# COVID-19 pandemic: a note for psychiatrists and psychologists.

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# ABSTRACT

The negative psychological effects of epidemic and quarantine are well documented at short and medium term. It is to assume that in the post COVID-19 quarantine mental health professional will face a significant increase of requests for assistance. This paper aims to provide a handy tool for psychiatrists and psychologists to have a note of the consequences of the COVID-19 epidemic on people mental health.

Method. Literature on psychological effects of COVID-19 up to 13 may 2020 was revised, aiming to study the following topics: quarantine stressors, psychological response of the population and groups at greater risk (health workers, children, psychiatric patients). The major challenges posed to psychiatric care in China and in some European countries, including Italy, are also examined in this paper.

Conclusion. Studies report that quarantined subjects show anxiety, anger, depression and PTSD symptoms whit psychiatric patients at higher risk. Psychiatric Services were reorganized in all the countries to assure continuity of the care

Particular attention should be paid to surveillance in the post-pandemic of people and to the most fragile subjects.

Children who were separated from parents or whose parents died because of the quarantine should receive a psychological assessment and treatment.

# RIASSUNTO

Gli effetti psicologici negativi delle epidemie e della quarantena sono ben documentati in letteratura. Si ipotizza che nel post quarantena del COVID-19 psicologi e psichiatri dovranno affrontare un aumento significativo delle richieste di assistenza. Questo documento mira a fornire una sintesi utile delle conseguenze dell'epidemia di COVID-19 sulla salute mentale delle persone.

Metodo. Abbiamo fatto una revisione della letteratura sugli effetti psicologici di COVID-19, fino al 13 maggio 2020. L'obiettivo era approfondire alcuni temi: i fattori di stress da quarantena, la risposta psicologica della popolazione e dei gruppi a maggior rischio (operatori sanitari, bambini, pazienti psichiatrici), le principali criticità emerse nell'assistenza psichiatrica in Cina, in Italia e in alcuni paesi europei.

Gli studi documentano che i soggetti in quarantena mostrano ansia, rabbia, depressione e sintomi di DPTS che i pazienti psichiatrici hanno un elevato di 6

sviluppare disturbi o aggravarsi. I dati disponibili segnalano che servizi psichiatrici sono stati riorganizzati in tutti i paesi per assicurare la continuità delle cure.

Nel post-pandemia sarà necessario porre particolare attenzione al monitoraggio delle condizioni psicologiche dei soggetti più fragili.

I bambini separati dai genitori o i cui genitori sono morti a causa della quarantena dovrebbero fruire di una valutazione e un trattamento psicologico.

KEYWORDS Covid-19; Epidemic; Psychiatry; Psychology, Child

PAROLE CHIAVE Covid-19; Epidemia; Psichiatria; Psicologia; Bambino

#### INTRODUCTION

In the past years several forms of epidemics have developed over the world and researches have been carried out to study the psychological effects of quarantine.

These studies showed that negative psychological effects of an epidemic and a quarantine could develop in the short and medium term and identified the main challenges for psychiatric care during the outbreak and afterward (Brooks, S., 2020). It is to assume that in the post COVID-19 quarantine mental health professional will face a significant increase of requests for assistance.

Therefore, mental health workers need to be prepared to face the new coronavirus epidemic emergency.

From January 2020 up today, Chinese groups had published an increasing number of researches on psychological effects of COVID-19 outbreak; few reviews and commentary are available from Italy, GB and France, as well.

This paper aims to provide a handy tool for psychiatrists and psychologists to have a note of the consequences of the COVID-19 epidemic on people mental health. Key points, drawn from the available literature, will be listed.

#### COVID-19 PANDEMIC

The coronavirus pandemic spread quickly between late 2019 and early 2020: on 31th December, 2019, China officially informed that a disease characterized by severe lung impairment had developed in the city of Wuhan. On January 7, 2020, China identified the type of virus. On 11<sup>th</sup>March, WHO stated that a pandemic was ongoing due to the number of infections documented in many countries. The first Italian case occurred on 21<sup>th</sup>February and after 11 days(9<sup>th</sup>March, 2020), the Italian government decreed the lockdown. On 17 April 2020, the Official data from WHO reported 2,078,605 confirmed cases of COVID-19, including 139, 515 deaths over the world (WHO, 2020).

Coronavirus disease may be asymptomatic or presents mild symptoms and most people recover from the disease. Few patients develop serious pneumonia with difficulty breathing.

COVID-19 is highly contagious, a vaccine is not available, and treatments are experimental, currently the only way to avoid contagion is the social distancing. To mitigate the spread of the epidemic and reduce the number of deaths, most nations resorted to the quarantine. People were forced to stay at home and to use protective measures such as masks, disinfectants, and social distance. In China, in Italy and all over the world, millions of people have been subjected, or are still, in quarantine.

In China, patients with COVID-19 were isolated in hospital, whereas closecontacts and the frontline medical personnel were quarantined in hotel, all the residents were under lockdown during the peak of pandemic (Zhu, S., 2020).

### STRESSORS IN QUARANTINE

The term quarantine is often used as an umbrella term to name a range of forms of isolation. Brooks (Brooks S, 2020) underlined the differences between quarantine and isolation, she wrote "Quarantine is the separation and restriction of movement of people who have potentially been exposed to a contagious disease to ascertain if they become unwell, so reducing the risk of them infecting others. This definition differs from isolation, which is the separation of people who have been diagnosed with a contagious disease from people who are not sick."Chinese COVID-19 quarantine was a measure to protect public health, which involved a large number of subjects and large areas of the country.

The Lockdown "Is a situation in which people are not allowed to enter or leave a building or area freely because of an emergency, (Cambridge Dictionaryonline), it was ordered, for example, in response to terrorist attacks.

The lockdown due to epidemic is applied to the whole population, regardless of their health conditions (infected, potentially contagious, not-infected ones). People live in the home environment and maintain relationships with the family members living together; however, lockdown prevents population from going out home, from having large social interaction and working in group. Clearly, the lockdown might alter one's quality of life (Usher, K., 2020).

Consequences of the quarantine on people mental health have been studied for the Serious Acute Respirators Syndrome (SARS) and Middle East Respirator Syndrome (MERS). Most people suffered from anxiety, anger, depression, posttraumatic stress disorder symptoms, avoidance behaviours (Brooks S., 2020). At long term, in the post-quarantine for SARS, obsessive symptoms, avoidance behaviours (fear of social contact, of the crowds and people) and hand-washing rituals had been observed(Usher, K.,2020)

The stressor that have been identified during SARS, MERS, Ebola and pandemic flu are listed by authors: duration of quarantine, fear of becoming infected or infecting (family members or patients), prohibition to meet friends and relatives, lack of support for food, difficulties for continue regular medical care, lack of medical protective masks and products, inadequate social networking activities and a history of psychiatric illnesses, Additional factors which affect the people psychological status after the outbreak are: financial loss and the stigma for people who were been infected and their relatives, (Brooks, S., 2020; Wang, C., 2020, Usher, K., 2020). In particular, financial loss and be out of work are risk factors for suicide during a pandemic (Gunnell, D., 2020).

A major concern is the quality and quantity of given information about epidemic by media and governments. Receiving poor information or fake news increases the risk of psychological problems(Brooks, S., 2020), people who are following the news repetitively through media channels were at major risk for psychological distress, conversely to receive an accurate health information during outbreak decreased the risk for anxiety and depression, (Wang, C., 2020; Fiorillo,A.,2020). The effect of overexposure to potentially traumatic images by the media, following catastrophic events, have been documented in children and adolescents (Masten, A.S., 2012). The World Health Organization published an online-document: *Mental health and psychosocial considerations during the COVID-19 outbreak*. In this paper the WHO recommends:"Minimize watching, reading or listening to news about COVID-19 that causes you to feel anxious or distressed; seek information only from trusted sources and mainly so that you can take practical steps to prepare your plans and protect yourself and loved ones. Seek information updates at specific times during the day, once or twice. The sudden and near-constant stream of news reports about an outbreak can cause anyone to feel worried. Get the facts; not rumours and misinformation. Gather information at regular intervals from the WHO website and local health authority platforms in order to help you distinguish facts from rumours. Facts can help to minimize fears."

# Key points

- It has been shown that negative psychological consequences result from epidemics and quarantine at short and long term.
- It can be assumed that many stressors play a role in quarantine: a) the types of containment measures, ie isolation, quarantine or lockdown; b) duration of the lockdown/isolation (> two weeks); d) the age; b) being infected-case or potentially contagious; c) being health-care workers; e) being in a condition of physical, mental or social fragility,
- Information about epidemic and quarantine should be given with caution and paying attention to quality.

# GENERAL PEOLPLE SURVEYS

Psychological impact of COVID-19 outbreak on adults was assessed in 1210 subjects living in 194 cities in China through an online survey, using the Impact of Event Scale-Revised (IES-R) and the Depression, Anxiety and Stress Scale (DASS-21). Results showed that half of the respondents rated the psychological impact as moderate-to-severe, about one-third reported moderate-to-severe anxiety. Depressive symptoms were reported by 16.5% of the sample (Wang C., 2020)

A large survey evaluated the COVID-19 Peritraumatic Distress Index (CPDI) in 52730 SS from China, Hong Kong, Macau and Taiwan (Qiu, J., 2020). Data showed that 35% of the respondents experienced psychological distress and higher levels of stress were related to: gender (females); age (to be aged between 18-30 and above 60); to be migrant workers; to live in some regions of China (due to the rate of affected people) and to have a higher education (due to high self-awareness of their health). The authors speculated that the stress in young adults was higher in those who sought more news on Internet.

A research (Zhu 2020) compared mental health status of a sample of Chinese (n.1443) who were subjected to different types of quarantine (i.e., 206 close-contacts and 320 frontline medical personnel under hotel-quarantine, and 917 public residents under home-quarantine), with a group of 836 SS without quarantine (i.e., 538 non-frontline medical personnel and 298 community support workers). Data were gathered through a mobile app used for administering (M)

standardized tools for anxiety and depression. Results showed no significant difference between participants with and without quarantine and that the screening-positive rate for anxiety and depression were significantly associated with impacts on daily life, but not the variable of with/without quarantine or different-group.

Results suggested that the changes in daily life, more than quarantine itself, produced a risk for anxiety and depression, in the observed samples.

This hypothesis requires caution and needs to be confirmed by further studies. The authors speculated that awareness of the need to remain isolated, to protect one's health, helps people to tolerate quarantine. It is quite likely that the quality of information received from the Government and way in which any Country manage to explain the reasons for the imposed limitations can affect the degree of stress.

The prevalence and severity of psychological distress within patients newly recovery from COVID-19 infection, individuals under quarantine, and the general public, was assessed in 205 subjects (Zhang, K., 2020).Patients who have been affected with COVID-19 showed highest scores of all participants for depression. It is to note that general population scored higher in anxiety and depression than quarantined ones.

Psychological consequences for isolated people due to contact with infected patients was studied in Korea on a sample groups during MERS (Jeong, H., 2020). Participants (1,656 SS. not-MERS cases) had been isolated for 2-week, stayed with family at home and very few stayed in the hospital. Data show anxiety symptoms (7.6%) and feelings of anger (16.6%) during the isolation period. At four to six months after release from isolation, the percentages of anxiety symptoms and feelings of anger decreased; anxiety symptoms were at 3.0% and feelings of anger at 6.4%. Subjects at major risk for an anxiety and anger at four to six months after release suffered from symptoms related to MERS during isolation, received inadequate supplies (food, clothes, accommodation), had poor social networking activities or history of psychiatric illnesses, and financial loss. For patients with psychiatric illnesses, the risk for anxiety and anger was higher at four six months.

On March 2020, a research was carried on in Italy to evaluate psychological response to the COVID-19with standardized tools and ad hoc questionnaire (Mazza, C., 2020). Among 2766 responders, 67.3% scored a high range for depression and the 81.3% scored a high range for anxiety. Results showed an increased percentage of people with high and very high levels of distress compared to the European epidemiological statistics Risk factors for distress. Risk factors for distress were: female gender, negative affect. Risk factors for depression and anxiety were: having a history of stressful situations and medical problems raised. Further stressors were: having a family member infected, being young in age and the need to continue to go outside home for working.

Part of the aforementioned studies was carried out while the quarantine was ongoing. there are several outstanding issues. The first question is: are anxiety and depressive symptoms related to the normal response to stress (Goldberg, J.F., 2020) and are they adaptive? We have some data relating to MERS and SARS which indicated that a percentage of the symptoms tended to persist or hesitated in a mental disorder. The second question is: what are the protective factors for people mental health during an epidemic? Could quarantine (i.e. isolating in the family environment and protect from the dangerous outside

world) be a protective factor for mental health, given that some research finds less anxiety in quarantined subjects than in the general population?

Further studies and long-term assessments are needed to answer these questions.

Key points

- Stress-related symptoms in general population have been observed in subjects who undergone quarantine for epidemics.
- Anxiety, depression, PTSD symptoms have been documented in Chinese samples, during COVID-19 quarantine
- Further studies and long-term assessments are needed

# HEALTH WORKERS

The COVID-19 is highly contagious, the infection spreads rapidly and the number of people in need of intensive care is very high. Hospital staff and Healthcare workers are exposed to high stress due to the risk of being infected and to respond to heavy workload. The major stress is related to the absence of specific therapies for COVID-19, and this produces a feeling of helplessness in doctors and nurses. Most of them are forced to live isolated to protect families from the virus. For all this reasons health care professionals are at risk of high levels of stress, anxiety, depression, burnout, addiction and post-traumatic stress disorder" (El-Hage, W., 2020) During the COVID-19 outbreak, medical health workers had a high prevalence of insomnia, anxiety, depression, somatization, and obsessive-compulsive symptoms (Lai, J. 2020).

In the early stage of the COVID-19 a study (Dai, Y., 2020)evaluated the risk perception and psychological status of 4,357 healthcare workers (Doctors, Nurses, Technicians and Support staff), most of them living in Hubei region. The 39.1% of the participants had psychological distress, 40% of frontline workers - mainly in Wuhan - expressed very worried about getting infected, about two-thirds of the whole sample was worried about the risks of infection (of colleagues and families) and about protective measures. It is to note that a consistent number of healthcare workers referred to be concern about medical violence.

Among a sample of medical and nursing working in Wuhan, more than one third was reported as having mental health disturbances, one third had mild disturbances, about 20% had moderate disturbances, and 6.2% had severe disturbance in the immediate wake of the viral epidemic. Psychological information and psychological help had been used by about a third of the participants (Kang L., 2020).

Key points

- Medical health workers might show a higher prevalence of insomnia, anxiety, depression, somatization, and obsessive-compulsive symptoms in compared with nonmedical health workers, as demonstrated for MERS.
- Psychological help is needed for health workers during an epidemic

### PSYCHIATRIC PATIENTS

The risk for mental health of psychiatric patients during pandemic and after quarantine has been described for the MERS (Jeong, H., 2016). As regards the consequences of COVID-19 quarantine, the knowledge is scarce, probably due to the short time since the beginning of the COVID-19 outbreak.

A Chinese study assessed the psychological impact on a sample of psychiatric patients compared to controls. Standardized tools were administrated during strict lockdown for COVID-19. Patients showed higher score for anxiety, depression, stress, impulsivity and suicidal ideation and insomnia. About 40% of psychiatric patients reported PTSD-like symptoms (Hao, F., 2020)

Editorials and commentary from China, France, GB and Italy showed alarm and concern about the consequences of COVID-19 on the health of patients affected by mental problems, regret for the lack of attention to this issue and recommended to adapt psychiatric assistances and produce researches on the topic (Fiorillo, A., 2020, Holmes, E.A, 2020; Yao, H., 2020). The Italian Society of Psychiatry published an appeal to protect patients and mental health workers. (SIP-online)

### Impact of epidemic on psychiatric assistance.

Psychiatric patients can more easily contract the virus. In a major psychiatric hospital in Wuhan 300 Chinese patients with psychiatric disorders were diagnosed with the COVID-19, as well a large number of mental health professionals, (Xiang, Y.T., 2020).

Several studies documented the extent of the impact of COVID-19-epidemic on psychiatric care, highlighted the critical issues and recommended special interventions for people with a history of psychiatric illness.

Literature listed several criticisms (Chevance, A., 2020; Yao, H., 2020). First, the patients suffering from mental health disturbances are more susceptible to infections because they are little awareness of risk, and they are not careful regarding personal protection. Second, mental health disorders are frequently associated to comorbidities making the treatment more challenging and potentially less effective. Moreover, the stress resulting from all the limitations and rules imposed by the epidemic could affect the patient's mental state and cause a relapse, worsening or switch-ona psychopathological condition (Goldberg, J.F., 2020; Yao, H., 2020). The isolation can hinder access to the normal psychiatric care programs for out-patients and psychiatric care for inpatients might be difficult to care, due to protection measures. Finally, once infected, people with mental disorders can be exposed to more barriers in accessing quickly to health services. Two critical issues have been reported for psychiatric assistance; the difficulty in ensuring continuity of care due to the lockdown; and the need to protect psychiatric patients and mental-health teams from getting infected. Some authors pointed out that the lacking infectious disease preparation of psychiatrists could constitute an obstacle to identify patients who need to be isolated (Xiang YT., 2020). A study (Shi, Y., 2020) showed that the attitude towards psychiatric patients in a sample of Chinese psychiatrists and nurses was a willingness to care patients. On the other hand, the main concern was about infection of family members or themselves. Willingness was related to knowledge of COVID-19 and about how to prevent infection. It is to note that the 60% of the participants had received a specific training in the hospital. The study shows the importance to provide a specific

ON VO COVID-19 training for health care professionals.

The impact of the COVID-19 outbreak has forced the psychiatric hospitals outpatient facilities to quickly modify the the care routine and (Xiang,Y.T.,2020;Fiorillo, A.,2020; Goldberg, J.F., 2020; Chevance A, 2020). To ensure continuity of care for psychiatric patients who cannot interrupt pharmacological treatments and psychotherapies, and to prevent isolation stress witch might exacerbate the clinical picture, institutions adopted telemedicine, reserving to serious clinical cases to be assisted on front-line, in setting specially equipped for protection from COVID-19 (Fagiolini A., 2020). Psychiatrists have guaranteed a liaison service to hospitalized patients and to health workers, as well (Xian YT., 2020).

In Italy, psychiatric assistance was guaranteed, departments of mental health have had to adapt assistance in a few days, create online mental health services and to plan procedures to prevent infection of patients and staff (D'Agostino, A., 2020).

The Italian "Protezione Civile" carried out a free psychology emergency service, in accord with several Psychoanalytic Associations, for people who need to be supported. The National Association of Psychologists have published ad hoc guidelines and asked to psychotherapists to preserve the continuity for cares using Skype or Wa sessions.

# Key points

- Psychiatric assistance should be guaranteed in the quarantine, by using telemedicine and/or adapting the care by strict protocols environment to preserve the patients and the staff from contagion.
- Psychotherapy should be continued using skype or WA.
- A COVID-19 training for the staff is useful improve knowledge about the diagnosis and treatment of infection and might reduce the stress.
- Access to diagnosis and treatment for psychiatric patients suspected of having or suffering from COVID-19 must be guaranteed through coordination between psychiatric services and COVID hospitals.
- A liaison psychiatry service can be offered for COVID patients with psychiatric symptoms.

# CHILDREN AND PARENTS

Children infected by COVID-19 are often asymptomatic or develop mild clinical manifestations. The relation between COVID-19 infection and the increase in syndrome of Kawasaki is currently under discussion. The impact of home confinement on childhood affects physical (i. e. poor motor activity), and mental health.

Data about psychological COVID-19 pandemic consequences on children's mental health are still unsatisfactory despite there are some concerns for physical and mental health of this age group(Wang G., 2020). Literature well documented the negative psychological outcome on children exposed to disasters (Masten A.S., 2012), Post-Traumatic-Stress-Disorder (PTSD) have been found to be four times higher in children who had been quarantined than in those who were not (Sprang G., 2013). A working group including European Paediatric Societies, Chinese hospitals and universities carried out a preliminary investigation on the psychological effects of COVID-19 on 330 children and adolescents living in

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Shaanxi province. The study just aimed to obtain a preliminary screening of behavioural and emotional disorders in subjects aged 3-18. Data from these research – unpublished - are reported by Jiao, (Jiao WY.,2020). The two subgroups exhibited the following symptoms: subjects aged 3-6 years manifested symptoms such as clinginess and fear that family members could contract the infection; subjects aged 6 -18 years presented inattention and persistent inquiry. Clinging, inattention, and irritability were the most severe psychological conditions demonstrated by the whole sample. Children living in highly epidemic areas showed higher rates of fear and anxiety. Finally, results demonstrated that families used media entertainment, reading and physical exercise to reduce their children's distress.

In China infected children and children whose caregivers were infected were quarantined and lived separated from their caregivers, furthermore, several parents died from COVID-19.

Since the separation from families or death of parents is a high-risk factor for psychopathological disorders in childhood, the Chinese Government have set up specific psychological and nursing programs.

The lockdown is a critical condition for children and adolescents because several activities and relations, which represent unavoidable needs in the developmental age, are limited. Cluver stated that stress for living in isolation might increase parental violence on children (Cluver, L., 2020).

We do not yet have data on the psychological consequences of motor, social, scholastic limitations, nor on the way in which families, children and adolescents have solved this, in Italy. The aforementioned Chinese study gives some suggestions.

Anecdotal reports indicated that also Italian parents have taken protective actions. For example, short video-stories about Coronavirus have been produced for children and parents, to explain in a simple language the coronavirus infection and these stories were quickly disseminating by Facebook or Whatsapp. These tools might have mitigated the impact of quarantine on children. Several resources are available in Internet to help parents and to improve parenting during COVID-19 parenting (Cluver, L. 2020). If the time spent in the family is not long, it can be an opportunity to strengthen family ties and develop creative activities of the child / teenager.

Online school and college programs have been offered to students in several countries just because the schools have been closed during quarantine to reduce the spread of epidemic (Wang, G., 2020).

The main objectives of these courses were: to maintain the relationship with peers and teachers, to correctly inform students on the progress of the epidemic and on the protective devices to be adopted, to continue school learning.

Following school programs is a protective factor for the mental health of young people as it reduces anxiety and prevents forms of isolation and compulsive use of media. As the school routine helps to organize mental functioning, these programs are necessary for all children, especially those with behavioural or emotional problems.

In Italy, the unplanned closure of schools due to COVID- epidemic has been going on for many weeks, and it is still in progress, some schools and most universities quickly have transformed education going remotely. Unfortunately, a computer is not available for families with low socioeconomic status, especially for those living in the south of the country. In summary: the effects of quarantine-school closings, isolation, lack of physical contact with peers and activities - could be detrimental to mental health and academic achievement in young people.

To prevent negative psychological outcome of the quarantine, the Italian Society of Child Neuropsychiatry (SINPIA) has created a special online service. The service provides guidelines to operators, families and teachers and discusses the main critical issues produced by the epidemic. One section offers advice on how to talk to children about COVID-19. The Italian Society of Psychoanalysis and the main Child, Adolescent and Family Psychotherapy Societies have made available free online services.

Key points

- Children infected with COVID-19 can be asymptomatic but contagious. This condition limits their social relationships; we don't know if to be a child, in the coronavirus pandemic,could be confused with to be contagious: this would be a stigma.
- Lockdown is likely to produce short- and long-term psychological symptoms in children and adolescents. The data will have to be confirmed by further studies.
- Parents manage to provide their children with tools to compensate for limitations: i.e. media use, reading and creative activities.
- A long-term school closure might have negative consequences for families and children
- As aggressiveness increase during quarantine and in post-quarantine, the increase in violence on children should be monitored.
- It should be considered that the Lockdown experience for children / adolescents may not so traumatic as for adult. They have more creative resources than adults and are more competent to using the media. Moreover, a short period to live in the family could improve the emotional bond between children and parents.
- Age-suitable information should be provided to children who need to be preserved and from shocking TV images.
- Children/adolescents should receive assistance by child psychiatrist and/or psychologist by telephone calls, WA, Skype or telemedicine.

# CONCLUSION

The coronavirus pandemic differs from other epidemics in the number of countries involved, in the rapid spread and for the enormous health, social and psychological challenges.

The psychological response to the epidemic can be functional in adapting to the threatening situation, especially in the beginning. However, stress might result in maladaptive responses and persisting symptoms, over time.

Psychological response to outbreak depends on personal and environmental factors.

Countries have had a different number of infected subjects; each one has its own welfare organization, culture, and welfare. These factors can produce different psychological responses, besides the ones common to all peoples. It will take months or years to collect reliable data on psychological outcome. Nonetheless, it is necessary to begin to identify the main themes that must be the object of attention by professionals who deal with mental health of adults, children and adolescents.

This work is an overview of current knowledge about the possible effects of the pandemic on the mental health of the population; it does not include all published works.

The main limitation of the paper is the reliability of research data that have been published too quickly in recent months. Some studies have been criticized for the methods and validity of the data and a group of researchers (Thombs, B.D, 2020) has undertaken a living systematic review to continually update results collected from researches and provide a review.

Unexplored territories can be travelled in quarantine. Correctly, we thought that the lockdown imposed in Italy and in other countries may have negative psychological effects on individuals, families, and groups. However, anecdotal data concerning unpublished interviews and short talking indicated that some people might use quarantine creatively by activating mental resources.

It would seem that, at least in some cases, the quarantine is a time for thought. Most people used the term surreal, referring to an atmosphere and urban people-less environment, as in a surrealist painting. Others said that they were living in suspended time. This sense of emptiness can be a source of anxiety. However, the state of withdrawal can set thought in motion and may facilitate the psychological insight in some people. Some said they have had time to reflect on their story and to "see things differently".

The time will tell us if this experience, that has brought so much pain and anguish, has produced some positive changes.

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