#### Editoriale

### CoViD-19 and stress in the pandemic: "sanity is not statistical"

# CoViD-19 e stress da pandemia: "l'integrità mentale non ha alcun rapporto con la statistica"

#### MASSIMO BIONDI1\*, ANGELA IANNITELLI2

\*E-mail: massimo.biondi@uniroma1.it

<sup>1</sup>Department of Neuroscience and Mental Health, Sapienza University of Rome <sup>2</sup>Italian Psychoanalytical Society (SPI) and International Psychoanalytical Association (IPA)

**SUMMARY.** CoViD-19 pandemic is causing serious consequences on mental health, consequences that are considered that bad that the World Health Organization has affirmed that mental health defence is priority in this particular moment of development of pandemic. In light of this alertness, what we are interested in approaching in this work, is the specific stress condition caused by pandemic, which underlies and precedes the described classification of diseases and which is going towards an increase in the entire world, including Italy. The stress caused by pandemic is a new condition in comparison with what is known in clinical practice and with what is included in the classification of mental disorder. The ongoing stress condition and the mixture of different types of unconventional stress, which not only hits the present but also disrupts the future, create an entirely new form of clinical condition given by pandemic.

KEY WORDS: CoViD-19, SARS-CoV-2, coronavirus, Italy, stress, mental disorders, well-being.

RIASSUNTO. La pandemia da CoViD-19 sta provocando delle conseguenze sulla salute mentale così gravi da spingere l'Organizzazione Mondiale della Sanità ad affermare che la tutela della salute mentale è la priorità assoluta in questa fase dell'evoluzione della pandemia. Alla luce di questa allerta, ciò che ci interessa affrontare in questo lavoro è la condizione specifica di stress da pandemia che sottende e precede i quadri nosografici descritti e in aumento in tutto il mondo, compresa l'Italia. Lo stress da pandemia è una condizione del tutto nuova rispetto a quanto a noi noto nella pratica clinica e descritto nelle classificazioni dei disturbi mentali a causa di uno stato di una miscela di stress non convenzionale, che non colpisce solo il presente ma dissesta il futuro, fanno dello stress da pandemia una condizione clinica del tutto nuova.

PAROLE CHIAVE: CoViD-19, SARS-CoV-2, coronavirus, Italia, stress, disturbi mentali, benessere.

«He fell asleep murmuring "Sanity is not statistical", with the feeling that this remark contained in it a profound wisdom»<sup>1</sup>. These are George Orwell's words through the character of Winston in 1984, the dystopian novel in which the author describes an atmosphere which is very similar to what we are living at the moment during the CoViD-19 pandemic. As always, when words do not correspond to things, the uncanny lurks in our minds and thoughts agonize.

#### **PANDEMIC STRESS**

CoViD-19 pandemic<sup>2</sup> started in Wuhan, China, in October 2019 and has seen its first cases in Italy in January 2020. It has caused not only deaths and infections (today, May 12th 2020, there are 4.088.848 infected and 283.153 deaths in the world; 221.216 infected and 30.911 deaths in Italy), but also consequences on mental health, which are considered that bad<sup>3</sup> that WHO has affirmed that mental health defence is priority in this particular moment of development of the pandemic<sup>4</sup>. The aim of this essay is to reflect on the *specific stress condition caused by the pandemic*<sup>5</sup>, which underlies and precedes the described classification of diseases and which is going to-

wards an increase of factors such as anxiety, depression and sleep difficulties in the entire world, including Italy<sup>6-8</sup>.

The stress caused by the pandemic is a new condition in comparison with what is known in clinical practice and with what is included in the classification of mental disorder (DSM-5)9. It is in fact not a disorder given by post-traumatic stress, which instead seemed to be present before the onset of CoViD-1910. It is not a similar stress to the ones we can encounter as a result of extreme events described in diagnostic manuals, such as natural disaster traumas<sup>11</sup>. The stress caused by the pandemic is an individual and collective stress, it is "unconventional", discontinued, subacute, persistent, provoked by a stressful, consistent and uncanny situation, that can evolve in devious ways (second peak?) and that develops throughout different phases. Starting with an acute stress (warning), it leads to a consequent chronic stress, which is characterized by the effort to adapt to the mortal risk of infection and which results in both a psychosocial and an economic effort to resist the lockdown situation first, and, consequently, in the effort to manage damages before and after the pandemic. The ongoing stress condition and the mixture of different types of unconventional stress, which not only hits the present but also disrupts the future, create an

#### Biondi M. Iannitelli A



Figure 1. *Defenses against epidermics: 1575 and 2020.* Photo by Massimo Biondi.

entirely new form of clinical condition that originates from the pandemic.

#### **LAWS OF PSYCHIC**

The knowledge of the "laws of psychic" which rule thoughts, emotions and behaviors, can be very useful in normal life. However, their knowledge during the CoViD-19 pandemic means that we possess the necessary instruments to feel our proper internal reality and our experiences in order to better organize our lives, to prevent us to put ourselves at risk, to better deal with suffering moments and, finally, to rebuild everything.

Hundreds of researches on human stress have studied the adaptive responses to both the individual events (life stress events and traumas) and the ones related to communities (disasters and destructions)<sup>12,13</sup>, discovering 'average' responses in populations and, by contrast, a variability which depends on the history of the subject, therefore the different weight that this situation and other factors have had in the life of each person, such as risk factors, protective factors, different styles in the response, in the behavior or in the thoughts, according to which the stressful situation can be positively faced or sometimes even become harmful to the subject.

The important data is that 'preparedness', therefore the attitude with which we deal with the stressors and the resilience of the individual and the community, can be learnt, improved and enhanced in order to face crisis moments, not

only during the lockdown, but also during the re-opening of activities and throughout the coexistence with the virus SARS-CoV-2, the so-called phase two, in which we have all entered recently.

#### CoViD-19 STRESSORS

There are at least three stressors' sources connected with CoViD-19:

1. The Pandemic. December 31st 2019, the World Health Organization (WHO) was informed of the discovery of a pneumonia whose origin is unknown and which comes from the region of Wuhan, in China. January 30th 2020, WHO declares the existence of an international state of emergency of public health, announcing, on February 11th 2020, the name of the new disease by coronavirus: CoViD-19. The worldwide progressive spread of the disease leads the WHO to declare the pandemic on March 11th 2020. The condition of pandemic is prefigured as a stressor since it results in an invisible threat (droplets), which involves the risk of developing a disease with sudden onset, rapid development and not quite easy to manage in specific cases, with death for pneumonia but also death in connection with the involvement of other organs. Pandemic is a word that we have so far used in its medical definition, leaving behind its geopolitical sense, which instead is very important in a wider understanding not only of the global movement of the virus, but also of its consequences post-vaccination. This in order to permit the right commitment of the psychiatrics in treating both the present and not only the "near future" in such situation 14,15

2. 'Infodemic', a neologism coined by WHO during the CoViD-19 pandemic, which indicates the excessive information of media, a proper infection of information with mostly distressful and terrorizing content, even contradictory most of the time<sup>16</sup>.

3. The lockdown. A collection of measures adopted by the government (in Italy the lockdown started the evening of March 9th 2020) in order to prevent and limit the CoViD-19 infection. The "social distancing" and the block of all those activities that are not fundamental for our lives have been like a "cannon shot" (The Barber of Seville, Rossini) in the life of each person, with a disruption of world's reality and with a fracture on the continuity and "normality" of life<sup>17</sup>.

#### STRESS CAUSED BY CoViD-19

By dealing with these stressors, which are to be considered unexpected, traumatic and above all concerning all human beings, meaning that they can affect anyone regardless their social, political and cultural differences, men and women have a physical and psychical reaction, which helps them adapt to the changes of the environment in which they live in order to face the new condition and resist to it. As a consequence to the infection from CoViD-19, men and women respond by going through the common phases of response to stress, but with specific aspects related to the pandemic.

The first phase, which usually, at least during its clearest expressions, lasts between 1 and 6 months, is initially characterized by disbelief for what is happening ("who would have said, "after all I have been through, I wouldn't have thought I had

#### CoViD-19 and stress in the pandemic: "sanity is not statistical"

to live this moment as well") and by underestimation of what is said and lived ("it is the usual flu, just a little heavier", "everything will be fine"). But when reality shows itself in its unavoidable rawness (sick people who die without even the caress of their loved ones, the faces of the healthcare professionals with the signs of fatigue and pain, hundreds of coffins taken away by the army trucks), disbelief translates into fear and anxiousness, with the possibility of developing situations of enormous anxiety<sup>18</sup>. Anxiety especially, which in some people becomes terror, is reinforced by the consciousness of the lack of a specific cure or by the experimentation of health remedies learnt step by step during the acknowledgment of what the nature and the history of this disease are (the plasma of the infected people that have been cured, the plasma of lamas in Peru, medicines used for the Ebola or the malaria treatment, antiviral but only during the first part of the illness, the testing of medicines, even though most of it failed) and by the long wait for a vaccine to be developed to the stage at which it is ready<sup>19</sup>. Moreover, the new consciousness regarding the unpreparedness of the health system and of the population in dealing with the virus, the void or poor knowledge concerning the modalities to overfill the virus, the experts' opinions on how to face the disease, predictions and cures, all in contrast with one another, give account to the right of being scared. In the end, the only preventive behavior is the medieval quarantine, the same one used in 1347 to fight the plague that came from Mongolia, in 1630 to fight the one coming from Siberia and in 2020 to fight CoViD-19 from China.

The response of alarm and the feeling of fear become, therefore, the only two possible active functions in both the individual and the community which, once more in a defensive way, respond with an apparently spontaneous dimension of help and sharing ("o panar", which is a typical expression in Naples to indicate a basket full of food, becomes, during the pandemic, a supportive basket: "who can give, gives, who can't give, can take"; supportive moments of singing from windows and balconies of the cities), which is well connected with the concern of the development of the disease ( the daily waiting of the press release at 6 pm by the Civil Protection) and the first emergency measures. These represent the first responses from both an individual and a collective spirit of adaptation, embryos of a temporary individual social and economic organization.

During the acute phase it is important to use protective remedies. For example, it is protective to live in a safe place, to have food, a cover and "a roof over the head". It is a form of protection to have an idea of what is going on in order to well manage what is happening in real life. It is therefore important, during these first weeks, to maintain a connection with other people (connectedness), such as a partner, a group, a family or a community. The use of technologies<sup>17</sup> helps shorten the social distancing, with activities that can be carried out in specific safe spaces, such as gymnastics, work, medical treatment and also psychotherapeutic and psychoanalytic activities. Another protective element stands in having a reason to resist and survive such moment.

It is clear that in these first months everyone of us has responded thanks to the psychic resource possessed. It is important to remember that it is possible to respond to the situation by accepting such situation. This means to respond to the particular moment by adapting ourselves to it, but also by reacting and wanting to rebuild our own life, by envisaging a project of a possible future and by always cultivating hope<sup>12</sup>.

This phase corresponds to the vital necessity of satisfying the needs. Men and women initially search for safety for themselves and for their relatives, a safety that is built on the basis of information given by experts and by mass media, even if not always unanimous, but also by an embodied knowledge, both phylogenetic and ontogenetic of which our body has memory. Moreover, safety is requested and has to be satisfied by central and local authorities (governance), whose aim is to guarantee such security to all citizens with clear, comprehensible, feasible and true indications.

In this phase, men and women try inventing strategies in order to cope and adapt themselves to the situation through a new idea, never experimented before, with new capacities of listening to one another and to respond to each ones' emotions, therefore *a new approach to problem solving*. They discover themselves while building and enhancing the individual and collective resilience and, in the worse situations, creating for themselves a new way of dealing with the loss of relatives and friends or with an economic loss, heading towards the need to recuperate the possibility of a new future and a possible return back to normality<sup>20</sup>.

So, the way out of the pandemic, which is the main goal of the first phase, can be pursued by the use of two instruments, both based on resilience: the first one, on an individual level, consists in building thoughts and behaviors of attention towards ourselves and other people too; the second one, on a collective level, relies on the acceptance of collective behaviors and actions, such as the lockdown and other measures taken by the national and local authorities<sup>21</sup>.

During the pandemic, the health workers, apart from the general stress, experience many specific types of stress, such as the fear of being infected and die, mostly if they already had some particular health issues, and the fear of infecting their beloved ones. They experience the stigma of being considered the ones carrying the virus; the need to respect certain specific and strict measures and well regulated procedures which request a very high form of attention. They come across managing professional charges that are higher than normal and having a social support which is reduced. They experience impotence by seeing first hand failure in therapies or in the incorrect diagnosis of diseases and they reactivate the feelings linked to those experiences in connection with previous epidemics. They bear the anger towards the health authorities impotent and not prepared to face such crisis, towards the lack of an adequate protection, towards the work with new colleagues. The remedies for those workers are represented by the acceptance of such stressful experience, by respecting the basic needs (sleep, good food, exercise), by avoiding wrong strategies of coping (smoke, alcohol, drugs), by using strategies of coping that have been useful in other crisis' moments, by maintaining physical or virtual contact with other people through social media, by reducing the excessive emotional response, by asking for help if the stress is too hard to manage and by staying the course and building a new one<sup>22-30</sup>.

## THE ADAPTIVE PLASTICITY: A GREAT HUMAN RESOURCE

Once exceeded the first phase, the second one comes up, with a duration between 6 and 24 months. It is a phase charac-

#### Biondi M, Iannitelli A

terized by suffering, pain for the loss, for the ended relationships and also a loss from an economic point of view. In this phase, the acceptance of what has happened represents the first step for a second response of adaptation among the attempts of rebuilding our proper lives, responses that are creative, challenging, but that sometimes can even lead you to failure.

Remedies or resources throughout this phase are known. On an individual level, the so-called individual stress, factors of both success and failure are considered and come from psychobiology studies of stress. Researches on managing and responding to natural disasters, stress caused by trauma and post-traumatic stress (collective stress), provide guidelines for finding remedies for the communities. The remedy in this phase stands in the adaptive plasticity, a vital characteristic of the human mind.

During the years, humans have adapted to any critical and difficult condition in order to survive: extreme temperatures, plagues, destruction, cyclones, wars, genocide and life next to active volcanoes and in areas where earthquakes are repeated and destructive. Survival has been possible thanks to the adaptive plasticity which is characterized by innate abilities such as flexibility, resilience, creativity, adaption, hope, ability to affiliate, social behavior, know its own history, search for meaning, sense of belonging, desire to plan, commitment, inventiveness, faith.

The response to stress in this phase and its consequence on a physical and psychical level depends on the relationship between the perception of a threat and the possibility of managing such threat. If the perception of a threat is very high and the possibility of managing it is low, we will have a high level of stress with serious consequences on health. If, instead, the perception of threat is low and its management is sufficiently adequate, we will have a low stress condition. This "recipe of the theory of stress" helps us work in the stressful situations of the second phase, trying to lead thoughts in re-evaluating once again everything, in resizing and mitigating the objective perception of threat and enhancing everything that can improve the feeling of control. It is clear that the resources and possibilities of help in each person have a high inter-individual variability and they express themselves through an "individual resilience" and a "collective one". The distribution of such resiliencies follows a Gaussian curve: most people struggle but still resist to stressors, a minority confronts themselves but holds on (hardiness) and finally some people with a high level of vulnerability give in. The developments are therefore very different, they vary from one to another and have to be expected and accepted.

The remedies to overcome the second phase consist in developing and improving the techniques of coping, therefore in building thoughts and behaviors to face and exceed the critical moments, in maintaining and growing the social support with the community in which each person lives, both from an economic point of view and in terms of relationships, in promoting and developing the individual and collective resilience. The social support appears to be a fundamental variable as it has been proved in a research in which the health workers, engaged in assisting those who are infected by CoViD-19, have found benefit in this type of operation in order to reduce stress and anxiety and improve sleep difficulties<sup>31</sup>, which are very common during the lockdown<sup>32</sup> and inversely linked to the onset of post-traumatic stress symptoms<sup>33</sup>.

It is the government that needs to guarantee the minimum economic safety. The individual resilience can be improved by the enhancement of each person's resources; the collective resilience has to be protected through hope, solidarity and gratitude. Special care has to be given to those who are vulnerable, hence disabled people or those with previous mental health problems, and to the recognition of mental disorder, which is provoked by this situation and has to be treated with appropriate and immediate assistance. The education of health workers who treat mental disorder has to be adequate to this specific moment, thanks to learning techniques on resilience and through technological systems that can improve wellness<sup>34</sup>. Among these complex measures, both the press and mass media need to work in favor of a reachable future that can be shared and not encouraging the construction of a scapegoat ("Chinese virus pandemonium", "China kids stay home") on which convey the physiological feelings of rage<sup>35</sup>. The manifestation of anger, in the forms of self-directed and other-directed, will surely be an urgency in the near future. A research by Link Campus University of Rome, points out that in Italy, between 2012 and 2018, there have been nearly one thousand suicides for economic reasons. During the lockdown there have been 42 suicides and 36 attempts, which is a very alarming data considering the ones concerning the same months of the previous year, 14 in total. It is estimated that, in the future 10 years, the USA will count around 75.000 victims, classified as "desperation deaths", linked to the pandemic and involving suicides and deaths for drug abuse. It is therefore fundamental to put in place an immediate and solid preventive effort<sup>36</sup>. Together with these urgent topics, the maximum of our commitment, energies and the resources both of our country and of the world, must be directed to the young ones and to the teenagers of which nobody has spoken vet and that have silently accepted this lockdown in a particular phase of their lives: the age of development. It is during this age that being with the others, the first romantic love and the mistakes are fundamental and vital both for growing and for building an identity. A special attention needs to be directed to those boys and girls, enthusiastic and ready to enter the labor market and to whom the pandemic could take everything. And it would be a second pandemic of which the governance would be responsible<sup>37</sup>.

The aim of this second phase is to go back to a "new normality", treasuring what has happened and the silent listening felt during quarantine, which lasted 56 days. The adaptive instrument is represented by the psychic processes, by what is called psychic work, but concretely moving in the identification of specific actions, which are meant to be good for each situation. We need to build a constructive attitude and we need to be helped in doing this; we need to regain sociality, sense of community, solidarity and cooperation, characteristics that have already been tested during the critical and traumatic situation lived in the first phase of the pandemic. We need a global cooperation, as the WHO affirms.

It is fundamental to lead the mind to an existential view, this meaning that we need to focus on the significance of what we do, to develop a sense of belonging and to be part of a bigger project<sup>38</sup>. We need to rediscover the meaning of our history, of our family, of our group, community and of our country and find what links us to all of this, we must transfer the energy of rage towards sacrifices in order to recover; fix some

#### CoViD-19 and stress in the pandemic: "sanity is not statistical"

reachable goals to achieve and invest in the future<sup>39</sup>. The pain and the rage have to be accepted and expressed through a mixture of positive vibes and emotions, an individual work which can be facilitated thanks to the presence of others in order to get back to a "new normality", which still has to keep in mind the changes that this situation has brought, treasuring what we have learnt from all of this, such as the disorientation which has lead us to question many things. However, we need to bear in mind that the human being always expresses two opposite but inseparable forms of energy, a vital and erotic force which tends to the highest values of expression of men and women on earth, a force which leads to building ties during extraordinary feats (let's just think of the 2500 psychologists, psychotherapists and psychoanalysts that have volunteered under the coordination of the Ministry of Health and the Civil Protection Department and have enabled the construction of a network of Listening all over Italy, which also supports SSN, in order to recount the unease that Coronavirus has caused), and another ancient force, made of rage, of destructive projections and not at all adaptive. These two forces have to be linked in order to move together in the humanization process and, in this phase of the pandemic, need to work together towards the future not only of humanity but also of the world. Let's not miss this occasion.

#### **REFERENCES**

- Orwell G. Nineteen Eighty-Four. A novel. London: Secker & Warburg, 1949.
- Singhal T. A review of Coronavirus Disease-2019 (CoViD-19). Indian J Pediatr 2020; 87: 281-6.
- 3. Torales J, O'Higgins M, Castaldelli-Maia JM, et al. The outbreak of CoViD-19 coronavirus and its impact on global mental health. Int J Soc Psychiatry 2020; 20764020915212.
- Adhanom Ghebreyesus T. Addressing mental health needs: an integral part of CoViD-19 response. World Psychiatry 2020; 19: 129-30.
- Qiu J, Shen B, Zhao M, et al. A nationwide survey of psychological distress among Chinese people in the CoViD-19 epidemic: implications and policy recommendations. Gen Psychiatr 2020; 33: e100213.
- Rossi R, Socci V, Talevi D, et al. CoViD-19 pandemic and lockdown measures impact on mental health among the general population in Italy. An N=18147 web-based survey. medRxiv 2020.04.09.2005 7802.
- 7. Talevi D, Socci V, Carai M, et al. Mental health outcomes of the CoViD-19 pandemic. Riv Psichiatr 2020; 55: 137-44.
- Costantini A, Mazzotti E. Italian validation of CoViD-19 Peritraumatic Distress Index and preliminary data in a sample of general population. Riv Psichiatr 2020; 55: 145-51.
- American Psychological Association (APA). Diagnostic and Statistical Manual of Mental Disorders: Depressive Disorders. Arlington, VA (USA): American Psychiatric Publishing, 2013.
- Bo HX, Li W, Yang Y, et al. Posttraumatic stress symptoms and attitude toward crisis mental health services among clinically stable patients with CoViD-19 in China. Psychol Med 2020 Mar 27; 1-7.
- 11. Pfefferbaum B, North CS. Mental Health and the CoViD-19 Pandemic. N Engl J Med 2020 Apr 13.
- 12. Hobfoll SE, Watson P, Bell CC, et al. Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. Focus (Madison) 2009; 7: 221-42.
- Nielsen MJ, Ferguson S, Joshi AK, et al. Post-earthquake recovery in Nepal. Lancet Glob Health 2016; 4: e161.

- 14. Ursano RJ, Fullerton CS, Weisaeth L, et al. Textbook of disaster psychiatry. Cambridge: Cambridge University Press, 2017.
- 15. A.A.V.V. Il mondo virato. Limes 2020; 3.
- Dong M, Zheng J. Letter to the editor: headline stress disorder caused by Netnews during the outbreak of CoViD-19. Heal Expect 2020: 23: 259-60.
- Galea S, Merchant RM, Lurie N. The mental health consequences of CoViD-19 and physical distancing: the need for prevention and early intervention. JAMA Intern Med 2020 Apr 10.
- 18. Wang C, Pan R, Wan X, et al. immediate psychological responses and associated factors during the initial stage of the 2019 Coronavirus Disease (CoViD-19) Epidemic among the general population in China. Int J Environ Res Public Health 2020; 17(5). pii: E1729.
- 19. Guo YR, Cao QD, Hong ZS, et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (CoViD-19) outbreak an update on the status. Mil Med Res 2020; 7: 11.
- Chew QH, Wei KC, Vasoo S, et al. Narrative synthesis of psychological and coping responses towards emerging infectious disease outbreaks in the general population: practical considerations for the CoViD-19 pandemic. Singapore Med J 2020 Apr 3.
- Parmar D, Stavropoulou C, Ioannidis JPA. Health outcomes during the 2008 financial crisis in Europe: systematic literature review. BMJ 2016; 354: i4588.
- Petzold MB, Plag J, Strohle A. [Dealing with psychological distress by healthcare professionals during the CoViD-19 pandemia]. Nervenarzt 2020; 91: 417-21.
- 23. McLean S. A critical CoViD-19 metric: your ED staff infection rate. Acad Emerg Med 2020; 27: 341-2.
- 24. Bansal P, Bingemann TA, Greenhawt M, et al. Clinician wellness during the CoViD-19 pandemic: extraordinary times and unusual challenges for the allergist/immunologist. J Allergy Clin Immunol Pract 2020 Apr 4. pii: S2213-2198(20)30327-5.
- Sim K, Chua HC, Vieta E, et al. The anatomy of panic buying related to the current CoViD-19 pandemic. Psychiatry Res 2020; 288: 113015.
- 26. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to Coronavirus Disease 2019. JAMA Netw Open 2020; 3: e203976.
- Li W, Zhang J, Xiao S, et al. Characteristics of health worker fatality in China during the outbreak of COVID-19 infection. J Infect 2020 Apr 8. pii: S0163-4453(20)30158-4.
- Li Z, Ge J, Yang M, et al. Vicarious traumatization in the general public, members, and non-members of medical teams aiding in CoViD-19 control. Brain Behav Immun 2020 Mar 10. pii: S0889-1591(20)30309-3.
- Lima CKT, Carvalho PMM, Lima I, et al. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). Psychiatry Res 2020; 287: 112915.
- Huang JZ, Han MF, Luo TD, et al. [Mental health survey of 230 medical staff in a tertiary infectious disease hospital for CoViD-19]. Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi 2020;
  38: F001
- 31. Xiao H, Zhang Y, Kong D, et al. Social capital and sleep quality in individuals who self-isolated for 14 days during the Coronavirus Disease 2019 (CoViD-19) outbreak in January 2020 in China. Med Sci Monit 2020; 26: e923921.
- 32. Altena E, Baglioni C, Espie CA, et al. Dealing with sleep problems during home confinement due to the CoViD-19 outbreak: practical recommendations from a task force of the European CBT-I Academy. J Sleep Res 2020 Apr 4: e13052.
- 33. Liu N, Zhang F, Wei C, et al. Prevalence and predictors of PTSS during CoViD-19 outbreak in China hardest-hit areas: gender differences matter. Psychiatry Res 2020; 112921.

#### Biondi M, Iannitelli A

- 34. Maunder RG, Lancee WJ, Mae R, et al. Computer-assisted resilience training to prepare healthcare workers for pandemic influenza: a randomized trial of the optimal dose of training. BMC Heal Serv Res 2010; 10: 72.
- 35. Zheng Y, Goh E, Wen J. The effects of misleading media reports about CoViD-19 on Chinese tourists' mental health: a perspective article. Anatolia 2020; 31: 337-40.
- 36. Gunnell D, Appleby L, Arensman E, et al.; CoViD-19 Suicide Prevention Research Collaboration. Suicide risk and prevention
- during the CoViD-19 pandemic. Lancet Psychiatry 2020 Apr 21. pii: S2215-0366(20)30171-1.
- 37. Green P. Risk to children and young people during CoViD-19 pandemic. BMJ 2020; 369: m1669.
- 38. Biondi M. Pensieri terapeutici: alla ricerca di cio che cura in psicoterapia. Roma: Alpes Italia, 2015.
- 39. Corzine E, Figley CR, Marks RE, et al. Identifying resilience axioms: Israeli experts on trauma resilience. Traumatology (Tallahass Fla) 2017; 23: 4-9.