Research Article

Trauma and Distress on a Cruise during the COVID-19 Pandemic: A Qualitative Study with Italian and French Tourists

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Abstract

The COVID-19 pandemic has drastically changed our daily lives. One of the sectors most affected was tourism and travel – and, more specifically, cruises, given the prolonged time passengers spend with others within the small spaces of the cruise ship. While finding well-organised entertainment opportunities on cruises is possible, emergency conditions may cause panic. On such occasions, reactions can be highly stressful or even traumatic. This research explores the events and emotions experienced by passengers during a cruise ship quarantined for COVID-19. The empirical materials consist of interviews with 15 passengers. The analyses show four thematic areas: fear of contagion, feelings of discrimination, cooperation between passengers and relationship with the crew. The problems during a cruise ship quarantine presented by the passengers in this study reveal the need for psychological preparation for the crew and security personnel. Finally, we suggest that telemedicine and

telepsychology are key elements to improve the efficiency of behavioral control on cruise ships and to mitigate the COVID-19 effects on tourists' well-being during a quarantine.

Keywords
COVID-19; cruise ship; contagion; distress; security; total institution; trauma; discrimination; telemedicine; telepsychology

1. Introduction

The effects of the COVID-19 pandemic, which broke out in Wuhan and then spread worldwide [1], triggered a wave of widespread panic and made the fear of death more concrete [2]. Continuous news reports on the news, radio and social media about COVID-19 made thoughts about death more accessible and caused an increase in thoughts about death [3].

Information about COVID-19 has begun to spread at an impressive rate, sometimes causing misinformation, confusion and fear [4]. One of the areas most affected by the recent coronavirus pandemic is tourism [5-7]. Different rules are imposed on travellers to minimize contagion depending on the country of origin or destination and the reasons for travelling. With international air travel slowing rapidly due to the crisis and many countries imposing travel bans, closing borders or introducing quarantine periods, international and domestic tourism has declined precipitously [8, 9].

One of the tourism sectors most affected by the pandemic was cruise travel. At the beginning of the epidemic's spread, cruise ships became high-risk locations due to their enclosed environments, close contact between travelers from different countries, and crew members' movement from one ship to another [10].

There have been cases of ships being held offshore because no port gave permission to disembark and passengers being quarantined in their cabins [8, 11].

The fear of being infected and possibly getting sick or dying causes great anxiety, by terror management theory [12, 13].

Coming into contact with an event that could prove potentially fatal generates strong anxiety in the person experiencing it, triggering dysfunctional reactions dictated by panic [14]. Furthermore, increased anxiety related to the fear of dying leads to an increased defensive behaviours, including explicit and implicit acts of racism towards a group with a different cultural background deemed responsible for the negative situation [3].

In the research, the cruise ship has sometimes been compared to the Goffman Total Institution [15, 16], a 'prison' where people follow a tight schedule, live and work together, and are cut off from society for some time [17]. Nevertheless, from the point of view of tourists, cruise ships are seen as heavenly worlds. Indeed, cruise tourism constitutes a form of experiential consumption [18] and cruise ships are considered 'cathedrals of consumption [19].

However, during a medical quarantine for passengers, paradise becomes a nightmare. After all, people are practically incarcerated, and a cruise ship can be considered a de facto total institution.

Quarantine is also a nightmare for the ship's management and crew. They must ensure the constantly safe and professional functioning of all aspects of the ship, addressing tourists' fears and

their different ways of reacting in the face of authoritarian rules.

This research aim is to investigate the experiences and emotions felt by a group of passengers who embarked on a cruise journey that began on February 23, 2020, just in the period in which the first infections from COVID-19 started to spread, a journey soon turned into a 'prisoners' experience for health reasons.

2. Methods

2.1 Participants

There were 15 participants in the study (3 women from France and 12 people from central and northern Italy; 3 men and 9 women), aged between 16 and 58 years (M = 39.9 DS 17.6) (see Table 1).

Table 1 Participants demographics.

Partecipant's pseudonym	Gender	Age (years)	Country	Occupation
Alessandra	Female	15	North Italy	Student
Chiara	Female	54	North Italy	Family physician
Cinzia	Female	54	North Italy	Housewife
Giacomo	Male	19	North Italy	Student
Gianluca	Male	54	North Italy	Banker
Giuseppina	Female	46	North Italy	Shop assistant
Mafalda	Female	53	Central Italy	Merchant
Matilde	Female	52	North Italy	Banker
Mauro	Male	18	Central Italy	Student
Nicole	Female	17	North Italy	Student
Sabrina	Female	57	North Italy	Housewife
Samantha	Female	19	North Italy	Student
Eléonore	Female	42	France	Commercial assistant
Justine	Female	55	France	Domestic assistant
Marguerite	Female	58	France	Unemployed

Participants were recruited using snowball sampling, starting with someone close to the researchers' group. Nineteen people were contacted, but four did not want to participate in the the research, as they did not relive or recount the event. Recruitment ended when the topics started to be repetitive. The selection of participants was guided by the research question: exploring the experiences and creation of meanings (perceptions, motivations, emotions, opinions, etc.) of cruise ship tourists forced to experience a COVID-19 quarantine. We thus opted for a purposeful selection to recruit 'information-rich' cases [20] that could maximize understanding of the phenomenon under investigation. The analysis focuses on patterns of meaning across cases, rather than meaning within individual cases. The group of participants is thus sufficiently large to justify the statements regarding the different areas of meaning emerging from the quarantine experience [21].

There were 1600 crew members and 4500 passengers on the ship, including 335 Italians, for 6100 people on board. A suspected case of COVID-19 among crew members also hindered the smooth running of the cruise, as the authorities in Jamaica and Mexico denied permission to disembark.

These circumstances forced the ship into continuous sailing, with only one disembarkation in Cozumel delayed by a day, thus eliminating the last stop in the Cayman Islands.

2.2 Data Collection

Participants were interviewed via a semi-structured interview consisting of 20 questions. The interview investigated the following topics: the experience of the trip, reactions to the news of a possible coronavirus on the ship, emotions felt during the riot episode, contacts with the outside world and the return to Italy and France. Questions were asked in the same order for each participant to facilitate the determination of data saturation and a more structured coding approach [22].

The interviews were conducted online via Skype or telephone (depending on the preference of each participant) and lasted approximately 60 minutes. Participants were explained in detail all the research objectives and the methodology of analysis used. They signed an informed consent form to be interviewed and were asked permission to record the conversations, transcribe their answers and analyze their contents to study the phenomenon. We have guaranteed them to anonymize the contents of the obtained texts and only those who have given written and signed consent have participated in the research. All the names cited below are fictitious (pseudonyms), and the quotations have been slightly changed to prevent any possibility of identification of the participants. The research followed the APA's Ethical Principles of Psychologists and the Code of Conduct and the principles of the Declaration of Helsinki. The study was approved by the Ethics Committee for Experimentation of the University of Padua (Prot. No. 667848DCE55040036B6484B91AB49B09).

2.3 Data Analysis

Textual data collected from the interviews were analyzed using thematic analysis. The thematic analysis was conducted according to the six phases outlined by Braun and Clarke [23]: familiarisation with the data, coding, generating initial themes, reviewing themes, defining and naming themes, and writing up the report. Thematic analysis was used because it is theoretically flexible and well-suited for studying participants' experiences and perceptions [24]. ATLAS.ti, a computer software for qualitative data analysis, was also employed [25].

3. Results

From the analysis of the data, four thematic areas were identified: fear of contagion, feelings of discrimination, cooperation between passengers, and relationship with the crew.

3.1 Theme 1: Fear of Contagion

The interviews revealed the participants' fear of being infected during the cruise. The first thematic area is composed of six subthemes:

3.1.1 First Subtheme

Spaces on the ship. During the cruise, people were forced to live together on the ship. Although the passengers were on board in one of the latest models offered by the company, it was still perceived as a confined space due to the number of people on board and the continuous sharing of spaces. This situation of close contact and the lack of disembarkations at the stops on the itinerary, caused people to feel anxious and afraid of being infected by COVID-19. The passengers were not updated on the real health situation of crew members suspected of having COVID-19. Regarding this, Samantha, 19 years old, from northern Italy, states, 'You could see in people's expressions that there was a growing concern and it was obvious that it was not a concern given by the fact that one had missed a day's holiday, it was a concern of someone who knows that there is something bigger than him coming.' Being denied disembarkation and being stuck inside the boat created a sense of oppression and danger, so much so that those who were able to use the large cabin decided to spend most of their time inside it, as Samantha says: 'I actually spent the cruise alone, on the cabin terrace, but then luckily we also had a fairly large cabin because, I mean, we didn't have the one with the porthole, we had a nice cabin with a nice terrace, that's it, I was there the whole time.'

3.1.2 Second Subtheme

The possible presence of the virus. Most of the Italian participants were very distressed about the possible presence of the virus on the ship and had therefore taken a precautionary attitude to avoid possible contagion, at the time of departure in Italy, there were two outbreaks, the only ones in Europe, and the number of contagions was increasing exponentially.

On the contrary, some passengers had a more detached attitude towards the coronavirus because they considered it a distant reality and did not consider the possibility of a real contagion. The perception of a danger linked to COVID-19 by some passengers was present even before the departure of the ship since, among the Italian members, most of them had asked the shipping company for a refund or to be able to move the trip to a safer period, since the situation in Italy was starting to be problematic.

This is reported in the words of Gianluca, 54 years old, from northern Italy, who left with his wife, daughter and daughter's boyfriend: 'I tried to postpone the departure already a few weeks before the departure. We left on 22 February but, unfortunately, it was impossible to postpone it because otherwise we would have lost everything. There was no kind of protection, neither to postpone the holiday to another period, nor to receive a refund.'

3.1.3 Third Subtheme

Detachment from the situation felt distant. On the other hand, other passengers were not worried about the situation in Italy and were more relaxed. All this can be seen in the words of Cinzia, 54 years old, from northern Italy, who left with her two children: 'We certainly didn't expect an experience like this, also because when we left, nothing had happened yet. The first case had happened in Codogno on the 21st, but we thought: "Well, it's a case." Honestly, it was a bit unexpected for us; we hadn't thought about the problem.' From the statements of Giacomo, a 19-years-old, from northern Italy, who lives with his mother and sister: 'Until that moment, since the

news spread in general by health authorities, etc. was not very clear, I thought that the problem was overestimated; that is, that the part of the population affected was mainly the elderly.'

3.1.4 Fourth Subtheme

<u>Fear is caused by behavior on the ship.</u> Among the French participants, concern about the virus only arose on the ship when they noticed a scrupulous attitude towards cleaning common areas on the part of the crew, since the situation in France differed from that in Italy. In particular, one French participant, 58-year-old Marguerite, was extremely worried about her husband's health, who had suffered a stroke a few months before leaving and was not in good health, having also had previous heart problems. Given the worrying situation in which he found himself, her husband decided to isolate himself in his cabin, trying not to come into contact with strangers to avoid being infected. In fact, Marguerite reported:

'My husband, with all his illnesses, used to tell me: "I'll stay in the cabin." He didn't even want to go out anymore. In addition, he had also had a stroke and heart problems, so he was afraid of getting sick on the ship.'

3.1.5 Fifth Subtheme

<u>Fear of falling ill away from home and relatives.</u> Participants reported that fear of infection was heightened by the prospect of falling ill in a place so far from home and not being able to return, as Marguerite states: 'Being away from home was very scary.'

3.2 Theme 2: Feeling of Discrimination

Most Italian passengers report a feeling of discrimination from other passengers because Italy was the first country in the world, excluding China, with the presence of the so-called 'red zones.' The second theme is composed of three subthemes:

3.2.1 First Subtheme

<u>Difficulty in finding news.</u> News about the contagions was difficult to access and this caused the passengers even more concern. They were only aware of the developments of the pandemic before departure. Of other news they received on the ship from relatives and friends who were at home, using the free Wi-fi when they docked in ports or buying the Wi-fi package on the ship, as Alessandra, 15-years-old from northern Italy, who left with her brother and mother, explains: 'There were internet packages with various rates with gigabytes, but, of course, you had to turn them off every so often, because otherwise they would take them all out immediately. But after some dissatisfaction, they decided to have this day where they gave free connection to everyone.'

3.2.2 Second Subtheme

<u>Non-Italian passengers' suspicion of Italians.</u> The news conveyed an image of Italy in a state of emergency, so other passengers looked at Italian tourists suspiciously. The latter started to feel uncomfortable in front of their stares and whispers. Cinzia reported this: 'The Spanish passengers were saying: "Let's not get off the ship because there are Italians on it!", as if we were the

coronavirus carriers. We were also afraid of this situation here because there were only 330 Italians on the ship out of 6,000 people, so we were in the minority. And they're angry with us; they think we're the ones with the coronavirus, that we brought it onto the ship.' Samantha's words are also significant: 'There was this widespread racism against Italians. But in general, among foreigners, there was this feeling of racism; everyone was afraid that we were the plague victims, but it was the same with the Chinese.'

3.2.3 Third Subtheme

Fear of being Italian. This suspicion turned into a strong fear on the part of Italian passengers, dictated by their nationality and the prejudice created about it. This was a very difficult situation for most of the Italian people interviewed – some even reported that they had stopped speaking in the presence of non-Italians in order not to make their nationality understood, as reported by Mafalda, 53-years-old, from central Italy, who left with her husband: 'We couldn't open our mouths anymore because how they saw us, especially the Americans... if we got into a lift we didn't speak, we didn't open our mouths not to make people understand that we were Italians because we had heard comments, people coming out of the lift because there was an Italian.' Other interviewees reported that they had not experienced discrimination from other passengers, but this was a small percentage. As Chiara, 54 years old, from northern Italy, who traveled with her sister and daughter, says: 'Well, not as far as I'm concerned. There has never been anyone who has shunned me or called me an anathema.' However, most reported feeling uncomfortable because of the marginalization they experienced onboard the cruise ship. Feeling discriminated against by other passengers because of a situation that was out of their control and for which they were not to blame created a lot of anxiety, to the point of not speaking their language for fear of being recognized as Italian. This made the holiday a nightmare, not a period of leisure and relaxation.

3.3 Theme 3: Collaboration between Passengers

Participants also reported the emergence of an unexpected relationship of mutual collaboration between Italians and French, aimed at putting pressure on the crew to obtain information about the uncomfortable situation they were experiencing. The third theme is composed of two subthemes:

3.3.1 First Subtheme

The proximity between passengers. The moment of difficulty led some passengers to perceive themselves as being closer and more supportive of each other, as Gianluca's words on the relationship born within the ship between some passengers affirm: 'There were also positive sides, such as the interpersonal relationships we had with lots and lots of Italians or even French people. I'd like to say here: I have to change my mind somehow because there are always clichés. I've always been prejudiced against the French. However, after getting to know people, you realize that you must stop with these stereotypes because they're wrong stereotypes that hurt everyone. Hence, you must get to know people before judging them.'

3.3.2 Second Subtheme

<u>Collaboration to get news about the ship from outside.</u> News about the ship's situation reached the group of Italians and French only from the outside, through the internet, so much so that many of the interviewees reported that they had learned of the cause of the failure to disembark in ports through newspaper reports or messages received from their acquaintances in Italy. Marguerite's words on this: 'We started to gather, Italians and French, at the reception desk and to ask for a little bit of an account, we were asking for the captain to come at least to talk to us, to explain the situation, we couldn't call our families, so we started to ask for at least some Wi-fi, so that we could call our families, explain what was happening, because on the social networks, well, it was starting to be spread, so I thought that the children and everybody would start to worry.' The words of Eléonore, 42-years-old, from France, are also significant in this respect: 'We spent a lot of time at the reception, and consequently we didn't even take advantage of the ship; I was every day at the reception with the Italians and the French,' as well as the thoughts of Matilde, 52-years-old, from northern Italy: 'While we were waiting, we followed on our mobile phones how the situation was going in Italy.'

3.4 Theme 4: Crew Relations

Finally, a relevant theme was the communication between passengers and crew members during the journey. The fourth theme is composed of three subthemes.

3.4.1 First Subtheme

<u>Feelings of abandonment.</u> Relationships with the crew, and in particular with the captain, were strained due to the lack of communication and clarity on the part of the captain himself regarding the reasons for the missed landings and the real situation of the presence of the virus inside the ship. As can be seen from Chiara's words:

'It was Tuesday morning; we got ready to go down, we had the excursion to Jamaica, we waited for the captain, whoever for him in short; now and then he intervened saying that they were completing the disembarkation procedures, to have some patience. After two hours of waiting, our guide told us that there was no disembarkation and that all the buses were leaving, so he was also leaving and the excursion was cancelled.'

The news passengers received was few and far between and they never got a clear and complete picture of the situation. Instead, passengers reported a need for clarity and reassurance from the crew given the delicate situation they were experiencing.

3.4.2 Second Subtheme

<u>Precarious relationship with the captain.</u> Participants reported that they could not communicate with the ship's captain, who never showed up to the passengers, and did not provide any information about what was happening, leaving the passengers in despair and uncertainty when they needed clarity and reassurance. As reported by Mauro, 18-years-old, from central Italy, who left with his fiancée and his fiancée's parents: 'Then it was enough for the captain to show up and, as it were, transmit an emotion of tranquillity, of serenity, so that the crowd calmed down a bit. He never showed up; he never said anything.' Similar words were expressed by Nicole, 19 years old,

from northern Italy: 'The captain didn't have any certain answers to give us and therefore, in my opinion, he preferred not to say anything, but that's not a justification; however, you have to have contact with your passengers, you have to talk and you have to make things understood. They always gave us hope the day before that we would dock the next day when, in my opinion, they already knew beforehand that there would be no possibility of docking on the next island.' From Justine, a 55-year-old French woman who left with her husband: 'I think we needed to be reassured! To be reassured by the commander about what this gentleman had, whether it was Covid or a real type of the flu...'

3.4.3 Third Subtheme

<u>Clash with members of security.</u> Passengers report an episode of tension and violence involving some passengers and crew members on February 27. Some passengers had discovered, through news from outside, that the suspected case of COVID-19 among the crew members had tested negative for swabs and that there was no danger of contagion. This news was not communicated on the ship. For this reason, two French passengers decided to take the microphone from the pianist, who was giving a concert in the lobby to alert all the passengers to the results of the swab. When two French gentlemen took the microphone, they were tackled and handcuffed by security team members, who, according to the interviewees, used excessive force and exaggerated their manner. Security sprayed the crowd with pepper spray to stop the two Frenchmen and the people protesting after witnessing the scene, causing panic and breathing problems for some passengers. The incident is reported here in Giacomo's own words:

'We all rated the response of the spray, of the pepper spray, by security, a tad excessive because in any case there were many children in an enclosed space, such as the reception area, and they practically ran out of three pepper spray cans which, for such an enclosed space, are suffocating; there were also people who vomited on the stairs, it was a moment of panic.'

4. Discussion

The study's results highlighted the problems on the ship due to the lack of communication between the crew and passengers, accentuated by the present fear of possible contagion and the feeling of discrimination felt by Italians because of other passengers of different nationalities. However, an experience of cooperation between some Italian and French passengers also emerged. When disembarkation was denied and life on the ship was no longer experienced as relaxing and carefree, all the reasons for choosing the holiday disappeared, which was then described as a real nightmare not to be repeated.

The study highlighted how a lack of proper communication management was the root of the problems experienced on the cruise. The crew's handling of a suspected case of COVID-19 on the ship and in particular the management of the communication of this news and all the warnings regarding missed moorings was damaging and ineffective.

Within the ship, there was a lack of the characteristics established by the WHO guidelines for valid communication during an outbreak [26]: the announcement of the presence of a possible case of COVID-19 inside the ship by the captain was never made, but discovered by the passengers through external sources; whenever the passengers asked the crew for information on the missed landings in the ports, going so far as to make actual garrisons at the reception, these were punctually

denied; the misinformation caused uncertainty and discriminatory behavior, resulting in a total loss of trust in the captain and an experience of panic and disappointment.

One of the study's findings was the feeling of discrimination by Italian passengers. The news received from the outside on the health situation in Italy at the time of the cruise, reported in the literature [27], triggered discriminatory behavior towards Italians by passengers of different nationalities. Italy was the first state in Europe to face such a difficult situation with the establishing the first red zones and increasing infections. To date, the news on COVID-19 is very comprehensive, whereas at the time of the cruise departure, almost nothing was known about this new invisible enemy.

The clinical manifestation of the coronavirus can vary from no symptoms to severe pneumonia; it is a highly contagious virus transmitted from person to person through respiratory droplets, saliva or fecal-oral contact and contact with contaminated objects [28]. The crew member had flu-like symptoms and a coronavirus case could only be ruled out when a swab was taken, but this was delayed. The passengers risked mass contagion as they spent their days in close contact with hundreds of people without any precautions.

One of the feelings experienced by the participants in the study was the fear of dying, accentuated by the fact that they were far from their homes and loved ones. The participants created different anxiety buffers: some engaged in the fight against the system; others spent their days with the entertainment offered by the cruise; each, in his or her way, tried to remove the anxiety from themselves and not think about the seriousness of the situation, should the virus have been present inside the ship. An essential aspect emerges for the management of a possible similar situation in the future: transparent and effective communication is essential for maintaining a relationship of trust between passengers and crew. It can make a difference in the experience of a potentially traumatic situation, helping to contain panic and discriminatory behavior [29].

4.1 Limits and Future Research

This study has some limitations. The impossibility of conducting a face-to-face interview limited the number of possible participants. Not all people may have the conditions to conduct an interview by video call or call, and some may even feel unsafe with this mode of execution. The difficulties caused by the ongoing pandemic meant that the number of participants was reduced rather than increased. The participants also came from defined areas of Italy with a limited geographical area. Therefore, future research perspectives were considered to make the study more comprehensive. Further interviews could be conducted with passengers, both Italian and of different nationalities, who had lived similar experiences, particularly on cruise ships, assessing the similarities and differences between their experiences. The crew members of this and/or other cruise ships could also be involved to investigate and understand their points of view.

5. Conclusion

The world has been following the media coverage of cruise ships quarantined and/or banned in various ports due to the COVID-19 emergency. Ship quarantine raises issues that affect both collective and individual health, personal safety, and appropriate codes of conduct. Cruise ships are isolated communities with high population densities, crowded public rooms and living facilities, shared health centers, and places for common water and food supply. Therefore, infectious diseases

are generally transmitted on board by infected people and through contaminated surfaces, food and water. This requires adequate apparatus technical and human to manage quarantine and health emergencies for large numbers of passengers and crew.

Cruise ships generally have high-level personnel to carry out their normal duties. During an emergency, such as the possible presence of infected and contagious passengers or crew members, a range of additional services should be provided – in common areas and individual areas such as passenger cabins – and crew members should be able to perform extra tasks, for which they should have been trained. The crew and security personnel must ensure the continued safe and professional operation of all aspects of the ship, 24 hours a day, 7 days a week, especially in extraordinary circumstances. Therefore, a primary objective is to keep morale high and motivate the crew. It is necessary to ensure transparent communication between the authorities involved (cruise line, port and health authorities), the media and the passengers. All parties concerned are constantly updated on the measures and actions taken. Operations must also be organized to ensure greater safety and security measures.

Although the protection of the public on the ground appears unquestionable, this cannot translate into defective emergency management on board. When such an asymmetry is manifested (high protection of the people on the ground, low protection of the people on board), feelings of helplessness, anxiety and fear develop among the passengers, but also among the crew members, and, if the situation of discomfort on board continues, various degrees of mental and physical exhaustion can be recorded [30]. In this case, follow-up is required for those concerned to avoid the onset of traumatic pathologies, such as post-traumatic stress disorder, which is known to have a delayed onset pathology.

A further aspect of such an emergency relates to the characteristics of the cruise ship population, usually a multinational and multicultural population of passengers and crew members. Therefore, security personnel must be aware of and prepared to deal with a diverse human reality with distinctive expectations and reactions to authoritarian rules of behavior. Moreover, the cruise ship population belongs to a medium-high social class that, in addition to the expectations related to the stipulated travel contract, is used to interact according to legal principles and rules of interpersonal respect. The arbitrary imposition of certain behaviors (as happens in total institutions) [17], when they are not clearly explained and democratically brought to the attention of those concerned, creates a citizenship shock in those who are and consider themselves subjects of law (and rights). The greater the level of psychological citizenship – a typical feature of European citizens [31] – the greater the trauma suffered. What is more, the appearance of coercive behavior of a violent nature produces two psychological consequences in passengers: the first relates to the irruption of chaos in a time and place where harmony and relaxation should reign – such as a holiday on a cruise ship – a frightening and distressing phenomenon, particularly because it communicates that those who should ensure the management and security (crew and security) are not able to cope with the situation, since they have to use means that are authoritarian and violent; the second relates to the well-known phenomenon of vicarious trauma [32]. Even those who do not directly experience violent actions but witness them or are made aware of them in great detail can suffer trauma, to which more vulnerable populations such as the elderly and children are particularly exposed.

If the COVID-19 outbreak has transformed cruise ships into epidemiological laboratories [33, 34], providing information on COVID-19 and the necessary emergency plans to protect the health of the crew and tourists [35] represents a new challenge for maritime medicine [36], at the same time,

cruise ships have also transformed into closed multicultural communities faced with the threat of serious illness or death. Hence, as highlighted by the present investigation, the need to avert interpersonal and/or intergroup conflicts and know how to deal with the socioemotional issues triggered by the fear of illness and death in crowded and isolated contexts. Thus, COVID-19 represents a challenge for maritime medicine and the psychological preparation of crew and security personnel on cruise ships.

Moreover, cruise ships often involve many countries. If an outbreak occurs at sea, strengthening communication between stakeholders (governments, health departments, port organizations, shipping companies) and establishing a communication channel and cooperation are essential to control the spread of a contagious disease [37]. In addition to this intergovernmental collaboration outside the ship, considering that cruise ships have international crews and tourists, we believe that internal collaboration during a possible quarantine, between crew members, security service and tourists, is also necessary. Since the threat of illness and death constitutes a traumatic experience that provokes psychological discomfort, anger and interpersonal conflicts, receiving on-site medical and psychological counseling can alleviate concerns and fears, ensuring more effective emergency management and greater social cohesion. In this sense, telemedicine [38] and telepsychology [39-41] are useful tools. During the COVID-19 pandemic, consultations conducted via telemedicine proved to be just as effective as an in-person visit, saving time and costs, ensuring patient safety and avoiding circulating the virus [42]. There are pathologies for which the evidence about the use of technology to support clinical practice is well established, such as in the case of PTSD [43], in anger management [44], in clinical situations characterized by anxiety and stress [45], in the treatment of panic disorders [46], drug and alcohol abuse [47], and in the treatment of victims of violence [48]. Furthermore, passengers may include individuals with previous mental health problems. The literature points out that such individuals are highly vulnerable to the side effects of COVID-19, particularly due to the impact of measures such as self-isolation and disruption of usual healthcare [49, 50].

A properly introduced and managed online helpline could be an additional tool to address individual and relational issues related to pandemic management on cruise ships.

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Author Contributions

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Competing Interests

The authors have declared that no competing interests exist.

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