledge something that has happened during the day for which you are thankful.
- Put thankfulness into practice by phoning or writing to a friend or family member, thanking them.
- Thankfulness increases self-esteem, serenity and connection with others.

It diminishes anger and depression.

## 3. Closure Phase: Summary and Assessment of the Meeting

Write three things that will stay with you, help you and be of use to you after this meeting.

How does your body feel now?

- Re-evaluate your negative sensations now on a scale of 1 to 10 to gauge if, at the end of the session, your score has gone down (second administration) (at the end of each meeting). The daily practice of Grounding (establishing a base) can be a useful addition to your daily planner.
- Through your replies, the therapist will be able to fill in the Well-being scale (second application) (at the end of each meeting)
- Set up a further appointment with the therapist

## The last meeting

- Answer the questionnaire of the SQ to verify any changes (second and final application)
- Assess the results obtained together with the therapist.