

## COVID-19 Pandemic: Psychological effects of quarantine on adults and children.

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### Abstract

In recent months, the majority of nations (at first China) are facing a dangerous threat that has forced governments to adopt and implement drastic restrictive measures such as quarantine. This threat is called "COVID-19 Emergency" (Corona Virus Disease-19). The quarantine condition imposed due to the extensive spread of coronavirus has, in the medium and long term, inevitable repercussions on many psychopathological states characterized by anxiety-depressive symptoms. For children, however, the impact of the traumatic context has different importance and outcomes, depending on their cognitive capacity and emotional competence. When children are experiencing a quarantine period in a state of world emergency such as the current one, his or her ability to manage the cognitive capacity and emotional competence adaptively and functionally has an essential significance. They may also perceive the experience as traumatic or not, through Reflective Function and Affect Mirroring with parents. Family experiences, care, and parenting are formative and preparatory to cope with the many events that life presents. It, therefore, becomes essential to establish in the family a climate of support and containment that facilitates the restructuring of the phenomenon and exorcises the stress arising from the event itself and contributes to the development of agency and resilience skills.

**Keywords:** Covid-19, Quarantine, Psychopathological states, Resilience, Parental styles.

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### Introduction

In recent months, the majority of nations (at first China) are facing a dangerous threat that has forced governments to adopt and implement drastic restrictive measures such as quarantine. This threat is called "COVID-19 Emergency" (Corona Virus Disease-19), which first emerged in China during the last months of 2019. This, in turn, forced the WHO (World Health Organization), in early March 2020; declare the emergency a pandemic as a result of the high number of infections that reached most nations in the world. It has been found that the virus belongs to the family of coronaviruses, which can cause medium to severe respiratory diseases, with potential death rates ranging from 2% to 10%.

In the initial stages of the emergency, governments requested people who had contacted infected people, or who had been in areas with high levels of infection to quarantine themselves in their houses or appropriated facilities buildings (Public Health England, 2020). Subsequently, in an attempt to stay infections and avoid the collapse of health facilities, governments of many nations decided to quarantine their entire population, allowing for only work or essential supplies travel. This situation can cause significant inconvenience, not only of an economic and social nature but also of psychological effect on the affected people.

A pandemic has in common with other natural and social disasters (e.g. wars and terrorist attacks) (a) Unpredictability,

(b) The intensity of the phenomenon, and (c) The persistence of psychological, cultural, economic, and social effects. Add to these, pandemic situations are associated with devastating effects of precautionary measures taken: quarantine and isolation. Individual reactions, as in other traumatic events, depend on: (a) Individual factors such as temperament, personality, individual resilience, quality of life before and after the disaster; and (b) Environmental factors such as intensity and proximity of the event, social and cultural reaction in terms of information, training, and tools adopted to oppose the phenomenon and support citizens [1].

The dominant psychopathological circuit starts with awareness. In epidemic outbreaks, quarantine is proof of the severity of the situation and of the fact that the situation can worsen. Anxiety and fear are among the most considerable consequences of a mass quarantine state, and these, according to certain or uncertain information provided, can increase the number of new infections and deaths: The first deaths, their increment in media reports and an increasing number of new cases are the most detected triggers of collective anxiety. The absence of clear messages reinforces fear and encourages people to seek information from less reliable sources.

The cumulative effect of these stressors may further aggravate the situation, especially as a result of infections among health professionals, and lead to a suppression of visits to hospitalized family members. The imposition of restrictive measures to protect people living far from the most affected

cities can sometimes undermine confidence in common interest authorities' actions. Overall, quarantine is seen as a loss of control, as a sense of entrapment, and as a denied freedom. These sensations are more experienced in families in which members live separately and are forced not to meet. Separation from loved ones, loss of freedom, uncertainty about health and boredom, can sometimes create dramatic effects. This circuit is the same as the SARS epidemic in affected countries, where there was a very high percentage of infections, including health care personnel. Restrictive measures were also adopted, and the consequences of confinement were described as a "Case of Collective Hysteria" [2].

### Processing of the trauma and intercurrent stressor

Traumatic experience elaboration, such as the quarantine condition resulting in a pandemic state, could be explained by the Kübler-Ross Model, which we have adopted for this study. The first phase is the denial (or phase of refusal) of what is happening. This phase is characterized by an underestimation of the severity of the situation, resulting in more superficial behavior than that required by the authorities. The innate biological tendency to reject any kind of change that may, in some way, undermine the personal balance and well-being, leading to refusal of such change, is quite common [3].

On the one hand, it acts as a defense mechanism against excessive death anxiety; on the other, it allows time to process the situation and reorganize, both psychologically and factually. The narcissistic tendency is the one that leads to the thought, "it will not happen to me!" The second phase is the anger stage, which is characterized by the activation of strong emotional responses such as rage and fear. Anger tends to limit one's freedom and modify one's habits with apparent disadvantages, fear of the uncertainty of the situation being experienced, and one's state of health. The third phase is the negotiation (bargaining), in which an attempt is made to find a compromise between the current situation and possible projects in the short and long term to face the traumatic event. This phase leads to the fourth one, the phase of resignation (or depression), in which there is a lowering of the mood, and the person begins to become aware of reality. Initially, a reactive position is assumed, in which the gravity of the situation takes place, and subsequently, results in a planning attitude. This is exemplified by thoughts oriented towards the near future, such as preparing for a continuation of the distressing situation, eventual losses, and possible recovery difficulties after quarantine. Finally, there is the fifth phase, the acceptance phase, in which you accept the situation in which you are in; there are a reworking and an adaptation to it; the emotional activation stabilizes; and cognitive and behavioral restructuring occurs. Different strategies are then found to face the new changes resulting from the situation experienced (e.g. new smart working modes, video chat to stay in touch with loved ones, etc.) (Figure 1). Several stressors come into play in the processing of the traumatic event. One of them, which significantly influence the elaboration of the various phases, is a previous psychiatric history. The literature suggests that having a prior psychiatric history is more associated with symptoms of psychological distress post-event. It is moreover demonstrated that individuals with dysfunctional mental disorders before the

start of the quarantine are likely to require additional support during the quarantine to avoid the aggravation of symptoms at the end of the traumatic period. During the quarantine period, however, previously latent subclinical traits may be exacerbated, such as hypochondriac traits that can be slantised [4]. Often the fear of infection during the quarantine is such that even at the end of the isolation period, people involved manifest clinical symptoms that can be compared to the real one [5].

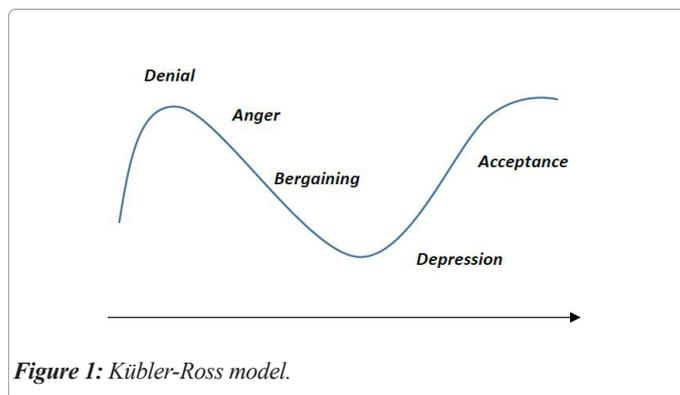


Figure 1: Kübler-Ross model.

Undefined quarantine duration and unclear information may further increase the psychological distress of the persons involved, as emotions can be so unmanageable that it can induce risky and hazardous behaviors [6]. Several studies have shown that receiving conflicting information on the real situation and standards to be followed is one of the most powerful stress factors [4,7-10]. The duration of the quarantine itself is a stressor. Studies have proven that people in quarantine for more than ten days have significantly higher post-traumatic stress symptoms than those placed in quarantine for less than ten days [11]. Other studies have demonstrated that more extended quarantine periods are associated, in particular, with mental health problems such as avoidance behaviors and anger [12]. However, the dominating stressful factor in most of the population was the awareness of inadequate health facilities and tools to deal with the pandemic situation as well as the high number of infections (as in the case of the SARS epidemic and the current COVID-19).

Most people who live in a constant state of anxiety tend to exhibit a low mood tone and depressive symptoms [6,9]. Stressful situations are, therefore, manifested to manage these contrasting emotions that induce fear and lead to behaviors devoid of rationality and self-reflexivity—for example, indirectly evading some rules with the false conviction of being able to do so without causing any harm. Studies [13,14] also suggest the need for effective mitigation measures as part of the quarantine planning process to avoid long-term psychological distress [15].

### Resilience

Quarantine is a cause of suffering. Some researches show that social isolation, and the pain associated with it, activates the same brain areas as physical pain [16]. As the brain faces a threat and exposure to danger signals, fear contributes to the activation of a series of archaic behavioral responses, which are crucial for adaptation to the environment and survival. The nervous system

causes a physiological reaction of fight, flight, or freeze that is adaptive to stress through the activation of the limbic system. However, if it is true that our brain is so predisposed that it can react to emergencies, it is also true that, in case of prolonged stressful events, the cognitive restructuring of the situation can allow us to face it with more complex and adaptive methods and behaviors: resilience and coping strategies. Resilience refers to the ability of a dynamic system to adapt to environmental disturbance events. In psychology, it is seen as the ability to cope in a crisis by activating individual resources to pursue a purpose and maintain an excellent homeostatic level. It is not easy to identify the role of individual and environmental factors involved in the development of resilience skills from an epistemological and operational point of view. Individual factors predicting good resilience include optimism, self-esteem, emotional regulation and self-regulation, and cognitive skills. Environmental factors such as the positivity of past experiences and the stability of the intra- and extra-family context are also identified [17,18]. Temperament and personality can be vulnerability factors or protection factors depending on the specific criticality [19,20]. In recent years, research in developmental psychology has questioned the evolution of this ability in children and adolescents, highlighting age-dependent differences (Figure 2) [21-23].

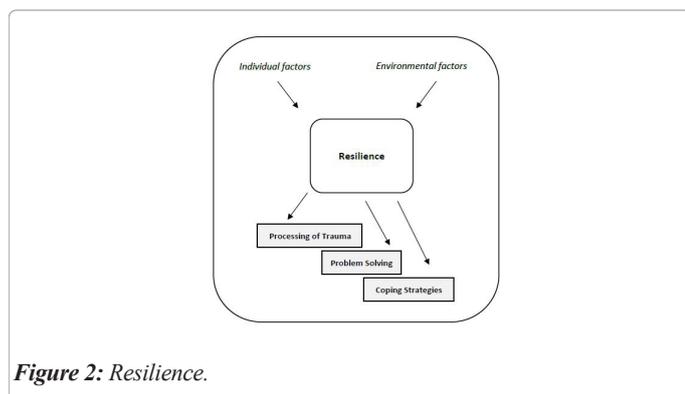


Figure 2: Resilience.

### Principal critical disorder quarantine-related

The quarantine condition imposed due to the extensive spread of coronavirus has, in the medium and long term, inevitable repercussions on many psychopathological states characterized by anxiety-depressive symptoms. The deprivation of social contacts and of stimuli, interruption of work, and general daily routine, coupled with the incessant "worry" on the possibility of "contagion," can be a source of strong psychopathological activation. A reference model for the interpretation of the psychopathological state can be Wells' Metacognitive Model. According to Wells, good metacognition allows a smooth flow of thought and, consequently, a good process of elaboration/disposal of thought itself [24].

In light of this reasoning, emotional suffering comes into play when people get stuck too long on a specific flow of thoughts, because metacognition, in the face of certain inner experiences, gives rise to responses that reinforce emotions and negative ideas. The element that favors this block takes the name of Cognitive-Attentional Syndrome (CAS). We can synthesize by defining the CAS as a dysfunctional mode of processing

input information. The Cognitive-Attentional Syndrome manifests itself with phenomena of concern, rumination, the focus of attention, and the use of dysfunctional and repetitive strategies of coping and/or self-regulation (rumination). In a metacognitive analysis, Wells, strongly inspired by the studies of Beck, talks about metacognitive beliefs (or meta-beliefs), or ideas and theories that each of us has regarding the content of our own thoughts, the efficiency of its memory, and its ability to concentrate. One may believe, for example, that some thoughts are harmful. These beliefs can be explicit (verbally expressed) or implicit (rules that guide thought), and have a positive or negative orientation (beneficial or detrimental effects of thinking). In the final analysis, the psychopathological framework, according to Wells, is generated and maintained by some dysfunctional elements, namely maladaptive thought style characterized by the CAS, dysfunctional meta belief, and alteration of the normal executive and self-regulation processes (Figure 3).

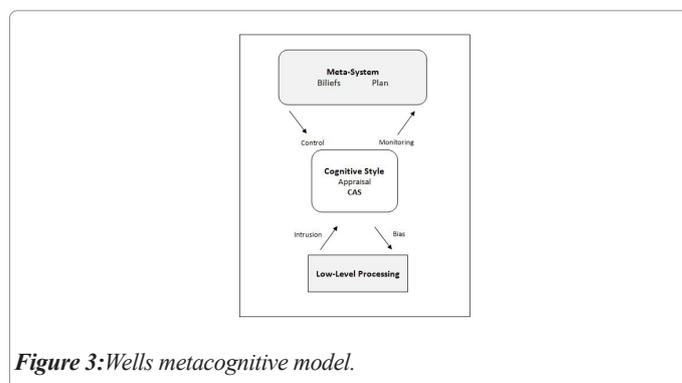


Figure 3: Wells metacognitive model.

The main clinical state related to extraordinary and catastrophic situations such as pandemics is undoubtedly Post-Traumatic Stress Disorder (PTSD) (14%) [15]. However, we can also have Generalized Anxiety Disorders (7%) [13], Depressive Activations and Obsessive-Compulsive slatentizations (9%) [11,14].

### Post-Traumatic Stress Disorder (PTSD)

The activation of the CAS, after a traumatic event, affects the ability of readjustment and increases the likelihood of persistence of symptomatology, such as worry, rumination, attempts to fill gaps in memories, threat monitoring, avoidance, suppression, and up to drug or alcohol use. Following a traumatic experience, survival instinct leads to the development of a metacognitive plan that can guide future thoughts and actions in the event of contact with potential threats. This process can be disrupted by the dysfunctional styles of thought and coping strategies adopted by the individual, configuring a real Post-Traumatic Disorder with anxiety, agitation, dissociative states, sleep disturbances, and global alterations in adaptive functioning.

### General Anxiety Disorder (GAD)

In this disorder, the most symptomatology is the anxiety due to a loss of control and a limitation of coping strategies compared to threats that are perceived as near and little manageable. The main cognitive characteristic of this disorder is chronic brooding, also called Worry. The worry, fed and favored by the CAS, is defined

as a chain of negative thoughts in an eminently verbal form, which aims at solving problems, but becomes a continuous not resolving thinking. This state of agitation and poor management of the unexpected in quarantine situations is unmasked by the circumstances of perennial stress in which the subject is forced to live. The feeling that is determined in the long period is not to handle threats and even your own flow of thought.

### **Depression**

The sense of impotence experienced during quarantine can reactivate rumination circuits with memory and attention bias. The subject focuses on the beliefs that support rumination, and even if he tries to stop the maladaptive process, he cannot. Activated CAS promotes the appearance of sadness and negative thoughts directed to one's past and present without hope for tomorrow. In the Depression, rumination becomes, as well as worry in the DAG, a central agent and input for maladaptive coping strategies. In comorbidity with Depression, there is often Obsessive-Compulsive Disorder (OCD). In the OCD, a style of excessive responsibility, combined with a strong sense of guilt, determines the meta-belief that one's action or non-action is decisive for oneself and the other. The threat, in this case, becomes thought itself, and then there is a fusion between thought and action. The subject develops obsessive ideas and compulsions. In particular, frequent in quarantine situations may create ideas of contamination.

### **Impact on developmental age**

Referring to children, the impact of the context has different importance and outcomes, according to their cognitive capacity and emotional regulation. Family plays a fundamental role in emotional self-regulation skills acquisition of the child. With this achievement, the child can experience emotions adaptively and functionally. Furthermore, being able to regulate emotions is a protective factor for the development of psychopathological problems. Emotional self-regulation represents the child's ability to control and manage his reactions to external stimuli and internal states. It is observable in the degree of intensity of emotional responses and coping strategies adopted for managing instructions after highly stressful events. A fundamental step, in this process, is the acquisition of emotional competence. When the child is experiencing a quarantine period in a state of world emergency such as the current one, his ability to manage these capacities adaptively, has an essential significance. Emotional competence takes on different importance depending on the age of the child. In Preschool Age (children 0-6 years old), emotions are recognized by children mainly based on expressive facial clues. However, they cannot distinguish between expressed emotion and felt emotion. They are not able to indicate what happens in cognitive terms, and therefore they are less affected by the phenomenon they are experiencing [25]. They may also perceive the experience as traumatic or not, through Reflective Function and Affect Mirroring [26]. For instance, if parental needs contaminated the reflection, the child would be negatively affected. School-age Children (children 6-10 years old), on the other hand, have a better emotional competence; they can distinguish between expressed emotion and felt emotion, and so parents are not always able to hide their fears. These children have the ability, furthermore, to reflect on the emotional event.

They also receive information from other sources, such as teachers and the various means of communication available, succeeding in acquiring a perception of the phenomenon. This can negatively affect the regulation of emotions and the potential frustration experienced as a result of a sudden change in one's lifestyle. The family may not always be able to cope with the traumatic event in a functional way, and this engenders difficulties in its support to children, who may find them experiencing a highly stressful situation and being emotionally affected. Masten and Obradovic describe this phenomenon as a contagion that is not only viral but also psychological, as "families often infect each other with fear" [27].

Children who experience more negative emotions and develop psychopathological disorders are those whose parents establish a psychopathological disease and are more emotionally involved. In particular, some studies have shown the prevalence of PTSD (Post-Traumatic Stress Disorder) in children with parents who had themselves developed this disorder compared to children of parents who had not established it, despite being exposed to the same disastrous phenomenon [28]. There are also several studies on the development of PTSD in children who have experienced quarantine situations; results show a probability of generating PTSD comparable to that of children who have experienced other traumatic events such as natural disasters, terrorist attacks or other types of abuse, etc. [21,29]. The psychopathological risk in the child, therefore, varies. Both in preschool and school-age, parental styles acquire importance; however, parental style may be overwhelmed when psychopathology is present in the parent as it contributes to aggravate the family circuit. Therefore, parental stress responses can influence the perception of the child, who assesses the phenomenon and responds to it using the adult as a reference. Parents represent, for the affective-relational development of the child, the first source of social reference and the only one in situations of forced isolation as in quarantine conditions. Thus, just as social responses are in some way able to modulate and address the individual psychological response of citizens, parents modulate their children's emotional response. The experience of traumatic situations harms emotional development, leading children to either emotional flattening or excessive control. Currently, most studies focus on the long-term effects of children who have survived a disaster or a pandemic situation.

In contrast, few studies exist on short-term effects. Similarly, there are few studies on the factors that contribute to the development of resilience and coping skills in children surviving a disaster, or how the social, family, and school context can help in this regard. They certainly depend on individual factors (temperament, self-esteem, emotional self-regulation) and environmental factors (parental styles, socio-cultural context, possible traumas, and other stressor factors). What seems, however, to be highlighted by the latest research is that children can neither be excluded from the environment in which they live and on which they depend nor their ability to adapt to the environment. Thus, the development of their coping and resilience strategies cannot ignore the relationships within their privileged context—the family and especially the parents [30].

### **Parental styles**

Family experiences, care, and parenting are formative and preparatory to cope with the many events that life offers. Parental style contributes not only to the creation of behavioral patterns of the child but also to the formation of emotional and relational patterns. The parent-child bond can be defined by two dimensions: responsiveness and demandingness. Responsiveness refers to the ability of parents to understand and support their children’s needs and requests, whereas demandingness refers to the ability to discipline their behavior through monitoring, reminders, and enforcement of rules and limits [31,32]. By crossing these two variables, it is possible to identify four main parental styles, namely authoritative, permissive, authoritarian, and neglecting. The authoritative style is characteristic of parents with high levels of responsiveness and demandingness who monitor the behavior of their children but encourage comparison and self-regulation by providing clear rules and explaining the reasoning that determines them. Very responsive but not very demanding, the permissive style is characteristic of parents, who tend to comply with the requests, desires, and behaviors of children, do not set rules, avoid engaging in behavioral monitoring, and tend to consult with their children on the decisions to be made. On the other hand, the authoritarian style characteristic of very demanding and managerial parents, but with little responsiveness, which provides a set of precise rules that must be respected without being explained, discourage open communication and engage in careful behavioral monitoring. Characterized by low levels of both demandingness and responsiveness, the neglecting style is identical to parents who do not take responsibility for the education of children and are indifferent to their needs or requests, do not provide rules, and do not engage in behavior monitoring (Table 1) [33].

Table 1: Parental styles.

Parental Styles	Responsiveness	Demandingness
Authoritative	+++	+++
Permissive	+++	---
Authoritarian	---	+++
Neglecting	---	---

The individual characteristics of the singular parents, their resilience, and parental style in dealing with the emergency and will influence not only the child’s perception of the phenomenon but also his possibilities of coping with the crisis. A child raised in an unprotected family, perhaps with a neglecting parental style, may experience this emergency as a non-significantly activating factor (since the basic activation threshold is already normally high) because he is already accustomed to having to defend himself from an uncontrollable and potentially threatening world. In this sense, he could benefit from a feeling of belonging

to the same discomfort and experiencing relief. A child raised in an authoritarian family, on the other hand, could react with a hypo-activation as the continuous request for activation could be extinguished by a responsibility no longer internal, but external. This is something bigger than oneself, which reduces the inner pressure in which you do not have enough agencies. This ability allows the child to assign relevance and meaning to things and events and to react to them in an adaptive and functional way (active agent). Albert Bandura identifies four basic capacities: (1) The ability of symbolization, that is, to symbolically represent knowledge about the experienced event—for example through language; (2) Ability to predict, that is the ability to anticipate future events, both emotionally and motivationally; (3) Ability to self-regulate, that is, to set goals and evaluate one’s actions concerning the event; (4) Finally, the self-reflection skill, that is, to reflect consciously on oneself and one’s internal emotional states. These capabilities, although distinct, usually operate in synergy [34].

The acquisition of agency capacity, guaranteed by good parental support, makes the child an active agent, ensuring a good psychosocial functioning and making him self-effective. A child raised in a permissive family, instead, could experience an emergency in the same chaotic way in which he is used to living, showing a lack of self-control, with aggression and intense and exasperated emotional reactions. Finally, a child raised in an authoritative family could experience the situation as something threatening, but surmountable, with appropriate emotional reactions and behaviors, responding to both emotional and informative support that parents would be ready to guarantee. Authoritative family contexts will provide fertile ground for the development of functional coping strategies and effective resilience skills, whereas contexts, in which dysfunctional parenting styles prevail, will have equally dysfunctional roots, depriving children of the opportunity to develop useful and appropriate resilience abilities. According to the perspective of Health Psychology, events are not considered positive or negative in themselves, but in the way in which the person deals with and relates to them, activating or not a series of resources (resilience). Critical events are conceived as potential resource activators, which are a stimulus for searching for new forms of relationships that better suit the changing conditions of growth [35]. It is therefore of fundamental importance to ensure that children can develop the skills necessary to overcome any type of critical event, including that of a pandemic, by showing and providing them with a series of strategies.

**Prevention**

Large-scale emergencies, such as the current pandemic, can have remarkably negative effects, not only on the territory but above all on the population. The population is generally considered as a homogeneous group, disregarding the individual differences of each. In this scenario, the children remain invisible to many; the latter instead realize the fear of their parents and find themselves experiencing an atmosphere of insecurity and emotional instability, in which the certainties and the structure of the social fabric are lost, and everyone’s life dramatically changes. When children perceive difficulties and inability of parents in their protective and supportive role, profound changes occur in the

relational and communicative aspects. This is especially evident regarding communication because parents can send signals of emotional suffering and feel powerless when their children suffer from the consequences of trauma. Parents may often be afraid to give the wrong answer or feel obliged to offer a solution to the child, but to support him or her, it is necessary to be emotionally available. Building emotional communication allows the child to develop a system of regulation that will enable him to cope with traumatic events in an adaptive way. The mother, in particular, plays an important role in the dyadic interaction, since she must be able to understand the negative emotions of the child, offering him warmth acceptance and positive support. Experiences of interaction and emotional communication lived positively, are recorded by the child, and become the basis on which he will structure his personality and self-concept. For Peter Fonagy et al. the importance of emotional attunement and the need to participate positively in the experiences of the child, constitute the basis for the development of metallization ability, which allows the child not only to recognize his own emotions, desires, and thoughts but also to tune in to those of others [36,37]. With the acquisition of this capacity, the child also becomes able to regulate himself and to have more mastery of what happens. It, therefore, becomes essential to establish in the family a climate of support and containment that facilitates the restructuring of the phenomenon and exorcises the stress arising from the event itself and contributes to the development of agency and resilience skills. Education disaster preparedness requires effective interventions, focused on increasing parents' knowledge of specific preparatory tasks, and aimed at increasing self- perception, is capable of performing the supporting task adequately. Therefore, the main indications move on two dimensions: (1) The development of adequate places and temporal structuring in the quarantine period, to cope with the total disruption of daily routines, and (2) The development of functional family communication. Communication with children must begin with conceiving the child not as a passive subject, but as an interactive and responsive referent. The communication is, therefore, not a mere passing of information from above, but also listening to the questions and concerns of the infant. Children helped by their parents in processing information during a traumatic experience develop better-coping strategies during and post-pandemic, with a better subsequent social adaptation [13]. Another critical element is to restore a balance in the routine and regularization of daily activities both during the pandemic period and in the restoration of life in the immediately following period. In this regard, UNICEF and WHO (2020) propose a series of strategies for parents to support their children in dealing with a threat, shown in (Table 2) [38].

Table 2: UNICEF advice.

Six Ways Parents Can Support Their Kids Through the Coronavirus Disease (COVID-19) Outbreak	
Be Calm and Proactive	Parents should have a calm, proactive conversation with their children about the coronavirus disease (COVID-19). Adults can empathize with the fact that children are feeling understandably nervous and worried about COVID-19 and they should reassure the children.
Stick to a Routine	Children need structure. Parents should have to invent entirely new structures and schedule activities every day, daytime where a kid can get on their phone and connect with their friends, but it also should have technology-free time and time set aside to help around the house.
Let Your Child Feel Their Emotions	Parents should support, expect and normalize that children are very sad and very frustrated about the losses they are mourning. It is normal that with the changing due to quarantine they feel sad or scared.
Check in with Them about what They're Hearing	Let's find out what a child is hearing or what they think is true. It's not enough to just tell children accurate facts. If they have questions parents can't answer, instead of guessing, they can use it as an opportunity to explore the answers together with their children.
Create Welcome Distractions	Children and adults can come to processing difficult emotions, "take your cues from your child, and really think a lot about balancing talking about feelings with finding distractions, and allow distractions when kids need relief from feeling very upset."
Monitor Your Own Behavior	Parents of course are anxious too and kids will take emotional cues from them. Parent should manage their anxiety in their own time and to not overshare their fears with their children. That may mean containing emotions, which may be hard at times, especially if they're feeling those emotions pretty intensely.

The organization of time and space allows one to cushion the upheaval induced by the emergency and to restore rhythm and a temporal scan to days that, during quarantine, could be perceived as destabilizing. Finding regularity in the proposed activities allows us to transfer and re-modulate the possibility that a new reorganization is possible, and to encourage the development of problem-solving strategies. Promoting regularity that offers moments of distraction guarantees active support for child and emotional overcoming of the stressful situation. Instead, lack of reassurance or overprotective attitudes, lack of willingness to accept children's concerns, lack of proper personal resilience, are factors that negatively affect the possibility of an adequate restructuring of the phenomenon in children [39,40]. Depending on the age and cognitive level, access to telematics information tools can also contribute to the reduction or promotion of stressor.

**Compliance with Ethical Standards**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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