

# The Essence and Causes of Mass Panic: An Analysis of Data on the Beginning of Quarantine in Ukraine

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**Abstract:** Based on the analysis of scientific information sources and empirical material (development and processing of the electronic questionnaire survey “Characteristics of mass behaviour in relation to COVID-19” in the social network “Facebook” at the beginning of the quarantine) clarified the nature of “mass panic” as a state of uncontrolled fear, panic state, confusion, a state of horror that increases when the real threat (COVID-19 pandemic) has become inevitably more threatening, and the imaginary danger of the consequences and further escalation of the pandemic acquires the magnitude of a real danger in person’s consciousness, which blocks the ability to rationally evaluate the threat of disease and mobilize internal and external potential, self-control for individual/group/mass resistance to this danger. Four causes of the occurrence and intensity of mass panic are specified: individual and psychological, physiological, socio-situational, politically ideological conditions. Another dimension of mass panic, which the authors call “self-isolated individual-mass panic” is defined. It was stated that if people had the opportunity to gather on the street at the beginning of quarantine, there would be mass panic in its classic form. The panic developed at home, so people did not communicate physically, did not gather in crowds, interacted only by means of communication equipment. The mass mental state of Ukrainian citizens during the quarantine period can be considered a state of mass panic of various stages of intensity.

**Keywords:** Fear, neurosis, self-isolation, mental health, physical activity, mass panic, society, age groups.

## INTRODUCTION

The philosophical, psychological, and empirical analysis of any person’s life gives grounds to assert that our everyday life is not secure, despite all the guarantees: one way or another there are situations that threaten our lives. Traffic accidents, natural and man-made disasters, wars, criminal attacks, accidents, diseases and epidemics are all that are likely to occur in our lives. No matter how much we insure ourselves, it is impossible to predict everything. The rule: “God helps those who help themselves”, as confirmed by life and historical experience, significantly reduces the risk of negative consequences of such situations, especially the occurrence of mass panic in an emergency.

At the Munich Security Conference in 2017, Bill Gates said that according to scientific research and forecasts, more than 30 million people could die from airborne pathogens. Therefore, we must prepare for

the fight against viruses like for war, and first of all, to investigate the issue of mass panic (Drury *et al.* 2013). This information can be perceived in terms of “global conspiracy theory”, but the authors’ scientific interest is focused on confirming by this information the relevance of the psychological aspect of the quarantine period – the mass panic. The question of the nature and psychological mechanisms of the emergence, elimination and avoidance of mass panic due to the epidemic instantly acquired a global scale: it sparked the interest in scientists and ordinary citizens. At the end of the last century, S. Moscovici (2010), summarizing the millennial aspects of research in philosophy, prose and poetry, sociology, psychology of individual behaviour in relation to the masses, in particular the causes of mass panic, summed up: “This issue remains unchanged”.

The study of psychological mechanisms of emergence and spread of mass panic is the subject of research of human psychology in emergencies, resulting in the preparation of the population and rescue teams to act in extreme situations (Kulinkovich and Gumenyuk 2013; Pochebut 2004). Psychological

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characteristics of collective resilience in emergencies as opposed to mass panic have been the subject of research by J. Drury, D. Novelli and C. Stott (2013) and others. Scientific research aimed at identifying the situation of panic, characteristics of this state, first of all, the description of changes in the mental state of the individual at this time, carried out by Y. Kalba (2012), A. Maslow (2008), D. Olshansky (2001a; 2001b), V. Yakovlev (2020) and others. A specific understanding of mass panic as a mental response to a threat of catastrophe is described in the paper by A. Mawson (2005). The dynamics of human behaviour in the context of mass panic was studied by R. Dynes (2008). In the book "Aggressive crowd, mass panic, rumours" A. Nazaretyan (2004) devoted separate sections to the issues of individual and mass panic, the factors of mass panic. However, the pandemic conditions make adjustments to the traditional dimension of the psychological essence of the "mass panic" concept, encouraging the study of mental features of this issue.

The purpose of the paper is to clarify the concept of "mass panic" based on the analysis of scientific sources and empirical material, to characterize the reasons for its occurrence at the beginning of the COVID-19 quarantine. The main object of the paper is to investigate: can the mass mental state of Ukrainian citizens during the quarantine period be considered a state of mass panic.

## MATERIALS AND METHODS

The paper has two components: theoretical (comparative, generalized, and systematic analysis of relevant scientific sources to compare the views of modern researchers) and practical (analysis of relevant data obtained during the survey, to summarize the conclusions of the study) for each component of the issues considered: "panic", "mass panic", "causes of mass panic". The theoretical component of the paper is based on the application of theoretical research methods: analysis, synthesis, comparison, generalization, systematization. Practical – based on empirical (questionnaires, surveys, discussions), and statistical (methods of mathematical statistics to determine the statistical significance of the results).

In order to achieve the goal and fulfil the task of the paper, at the beginning of quarantine the authors developed the questionnaire "Characteristics of mass behaviour with regard to COVID-19" in the "Facebook" social network (electronic questionnaire on the platform docs.google.com) (Characteristics of mass behavior...

2020). The questionnaire was developed taking into account the methodological recommendations of J. Raven (1991; 1997) on the use of this type of research methods. Each of the eight questions (indicating gender, age, occupation and place of residence – separately) provided from 4 to 17 options for clues-answers, except for one open answer. Each question of the questionnaire contained a statement of the respondent's own opinion ("Your version of the answer"). The principle of positive psychology was observed in the process of compiling the questionnaire by submitting the wording "After quarantine..." in the second question to relieve the mental stress of the respondents, setting them to wait for the end of the stressful period. The specified questionnaire was aimed at finding out: changes in lifestyle during the quarantine; planned changes in life, in particular regarding the methods of health safety, after the quarantine is lifted; the level of respondents' possession of information on the pandemic; individual reaction (physiological and behavioural) to a stressful situation – COVID-19 quarantine announcement ("As soon as you learned about the danger of a coronavirus pandemic, then..."); respondents' understanding of the essence of the concept of "mass panic" and its signs; identification by Ukrainian citizens of the situation with the coronavirus pandemic with the concept of "mass panic", etc.

378 participants aged 14 to 70 took part in the voluntary anonymous survey, including: 115 respondents aged 30 to 40 (30.42%), 86 respondents aged 40 to 50 (22.75%), 80 respondents aged from 20 to 30 years (21.16%), 38 respondents aged from 50 to 60 years (10.05%) and others. After the questionnaire, a discussion and additional survey was conducted with individual respondents (112 people in total) through the Messenger application. Female respondents made up the majority – 322 respondents (85.19%), which indicates, in the authors' opinion, the following: women's activity in social media; maternal feelings for the health of relatives; lack of stress resistance and increased levels of neurosis in the female population of Ukraine; passivity of the male part of the population of Ukraine; latent stress in men, which we called "temporary social torpidity", etc. (note: the conclusions made by analysing an additional survey of respondents). The total percentage of urban residents among the respondents was 335 people (88.62%). In our opinion, which is also confirmed by an additional survey, this is due to two reasons: unsatisfactory quality of the Internet in rural areas and the beginning

of agricultural season, which coincided with the beginning of quarantine in early spring (i.e., lack of time for social media). The occupational structure of the survey participants is as follows: teachers of psychological and pedagogical disciplines in universities – 63 responders (16.67%), teachers of general secondary education – 45 responders (11.9%), students (future practical psychologists) – 37 responders (9.79%), specialists in economics and business – 16 responders (4.23%) and others. However, 168 responders (44.44%), despite the anonymity and voluntary nature of the survey, did not indicate data in only one column of the questionnaire – “profession/place of work”, which requires further investigation. It was proposed to select several answers to individual questions of the questionnaire, so the total percentage for the response analysis was not always 100%. During processing of the results, a statistical approach was applied through a systematic analysis of the obtained empirical material.

## RESULTS AND DISCUSSION

Anything that poses the least threat to our lives and health causes a perfectly normal, natural state of fear (a protective reaction to abnormal circumstances). In this, scientists are completely unanimous, defining fear as a short-term/long-term emotional state/process caused by real/imaginary danger (Kulinkovich and Gumenyuk 2013; Potapchuk 2016; Stasiuk 2011; Shaparya 2009). The problem for the human psyche is not so much fear as a reaction to it, because “fear is a signal, a command to individual or collective protection, because the main goal facing a person is to stay alive, to continue its existence” (Kulinkovich and Gumenyuk 2013). That is, what is important is not the state of fear, as the body’s defensive reaction, but the time, methods, means and results of overcoming it and preventing the transition from primary fear to uncontrolled – panic-driven fear.

In modern psychology, it is customary to distinguish between mass and individual panic (Kulinkovich and Gumenyuk 2013; Nazaretyan 2004). What is inherent in a state of panic individually, acquires a mass character: a state of horror with a sharp weakening of the volitional self-control of the individual (Kulinkovich and Gumenyuk 2013); acute fear, uncontrollable desire to avoid a dangerous situation; strong horror – boundless fear that overwhelms the individual (Yakovlev 2020); emotional state that arises as a consequence of either a deficit or an excess of information about some incomprehensible situation that

frightens and causes impulsive actions in a person (Olshansky 2001a). At the same time, for example, horror and mental torpor are consequential, secondary phenomena, in comparison with fear; “Evolutionarily primitive needs directly or indirectly related to physical self-preservation, which suppress the needs associated with personal self-esteem” (Nazaretyan 2004). The psychological mechanism of the transition of an individual panic to a mass one is significant, because, in terms of etymology, the term “panic” (Greek. “panikon”) – suggests a massive nature of the phenomenon: a sudden, instantaneous madness of a herd rushing into the abyss, fire, water for no apparent reason – a reaction to the wrath of the Greek god Pan, patron saint of shepherds, pastures and herds (Shaparya 2009).

Thus, the analysis of interpretations of the concept of “panic” (Kulinkovich and Gumenyuk 2013; Olshansky 2001a; 2001b; Pokalchuk 2020; Potapchuk 2016; Stasiuk 2011) and empirical material allows to assert that panic state, uncontrolled fear, confusion, a state of horror that increases when the real threat (COVID-19 pandemic) has become inevitably threatening. The imaginary danger of the escalation and consequences of pandemic acquires the scale of real danger in the human mind, which sharply weakens, blocks the ability to rationally evaluate the threat of disease and mobilize the internal and external potential, self-control for individual/group/mass opposition to this danger. Henceforth, this situation (crisis, critical, extreme, emergency, etc.) will be called a “stressful situation” in the paper, understanding its acute emotional essence in the context of mass panic, because stress is a protective physiological reaction in response to an unfavourable factor, primarily mental (Shaparya 2009). It is obvious that the stressful situation for a person suffering from neuroses is much more dangerous: “In the theory of neuroses it is very necessary to understand both the nature of the feeling of danger and the body’s response to this feeling” (Maslow 2008)

Based on the statements of A. Maslow (2008), A. Nazaretyan (2004), D. Olshansky (2001a; 2001b), V. Yakovlev (2020), etc., we draw a logical conclusion that the panic state in the case of a modern pandemic, mainly actualized neurotic fears, which in fact had nothing to do with the obvious, objective danger of the disease, but were only signs of internal mental distress of certain people, especially neurotics. That is why A. Maslow (2008) noted that researchers should determine the threat not only in terms of basic needs,

but “also from the standpoint of the individual characteristics of an organism faced with a certain problem”. It is important to study and turn the traumatic situation into an instructive one, which will eventually make the individual mentally stronger. This also requires separate research in modern context.

At the same time, “... suggestion or influence is, in the collective understanding, is what in the individual sense is neurosis. Both involve: moving away from logical thinking, even avoiding it, and giving preference to illogicalness; the split of the rational and the irrational in a person, its inner and outer life. In both cases, there is a loss of connection with reality and a loss of self-confidence” (Moscovici 2010). However, the influence is social in nature, and the neurosis is antisocial, so it withdraws and returns the individual to himself/herself, his problems. What must definitely be taken into account is “mass madness”, which has a completely different nature than “individual madness”. Thus, it is not possible to recklessly deduce one from the other, because the first arises due to excess sociability, when a person penetrates the social body (therefore T. Lebon placed suggestion in the centre of mass psychology), and the second – the inability to coexist with others and find compromises necessary for common life (therefore S. Freud placed neurosis at the core of the psychology of the individual) (Moscovici 2010).

Although individual panic can be caused by an obvious threat, “the decisive factor in panic is indeed almost always the mental state of the subject”, because “no external danger is in itself sufficient for the panic to occur”. “The picture of a threat to any organism will not be complete until we know what the feeling of threat leads to, to what actions it prompts the individual and how the body responds to it ... the concept of threat contains phenomena that do not belong to the category of conflict, nor to the category of frustration in the typical sense of these words” (Maslow 2008). The presence of an individual tendency to panic in so-called alarmists is also important (Yakovlev 2020).

People have a sense of fear as an anthropological constant, along with social aggression “... objects and sources of fear change historically, but their share in the emotional palette of social moods remains more or less unchanged” (Nazaretyan 2004). This comment by A. Nazaretyan was made as a conclusion from the works of the German psychologist A. Guggenbühl-Craig. We find confirmation of the above in the works of K. Jung (2007) about the collective subconscious.

Describing the concept of “individual panic”, V. Yakovlev (2020) focuses on a specific case – unconscious fear in anticipation of an unknown danger (for example, the fear of a man lost in the mountains) and conscious fear caused by an imaginary cause (e.g., rustling leaves mistaken for the noise of footsteps in anticipation of the danger, prompts the escape, i.e., exaggeration of the significance of the stressful situation and the reason of its occurrence, or the real fear of meeting a predator).

Thus, in stressful situations, the reaction to fear is a stimulus to further human reactions: inhibition or excitation of the nervous system. The level of such a reaction of the nervous system determines the level and intensity of panic. The significance of this process is also determined by the strengthening or inhibition of the reaction by external stimuli. Such a stimulus that produces fear is the threat, first of all, to life in the form of the inevitability of death due to illness: “When we can no longer cope with a situation where the world seems too big, when we cease to feel masters of our destiny, when we lose control over the world or over ourselves, we can clearly speak of a sense of threat” (Maslow 2008). At the same time, A. Maslow considers isolation to be one of the most acute manifestations of threat (direct deprivation), along with humiliation, rejection, loss of prestige or power, etc. Thus, in quarantine we have a psychological increase in the threat: a sense of danger, loss of life, and the threat of self-isolation, controlled by the state, which, we assume, will be investigated in detail by scientists.

In the scientific sources (Kulinkovych and Gumenyuk 2013; Nazaretyan 2004; Olshansky 2001a; 2001b; Potapchuk 2016; Yakovlev 2020) four reasons for the occurrence and intensification of mass panic are generalised: socio-situational conditions; physiological conditions; psychological (general psychological) conditions; ideological or politically psychological (sociopsychological) conditions. Given our characteristics of the essence of the concept “mass panic”, the significance of the emergence and transition of individual panic to mass, the first among the causes of its occurrence we determine the psychological conditions and clarify the above conditions in this way:

1. Individual psychological conditions: excessive psychic excitement, emotionality, fear; suddenness of the event; extreme surprise; instability to danger; high level of anxiety, imbalance; underdevelopment of features of mental cognitive processes; somatic diseases

and mental injuries, etc., which are also caused by lack of information about the probable danger and ways to avoid it. O. Pokalchuk (2020) calls people with a weak “Ego” the most vulnerable to mass panic: “The more a person is currently an “activist”, the more unstable his psyche, the less he wants to be alone with himself. The group allows for a joint increase in anxiety, the emergence of common “fears” up to neurosis, and a dramatic collective experience of them”.

2. Physiological conditions (fatigue, chronic insomnia, alcohol or drug intoxication, hunger, etc.) weaken people physically and mentally, reducing their ability to quickly and correctly evaluate the situation, making them more susceptible to emotional infection. The situation regarding the coronavirus has shown that the Ukrainian population, in part, has just calmed themselves down with alcohol, spreading rumours that alcohol can protect against the disease. The mental aspect of this reaction is confirmed by a joke: in a stressful situation, an American goes to a psychologist, a Japanese goes to nirvana, a Ukrainian takes a bottle of alcohol and goes to a neighbour. Moreover, in order not to be considered an alcoholic, many people arranged remote festivities, drinking alcohol together to calm down. Most people panicked when they assessed their financial capabilities at the beginning of the quarantine and realized that their condition would not allow them to stay in isolation for a long time: fear of hunger due to inability to go to work frightened people more than the coronavirus and provoked panic.
3. Socio-situational conditions: tensions in society caused by natural, economic or political problems (flood, earthquake, coup, inflation, war, etc.; in this case – an epidemic); intensity and specificity of the action of the stimulus that caused the stressful situation, suddenness, unexpectedness of the situation. During a period of exacerbation of a stressful situation, people become particularly susceptible to any information that frightens or lacks information, especially in presumed circumstances similar to the probable social tragedy that has occurred before.
4. Political and ideological conditions: unclear awareness of common goals; lack of effective

management, i.e., a functional leader, which leads to insufficient cohesion of the group, the destruction of common values for the sake of individual salvation. For example, in loosely united groups, panic is provoked by minimal danger (danger of losing even small funds); instead, in a situation of war, as a natural experiment with a high level of organization of specially trained people, their cohesion avoids panic in many cases, or quickly level the situation with proper organization and decision-making.

Regarding the lack of panic in extreme situations in coordinated medical and fire brigades, A. Nazaretyan (2004) denies the statement of A. Prangishvili, because according to his research, such people in a stressful situation, “but without an updated attitude to mobilization and practical actions, lose self-control”. We believe that the political and ideological conditions for the mass panic over COVID-19 at the beginning of quarantine in Ukraine were contradictory: on the one hand, exacerbated by the loss of cohesion due to the unstable political situation in the country; on the other hand, weakened by, on the contrary, patriotic cohesion, extensive volunteer work in recent years. This was reflected in the negative reaction to financial and other assistance to ordinary citizens during the quarantine by politicians and the full approval of similar assistance by volunteers.

The current situation is compared with the historical events of the pandemics of plague, cholera, typhus, Spanish flu, etc., looking for common signs of tragic events. During periods of general tension, panic can arise out of nowhere. Thus, in the first weeks of quarantine, it was enough to declare that the workers returned to the cities, as the residents themselves made their self-isolation even stricter (severely restricted themselves from leaving the house). The situation of the emergence of panic states was complicated by the general economic and political instability in the country: military action in the east, political conflicts, unemployment and the like. It is also a fact that the panic was caused by two coincident stimuli: the COVID-19 pandemic, amplified by well-known information about the results of previous pandemics in human history; the global introduction of quarantine – a yet unknown socio-psychological phenomenon that increased the possibility of negative psychological consequences: domestic violence, divorce, depression, suicide, etc.

In any case, the onset of panic requires the action of a shocking stimulus, distinguished by something unusual. The most effective are sound (siren, rumble, etc.), visual (tsunami, fire, etc.) signals and rumours. Regarding the latter (rumours), V. Stasiuk (2011) gives a historical example of artificial creation of famine due to rumours about its occurrence, which led to the depletion of counters and pantries in 1917, despite the fact that it was one of the most productive years. In our case, widespread unprovoked rumours emptied the stock of toilet paper, buckwheat or other products in the stores throughout the world, despite the baselessness of need to purchase them for self-isolation, confirming the loss of the individual's ability to think logically in a mass panic.

Any rumours become significant at the slightest confirmation by the media. It is the mass media that confirm the rumours with a small message, increasing the fear. Information in the media generates other rumours, reinterpreting already known information. Thus, Ukrainian citizens reconsidered the information about mass diseases with viral pneumonia in December 2019 in the Ternopil region, interpreting it in rumours as coronavirus. Because the human psyche is set up to generate fears (this also serves as a protective function), such tendency to panic as an exacerbation of fear depends on individual belief in fear, which has specific images, which are exaggerated by the psyche. There is a classic rule formulated by S. Freud (2007): "... the groups have never thirsted after truth. They demand illusions, and cannot do without them".

Verbal announcement of an offensive stimulus (call, shout, etc.) can directly provoke a reaction of fear and panic even before its appearance. A historical example

of this is the constant fear among soldiers of the First World War of the use of poisonous gases by the Germans. Over time, as a result of direct observation of the effects of these weapons, only one mention and a shout "Gas!" led to the escape of entire battalions (Potapchuk 2016). In our case, a slight sneeze or cough in a crowded place, even at a distance, frightened others, despite the fact that coronavirus disease was characterized by a lack of colds, and a single sneeze and cough – a normal physiological need. A person who showed such need at the early stages of the quarantine in the presence of others, was condemned by the views of those present and their immediate distancing. On the one hand, this reaction can be perceived as a sign of concern for the safety of their health. On the other hand, in part, this stimulated hatred of the person coughing. During the pandemic, hatred was expressed not only for some people who fell ill, but also for countries, especially China. At the first stage of the quarantine introduction in Ukraine, the term "worker" became synonymous with the concept of "guilty of spreading the disease", stating both the obvious and the biased reason for this attitude. Each of these manifestations of overactive discussion on social networks, exacerbated and fuelled panic. Thus, they tried to "find a specific culprit" in the situation. The authors agree with the opinion of O. Pokalchuk (2020): "Negative thinking, which prevails on the Internet, certainly contributes to mental infection".

Thus, to the question: "Do you know in detail information about the coronavirus pandemic, namely: ...?" A significant percentage of respondents answered that they know the methods of infection (94.44%), symptoms of the disease (90.48%), means of protection (88.62%), the probability of complications of the disease (64.02%). In general, 56.08% of

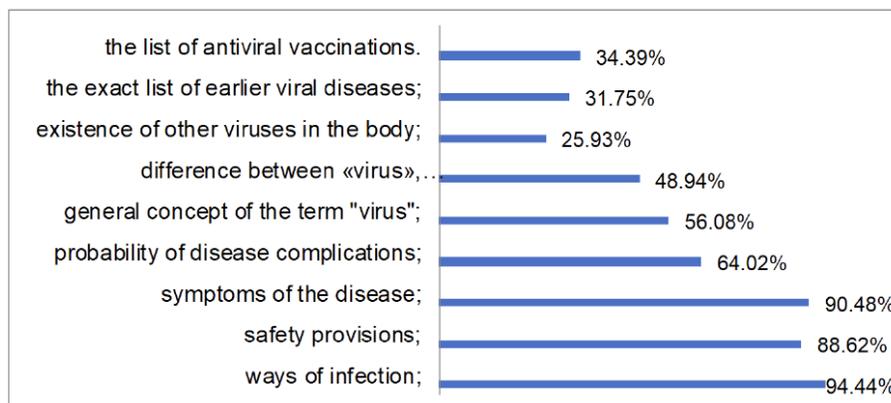
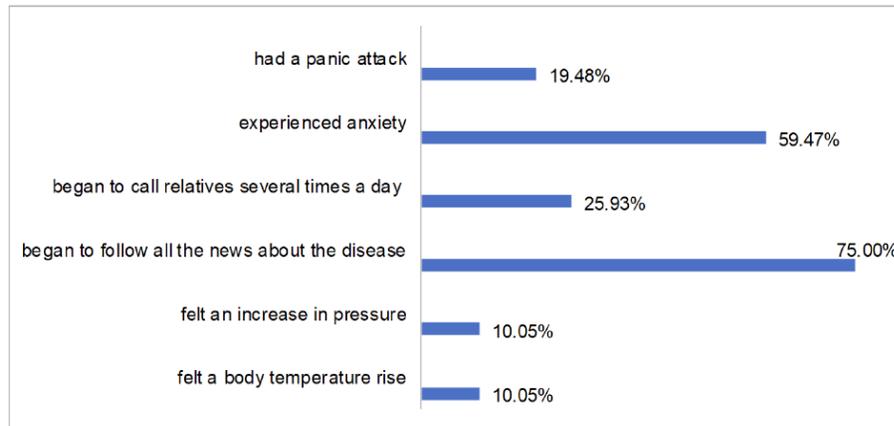


Figure 1: Possession by responders of detailed information on the coronavirus pandemic.

Source: compiled by the authors.



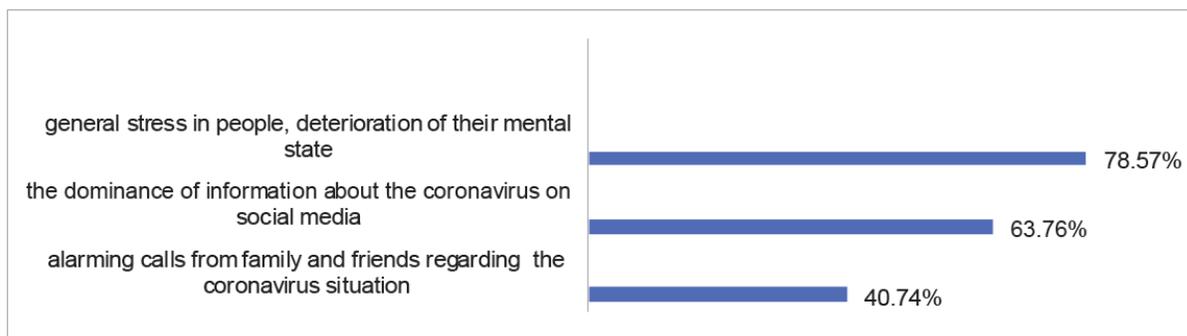
**Figure 2:** Individual reaction (physiological and behavioural) to a stressful situation – COVID-19 quarantine announcement. *Source:* compiled by the authors.

respondents know the essence of the concept of “virus”, but only 48.94% of respondents know the difference between the concepts of “virus”, “infection”, “bacterium”. But less than 35% of respondents know about the existence of other viruses in their body, the exact list of viral diseases, the exact list of available antiviral vaccinations (Figure 1).

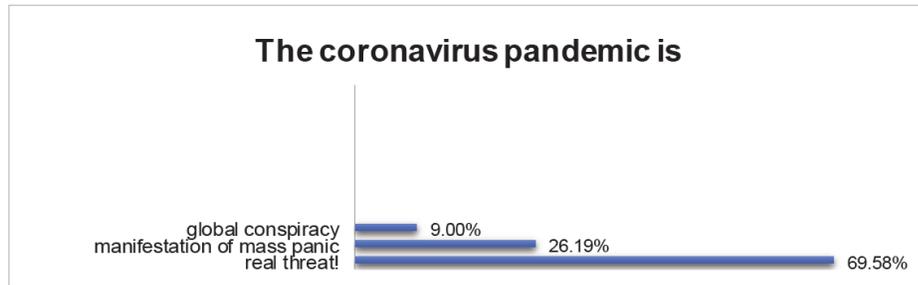
Thus, respondents are better informed about COVID-19 than about the state of their body in preparedness for this disease. At the same time, 25.93% of respondents, as soon as they learned about the danger of a coronavirus pandemic, began to call relatives several times a day. Although only 10.05% of respondents felt an increase in pressure and temperature, 19.84% felt a state of panic attack, but 59.47% of respondents experienced anxiety. However, as an additional survey showed, such a high level of awareness about COVID-19 is greatly exaggerated. That is, the respondents had the illusion of awareness. Instead, they began to follow all the news in the media about the disease – 75% of respondents (Figure 2).

Thus, we see a discrepancy between the percentage of those concerned and those who have become more active in monitoring statistics: there are doubts about the “quiet” viewing of information about the increase in the number of patients on the planet and in Ukraine, which indicates primarily conscious/subconscious concealment of their mental states. On the one hand, the respondents name the main signs of mass panic as the general stress state in people, deterioration of their mental state (78.57%), the dominance of information on social networks about the coronavirus (63.76%), alarming calls from family and friends regarding the coronavirus (40.74%) etc. (Figure 3).

On the other hand, identifying the situation with the coronavirus pandemic as “mass panic”, 9% of respondents called these circumstances a “global conspiracy”, 26.19% – a situation of mass panic, and 69.58% – a real threat (Figure 4). Thus, in previous answers, 75% of respondents said that they began to follow all the news about the disease, but 63.76% complained about the dominance of information about



**Figure 3:** Respondents’ understanding of the mass panic over COVID-19. *Source:* compiled by the authors.



**Figure 4:** Responders' identification of the coronavirus pandemic with the concept "mass panic".

Source: compiled by the authors.

the coronavirus on social media. That is, the authors report the dissonance of the need for information: "I want to listen ↔ I cannot listen", which confirms the general instability of the mental state of the population.

Note that the authors deliberately used the term "mass panic" in the questionnaire only in the 6th of the 8th questions to impartially determine the characteristics of behaviour in the coronavirus in the previous questions. In response to the last, open-ended question – the interpretation of the concept of "mass panic" (without options) – we received a significant number of detailed formulations, which were summarised in a few pages of text. Only 5.03% of respondents did not answer. Note that 38.36% of respondents were professionals (teachers and students of psychological faculties) who could give a high register definition of this concept. Therefore, we paid attention to ordinary interpretations of the concept. The most popular formulations are "mass panic": "what is happening now", "reaction of society to a high probability of danger to life and the awareness of the unpreparedness of the national health system for the threat of an epidemic", "very scary", "general psychosis", "general stress and deterioration of people's mental state", "excessive anxiety, fear", "purchase of food in large quantities, even if it is not absolutely necessary", "buy up hygiene products, medicines", "human aggression", "anxiety in all inhabitants of the planet", "horrors in social networks", "buying up buckwheat and toilet paper", "calling an ambulance at the slightest need", "finding symptoms of the disease, even if they do not exist", "lack of logical thinking", "fear for life", "lack of humane attitude to each other", "hysteria", "the fact that almost everywhere on TV they show news related only to this event", "the predominance of emotions over reason", "affective state when buying up buckwheat", etc. As we can see, in general, citizens understand the essence of the concept of "mass panic".

However, discrepancies were found: first, according to preliminary data (Figure 3), only 26.19% of respondents consider the reaction of people to the quarantine as the mass panic, and 69.58% – only a threat, but in the description of "mass panic" more than 75% respondents indicated the circumstances of quarantine. Secondly, the choice of the wording "the situation with the coronavirus pandemic is a real threat!" (69.58%) is an identification of the situation with mass panic, because the key reason for this is the real threat as a stimulus. We see such inconsistencies as a subconscious defence in the form of an attitude such as: "there is a threat – I do not panic, but I am afraid": the boundary state between primary and panic fear. Moreover, the key terms used by respondents in the description of the concept of "mass panic" was the following: threat, danger, fear, psychosis, stress, hysteria, aggression, fear and the like. Thus, the contradictions in the interpretations indicate the general unstable mental state of the participants at the beginning of the quarantine, when the survey was conducted.

On the basis of the questionnaires and surveys conducted, the authors have identified the following types of "coronavirus-related fear" at the beginning of quarantine:

- intuitive fear – the feeling that the disease is approaching, it will not pass, despite: all safety measures taken, no case of the disease in a particular locality, etc.;
- hyperbolised fear – the feeling that the disease will destroy humanity and no one will be saved; the course and consequences of the disease, for those who survive – more terrible than they are described in the media (for example, remain infected for life, or acquire some other incurable symptoms), etc.;

- obvious fear that arises in those who directly observed the complicated course of the disease with fatal outcome (doctors who resigned en masse; family members of those who died of the disease, etc.).

Regarding the individual response to stress, fear and panic, based on the analysis of forms of fear by F. Riemann (2017), we understand the need for a separate study of the so-called “coronavirus-related fear” in individuals with different mental conditions: schizoid, depressive, hysterical and obsessive behaviour.

It is obvious that the highest level of mass panic is achieved in the presence of four reasons for its occurrence and intensity (individual psychological, physiological, socio-situational, political and ideological conditions), which was observed at the beginning of quarantine in Ukraine. At the same time, the authors note that if people had the opportunity to gather on the street at the beginning of the quarantine, there would be mass panic in its classic form. Now there is another dimension of mass panic, which we called “self-isolating individual mass panic”. Panic arose at home, we did not observe it in a typical way: people did not make physical contact, did not leave the house and did not gather in crowds, were in touch only by means of communication (telephone, social media, etc.). As with any socio-psychological phenomenon, mass panic is characterised by degrees of intensity, the definition of which also requires a separate study. The scholars (Pokalchuk 2020; Potapchuk 2016, Stasiuk 2011) generalised four categories of similar criteria for the emergence of mass panic as the psychological phenomenon:

1. Medium of origin: in large groups (mass gatherings, crowds, numerous diffuse groups).
2. Psychological causes (described above).
3. Mental and physiological state of individuals: inhibition of a number of parts of the cerebral cortex – a decrease in active consciousness; distortion of perception, i.e., the inability to comprehend the cause of the situation; impaired thinking and memory; rapid heartbeat, shortness of breath, nervousness, increased sweating, anxiety, pulsation in the abdomen up to the vomiting; hysterical reaction that causes loss of ability to resist the situation; helplessness and weakness and, as a consequence – immobility

(mental torpor); destruction of motivation; occurrence or exacerbation of psychoses, neuroses, phobias, complexes, depressive states; decreased self-esteem; loss of self-control; loss of sense of duty and honour, etc.

4. External, i.e., behavioural manifestation of mental states: disorganised, spontaneous or indeterminate behaviour/state of people: confused, inadequate, chaotic movements and actions; inability to respond to calls, warnings, etc. (Gates 2017).

Throughout the quarantine self-isolation, the authors were able to observe individual, pair, group and mass panic of different stages and stages of intensity.

## CONCLUSIONS

Thus, based on the analysis of scientific information sources and empirical material (development and processing of the electronic questionnaire survey “Characteristics of mass behaviour with regard to COVID-19” in the social network “Facebook” at the beginning of the quarantine) the authors made the following conclusions.

Specified the essence of the concept of “mass panic” as a state of panic, uncontrollable fear, confusion, a state of horror that increases when the real threat (COVID-19 pandemic) has inevitably become more threatening, and the apparent consequences and escalation of the pandemic acquires the scale of real danger in the human mind, which blocks the ability to rationally evaluate the threat of disease. The issue here is not the state of fear as the defensive mechanism in the body, but the time, methods, means, and results of overcoming it and preventing the transition from primary fear to panic fear.

Stated the following: 1) panic states in the case of a modern pandemic, mainly actualised neurotic fears, which, in fact, had nothing to do with the obvious, objective danger of the disease, but were only signs of internal mental distress of individuals, especially neurotics; 2) under the quarantine conditions the psychological increase of threat was found as a stimulus to panic: feeling of danger, loss of life, and threat of self-isolation controlled by the state; 3) panic arose among citizens who understood that their savings would not allow to be in self-isolation for a long

time (fear of hunger frightened people more than the virus); 4) fear arose when workers returned to their cities: the residents made self-isolation even more severe, found the “culprit” in the situation; 5) panic was caused by two stimuli at the same time: the actual COVID-19 pandemic and the global introduction of quarantine as a yet unknown socio-psychological phenomenon, that could intensify the risk of domestic violence, depression, suicide, etc.; 6) the loss of the individual’s ability to think logically in conditions of mass panic was confirmed by the depletion of toilet paper and buckwheat in stores as a result of unreasonable rumours; 7) rumours, confirmed in the media, significantly increased the spread of fear; 8) the manifestation of normal physiological needs became the stimulus for panic in crowded places, this includes sneezing or coughing; 9) there was an illusion of awareness about COVID-19; 10) inconsistency between the percentage of those concerned about the situation and those who have become active in monitoring statistics as a conscious/subconscious concealment of their mental states; 11) the dissonance of the need for information: “I want to listen ↔ I cannot listen”, which confirms the general instability of the mental state of the population; 12) general understanding of the essence of the concept “mass panic” and identification of this concept with the current situation, where the real threat is a panic stimulus; 13) the borderline state between primary and panic fear: subconscious defence in the form of an attitude: “a threat ↔ I do not panic, but I am afraid”; 14) inconsistencies in the interpretations indicate the general unstable mental state of the participants at the beginning of the quarantine when the survey was conducted.

Highlighted the following types of “panic-quarantine fear” of the period of the beginning of quarantine introduction are distinguished: intuitive, hyperbolised and obvious fear. Four causes of the occurrence and intensity of mass panic are specified: individual-psychological, physiological, social-situational, political-ideological conditions. Determined another dimension of mass panic, so-termed, “self-isolated individual-mass panic”. It was stated that if people had the opportunity to gather on the street at the beginning of quarantine, there would be mass panic in its classic form. Panic developed at home, so people did not communicate physically, did not gather in crowds, interacted only by the means of communication. The mass mental state of citizens in Ukraine during the period of quarantine can be considered a state of mass

panic of various stages of intensity. The authors do not claim to fully cover the problem at hand. The prospect for further research is the issue of spreading, securing and eliminating mass panic, in particular during the pandemic period; the emergence of the so-called “coronavirus-related fear” in individuals of different types (schizoid, depressed, hysterical and obsessive behaviour); fear of state-controlled self-isolation; diagnostics of the degrees of intensity of mass panic, etc.

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## REFERENCES

- Characteristics of mass behavior in relation to COVID-19: Questionnaire. 2020. Retrieved October 11, 2020 (<https://www.facebook.com/groups/pundlpd/permalink/761832557679785/>)
- Drury, John, David Novelli, and Clifford Stott. 2013. “Representing crowd behaviour in emergency planning guidance: “Mass panic” or collective resilience?” *International Policies, Practices and Discourses* 1(1): 18-37. <https://doi.org/10.1080/21693293.2013.765740>
- Dynes, Russell. 2008. “Mass panic and social attachment: The dynamics of human behavior”. *Contemporary Sociology* 37(2): 138-139. <https://doi.org/10.1177/009430610803700221>
- Freud, Sigmund. 2007. *Psychology of the Masses and Analysis of the Human Self*. Minsk: Potpourri.
- Gates, Bill. 2017. Panel Discussion on “Health Security: Small Bugs, Big Bombs”. Retrieved October 30, 2020 (<https://securityconference.org/mediathek/asset/panel-discussion-health-security-small-bugs-big-bombs-1531-18-02-2017/>)
- Jung, Karl-Gustav. 2007. *Archaic Man. Problems of the Soul of Our Time*. Moscow: Akademicheskyy Proekt.
- Kalba, Yaroslava. 2012. *Psychology of the Masses*. Ternopil: Textbook – Bogdan.
- Kulinkovich, Yulia, and Oksana Gumenyuk. 2013. “Factors and mechanisms of mass panic in emergency situations”. *Scientific and Technical Statements of the St. Petersburg State Polytechnic University* 2(171): 261-267.
- Maslow, Abraham. 2008. *Motivation and Personality*. St. Petersburg: Piter.
- Mawson, Anthony. 2005. “Understanding mass panic and other collective responses to threat and disaster”. *Psychiatry* 68(2): 95-113. <https://doi.org/10.1521/psyc.2005.68.2.95>
- Moscovici, Serge. 2010. *Science of the Masses. Psychology of the Masses*. Samara: Publishing House “Bakhrakh-M”.
- Nazaretyan, Akop. 2004. *Aggressive Crowd, Mass Panic, Rumors*. St. Petersburg: Piter.
- Olshansky, Dmitriy. 2001a. Basic forms of mass behavior. Retrieved October 18, 2020 (<https://psyfactor.org/lib/panic.htm>)

- Olshansky, Dmitriy. 2001b. *Psychology of the Masses*. St. Petersburg: Piter.
- Pochebut, Lyudmyla. 2004. *Social Psychology of the Crowd*. Moscow: Publishing House "Pech".
- Pokalchuk, Oleh. 2020. Coronpsychosis. Retrieved October 22, 2020 ([https://rus.lb.ua/society/2020/01/24/448091\\_koronapsihoz.html](https://rus.lb.ua/society/2020/01/24/448091_koronapsihoz.html))
- Potapchuk, Natalia. 2016. "Dynamics of panic in extreme situations and features of overcoming it". *Problems of Extreme and Crisis Psychology* 19: 131-140.
- Raven, John. 1991. *The Tragic Illusion: Educational Testing*. Winner of World Education Fellowship Best Book of Year Award. Columbus: Trillium Press.
- Raven, John. 1997. "Open dialogue: Education, educational research, ethics and the BPS". *BPS Education Section Review* 21(2): 3-26.
- Riemann, Frits. 2017. *Basic Forms of Fear*. Kyiv: Svarog.
- Shaparya, Viktor. 2009. *Psychological Explanatory Dictionary of the Most Modern Terms*. Kharkiv: Prapor.
- Stasiuk, Vasyli. 2011. "General aspects of the occurrence, course, prevention of panic". *Bulletin of the National University of Defense of Ukraine* 4(23): 248-251.
- Yakovlev, Vladimir. 2020. Panic. Personalized psychiatry. Innovative solutions for mental behavioral disorders. Retrieved October 04, 2020 (<http://www.personpsy.ru/publikacii/nashi%20publikacii%20na%20fejsbuke/lektzii/panika.php>)

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