

Cruise Industry: Enhanced Health and Safety Protocols

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Abstract

SARS-CoV-2 pandemic swept every country in its path significantly affecting billions of people's lives, their health, income and lifestyle, threatening the global economy and irreversibly disturbing international markets and industry sectors. The cruise industry, once the largest and most profitable sector of the global tourism had been significantly impacted by the violent virus outbreak and its detrimental effects on the cruise operations and companies financial condition.

This study aims to provide an overview on the cruise industry state investigating the proactive response to the health crisis in the current global context of the tourism industry. The research methodology employed in the article was observational in order to support the identification and analysis of the empirical evidence derived from collecting secondary data. Exploratory research focused on specific cruise industry literature which was thoroughly reviewed favoring in-depth insights and interpretation of concepts, facts and expert opinions. Our qualitative research considers the chronological course of events from the moment of the virus outbreak, followed by suspension of cruise operations and continuing with the progressive evolution towards a safe recovery.

The empiric analysis highlights findings pertaining to some of the essential preventive measures designed to identify and reduce the transmission risk of COVID-19 virus on board the ships, as well as the progress made on strategy provisions intended to mitigate the risk of virus proliferation among the cruise passengers and port destinations.

Literature review shows that over the past year cruise industry displayed resilience and determination towards adopting efficient strategies that help combat the pandemic impact upon the cruise companies and its partners. The research underlines preventive and counteractive measures pertaining to the enhanced hygiene protocols adopted by the cruise industry. Conclusions are drawn pertaining to the efficacy of the cruise industry's current initiatives under the state of global uncertainty.

Keywords

Cruise industry, enhanced hygiene protocols, health, cruise operations, outbreak, cruise ships, risk.

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Introduction: Cruise industry on the road to recovery

Cruise ships are in fact floating hotels and because of their congregate settings and enclosed communal areas the rapid proliferation of the virus represents the major threat on board the passenger's vessels. Since the pandemic outbreak severe lessons have been learned as the cruise industry focused on innovation and research aimed at creating viable solutions that allow for action of risks mitigating as well as building sustainability and strengthen the resilience towards future recovery.

Over the past year all the countries have been focused on fighting the pandemic prioritizing salvation of people's lives and supporting the recovery by allocating funds aimed at protecting the population

from losing their jobs by assisting companies to avoid bankruptcy wherever possible. According to (IMF) International Monetary Fund, the projected detrimental impact of the pandemic on the economic growth decline was 3% in 2020. Although immediate action had been taken by the governments to alleviate the consequences of the outbreak, the long-term effects on the tourism have to be taken into consideration as countries are struggling to develop strategies to build a more resilient tourism environment on a regional level.

The entire cruise industry had been put to rest and the most important part of the recovery is planning for gradual reopening of operations under unprecedented conditions where testing of both passengers and crew is a pre-requisite among many other stringent measures designed to address Covid-19 safety related concerns. Safety of life at sea and protection of public health the industry had prioritized when all the cruise operators decided to voluntarily suspend the global cruise operations and extend the initial suspension term and that might play an important role in re-establishing consumer confidence and their level of engagement the future.

The industry's resilience to this unparalleled crisis is demonstrated by the bold approach of turning the challenges posed by the pandemic into opportunities and take advantage of this downtime to re-engineer the business models and restructure the internal cruise operations and crisis response mechanisms.

Cruise Lines International Association (CLIA, 2020) acknowledged that the intentional extension of the operations suspension is being well utilized by the cruise industry in order to focus on elaborating effective scientific health and safety measures. In addition to that the extensive preparation is essential to the successful implementation of the health protocols in alignment with the U.S. Centers for Disease Control and Prevention (CDC) framework for conditional sailing in order to ensure a safe and responsible restart of cruising.

Problem Statement: Cruise industry at crossroads

Over the last year the cruise industry received a lot of attention, particularly as it represents the largest sector within the global tourism, which had been dramatically impacted by the SARS-CoV-2 pandemic. The position of a vast majority of cruise line operators has been analysed in terms of their policy reform and operational implementation of Covid-19 protocols aboard the cruise vessels.

Due to the excessive negative publicity for the past year the cruise industry directed their efforts and performed a thorough hazard analysis - essential towards generating and boosting customers confidence in the cruise products and further encourage them to sail again in the near future.

With the current controversy pertaining to CDC's No Sail Order in U.S. waters, the cruise industry is faced with a decisional dilemma: should major part of the operations be moved to other countries and operate passenger's embarkation/ debarkation in foreign ports? The future months ahead will unveil the direction of the cruise industry however one thing is certain: the successful restart of the cruise operations depends on the active implication of all the stakeholders involved and the constant tracking of Covid-19 related activity on board and in cruise destination ports.

Research methodology

The research methods employed in this article focused on the empirical observation of the current state of the cruise industry. Previous existing literature in addition to the cruise operators official websites and industry news and articles have been researched in order to highlight the events evolution since the pandemic outbreak until present times.

Although the availability of scientific research in this field is limited the present paper aims to provide a thorough qualitative analysis pertaining to the health and safety measures adopted aboard the cruise ships. The use of comparative observation allowed us to explore the similarities and differences of cruise companies approach in terms of implemented health procedures and safety protocols aboard the cruise vessels, at cruise embarkation terminals and destination ports.

Our findings underline the specific elements of the enhanced hygiene protocols the cruise industry broadly implemented under the expert guidance of the scientific community and the national health and government authorities.

Results and discussions

Over the passing months under the CDC's conditional No Sail Order issued in March 2020 the industry proved resilient (Vlasceanu and Tigu, 2021) and adopted bold business strategies, amongst it: selling some of the old ships, modernizing the fleet with new and efficient technologies designed to facilitate the reduction of pollutant emissions and improve the sustainable tourism management level. As the rapid spread of the virus continues to endanger the public health (Chinazzi, et al., 2020) there is an undisputed positive effect of reduction in pollution emissions recorded in most countries (Gualtieri, et al., 2020; Ghahremanloo, et al., 2021; Chatterjee, et al., 2020; Srivastava, 2020; Sharifi and Khavarian-Garmsir, 2020;) resulted from the reduced traffic.

The mobility restrictions and social distancing across the entire world accentuated the sudden shift of business operations into the online virtual environment (Assaf and Scuderi, 2020; Thomas and Chopra, 2020) and wherever possible technology is being utilized to ensure operational continuity and drive growth whilst avoiding physical contact.

By contrast, the tourism industry relies solely on human and social interaction and its revival will depend on boosting confidence in travelling and lessening the perception of risk involved (Assaf and Scuderi, 2020). Mao, et al. (2020) argued that gaining employee and consumer confidence is crucially important for the economic healing, as the impact caused by the global pandemic dramatically influenced consumers' perception of tourism product and services (Yu, et al., 2020).

The UK Institute of Hospitality, 2021 highlights the findings of Sheffield Hallam University consumer loyalty report amongst 2,000 adults analysing customer behavior in order to project trends and opportunities within the hospitality sector for the months ahead. The study reveals that overall 39 per cent of the interviewed people intend to eat and drink out and visit hospitality venues a lot more often comparing to the times before the pandemic (table no.1).

Table no. 1. Consumer behavior report: Intention to visit hospitality venues in 2021

Consumer age groups / Region	Percentage
Age: 18-24	66
Age: 25-34	55
London	44
Yorkshire	45
North East region	55

Source: UK Institute of Hospitality, 2021

The road to recovery ahead is dramatically influenced by the restrictions the population suffered along the entire period of repeated lockdowns, drastic curfews, limitation of mobility, social and professional boundaries imposed by the pandemic. It appears that people's intentions of wanting to go out, travel and socialize comes as a natural response to the drastic conditions that everyone had to comply with for the past year. Perhaps now more than ever, governments, industries, companies have to overcome the challenge of re-establishing trust and confidence in their entities, services and products and foster a safe and secure environment for their customers.

As tourists are eager to travel again, the hospitality industry must work diligently to create a safe and secure environment without altering the visitor experience across the regions; table no. 2 highlights customer's cruise purchase intention and industry's short-term projections.

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Table no. 2. 2020 Consumer behavior report and 2021 Projections

Consumer age groups / Region	Metrics
Willing to cruise in the next years	74%
Intl. people who never cruised before likely to cruise in the next years	58%
Willing to cruise within a year	2 out of 3 people
Number of cruise ships projected in operation in 2021	270
New cruise ships to debut in 2021	20

Source: CLIA, 2020

Precisely trust and confidence are the key factors towards a safe recovery of the global hospitality industry and CLIA's 2020 Qualtrics issued report on 4000 interviewed passengers from 8 countries highlights that 74% of them are likely to cruise in the next few years, 58% of people who never cruised before are considering taking a cruise in the next years and 2 out of 3 cruisers are eager to cruise within a year.

The overall optimistic sentiment among people represents cruise industry's outmost desire on the path to recovery, particularly as 20 new cruise ships are set to debut in 2021 and 270 vessels are projected to start their cruise operations this year. As such particular consideration had to be given to the customer experience aspect of cruising when designing the enhanced health protocols under the guidelines of CDC issued hygiene requirements. Cruises are considered the paradise of vacationers where limitations and restrictions do not interfere with such an amazing and truly unique holiday experience and therefore extreme thoughtfulness had to be invested in protecting this vulnerable cruise component. To successfully achieve a high level of customer experience some of the cruise lines turned to new technologies and introduced an onboard app to help internalize the onboard health and safety measures in a subtle manner in addition to complimenting and efficiently customizing the cruise product by allowing guests to book onboard events, adventure trips and order food and beverages.

Nevertheless, undisputable are the pandemic effects upon the cruise industry, particularly at fleetwide level the COVID-19 related costs are significant as the mega-liners have to be continuously sanitized and in perfect compliance with the latest hygiene-related protocols implemented across all brands in preparation of restarting the cruise operations.

In accordance with the U.S. Centers for Disease Control and Prevention's (CDC) Framework for Conditional Sailing Order the cruise companies respect the color-coding system with its four tiers of categorizing destinations according to their Covid-19 risk level. Tier one is considered as low level for which basic distancing and hygiene recommendations are issued, tier two – moderate level avoidance of all non-essential travel, tier three corresponding to a high level of risk and avoidance of non-essential travel and tier four - a very high level of risk with recommendations of all travel to be avoided in those regions.

For the entire industry is of paramount importance to protect against tier four high level of risk regions and implement emergency procedures that help counteract future outbreaks and continuously maintain a safe environment aboard the cruise ships.

Our research reveals that cruise operators have very strict contingency plans in case of high numbers of Covid-19 related illnesses recorded during a cruise and in case needed itineraries may be altered and the voyage may possibly end with the vessel's immediate return to the port of embarkation and further imposed quarantine of guests and crew aboard the ship.

Sadly, at the beginning of the outbreak there have been reports of Covid-19 related illness on some of the cruise ships that culminated with loss of life and long-term effects upon the passenger's health. To prevent these potential hazards of reoccurring the complete pause of the operations had served as an opportunity for better planning and aggressive action towards a safe resuming and gradual cruise operations.

CLIA member companies adopted a comprehensive protocol that incorporates a set of essential rules applicable to the cruise operations at the ports of embarkation/debarkation, as well as on board and also

in the visited ports. In addition to the core elements of the hygiene protocol there are a series of additional health measures that are likely to be adjusted and suffer modifications depending on the continuous developments of Covid-19 pandemic, the medical initiatives in terms of prevention and therapy in the transformational global context and the rapid evolution of events.

Medical crisis contingency planning includes besides the shipboard instant medical response in addition to the controlled cabin occupancy and specially allocated inventory for cabin isolation purposes, collaborative partnerships with shoreside private healthcare providers for treatment and quarantine in specialized facilities, as well as transportation from the ship to the local hospitals.

To ensure the safety of the passengers during their adventure trips in destination ports a strict selection of the shore excursions operators had taken place based on the health protocol requirements, going as far as potentially denying of re-boarding for the non-complaint passengers.

Table no.3 displays a detailed listing of the essential elements of the health and safety protocol in all three dimensions: at cruise terminal before boarding, during the voyage aboard the cruise ships and in ports of destination.

Table no. 3. 2021 Cruise industry’s enhanced health and safety protocols

Cruise Line	Safety measures at embarkation check in	Safety measures aboard the cruise ships	Safety measures in cruise ports and excursions
All	Mandatory compliance with all local port and health authorities’ regulations	Fever screening infrared system at the ship’s gangway	Mandatory mask-wearing during excursions
All	Online check-in: designated arrival time at cruise terminal to minimize congestion.	Mandatory mask-wearing by all passengers and crew onboard	Physical distancing during shore excursions and private sightseeing
All	Additional waiting areas in terminals to allow staggered times for passengers embarkation	-Physical distancing onboard the cruise ships of all guests and crew; -Time, size and flow management of groups at restaurants and entertainment venues	Availability of hydro-alcoholic gel during shore excursions
All	Pre-boarding health declarations, enhanced health screening questionnaires for all guests and crew	Daily temperature checks for all crew members Designated crew - use of appropriate Personal Protective Equipment (PPE)	Additional waiting areas to allow staggered times for cruise boarding in destination ports
All	Physical distancing at embarkation/debarcation terminals (6,5 feet/2m)	Rapid response and contact tracing methodologies in case of reported illness; health checks during the cruise for guests and crew	Adequate training tour operators following guidelines of the international health authorities
All	Before embarkation each guest and crew must provide proof of a negative COVID-19 test in the last 72 hours	- HVAC technologies for efficient air ventilation; - H13 HEPA (high-efficiency particulate absorbing) filtration systems in ship’s infirmary and assigned pax and crew isolation rooms; - MERV 13 (Minimum Efficiency Reporting Value) - removing 99.9% of airborne pathogens, including SARS-CoV-2 - Bi-polar ionization technology and individual climate control in each passenger and crew cabin	Tour vans and coaches operating at reduced capacity to ensure proper distancing
All	100% Covid-19 testing of passengers and crew prior to embarkation	-Redesigned restaurant space layout -Table service restaurant assigned seating meal times	Frequent cleaning and sanitization of tour buses

All	Touch-free temperature checks	Contactless Lido Bar and Buffet style food and beverage — served by waiters wearing visors, masks and gloves	Availability of disposal bins for used face masks and gloves
All	Abundent availability of sanitizer dispensers	Passenger’s and Crew Cabins: increased disinfection with U.S Environmental Protection Agency (EPA) certified cleaning products	Bio-Hazard materials, contaminated items – sealed and disposed according to health and safety guidelines
All	Bio-Hazard materials, contaminated items - sealed and disposed according to health and safety guidelines	- Quick removal of room service food waste to prevent bacteria development and growth. - Housekeeping cleaning and turndown service with linens disinfected at high temperatures	Other specific measures according to each location
All	Availability of disposal bins for used face masks and gloves (non-contaminated)	Sanitization of public bathrooms with heavy duty alkaline cleaning solution, (EPA) approved	
All	Disinfection of luggage	Training of crew on the new sanitary regulations, monitorization of health and symptoms of crew	
All	Fogging – spreading disinfectants in all embarkation terminal areas as fog or mist	High frequency sanitization and disinfection of passenger public areas and the high traffic walkways and gangway	
All	Intensive disinfection before and after each embarkation/debarkation	Additional waiting areas to allow staggered times for passengers debarkation in home port and destination ports	
All	Decontamination Zone - Disinfection/ Decontamination of all guests and crew personal belongings and all goods and merchandises	Intensive sanitization process of cleaning, fogging and wiping with hospital grade disinfectants in all public areas and on board facilities	
All		Higher frequency critical touchpoints sanitization in all public and communal areas (elevator buttons, door handles)	
All		Abundent availability of sanitizer dispensers in all guest and crew areas	
All		Cleaning and sanitization during and after service of all galleys, restaurants and bar areas – three times a day	
All		Adequate spacing for restaurant seating; disposable cutlery -available on request	
All		Restriction of supply procurement from tier 4, highly affected regions	
All		Controlled cabin capacity as to allow available cabins destined to be converted into quarantine rooms when required	
All		Availability of disposal bins for used face masks and gloves	
All		Bio-Hazard materials, contaminated items and medical waste – sealed and disposed according to health and safety guidelines	
All		PCR testing onboard following medical decision	
All		- Spa treatment protocol, use of gloves and visors during therapy	

		- Periodical sanitization of all gym equipment - Periodical decontamination of child care facility and playground	
NCL, Oceania Cruises, Windstar, etc		Mandatory Covid-19 Vaccination requirements of all guests and crew, at least 2 weeks prior to cruise departure date	
NCL, Oceania Cruises, etc		Public Health Officer - incharge with the sanitation of public areas and accommodations	
CCL, NCL, Princess, RCL, etc		In cruise app	

Source: Ponant, Carnival Cruise Lines, Princess Cruises, Paul Gauguin Cruises, Virgin Voyages, UN Cruise Adventures, Victory Cruise Lines, Windstar Cruises, Royal Caribbean, Regent Seven Seas Cruises, Oceania Cruises, Norwegian Cruise Lines, Hurtigruten Expeditions, Genting Cruise Lines, Croisi Europe Cruises, Bahamas Paradise Cruise Lines, American Cruise Lines

In order to enhance the cruise experience of the passengers and monitor their onboard health and safety in a seamless manner some cruise companies introduced an onboard app created to assist guests along the way from the point of embarkation where they can use the app for online check-in, complete the health and safety section and input their personal information. In addition to that, the app is designed to facilitate the dissemination of cruise information amongst all the guests pertaining to the daily schedule of onboard activities allowing guests to book certain events, shore excursions, entertainment, dining reservations, etc. Cruise industry had successfully implemented new technologies and besides complementing the guest’s cruise experience, it also gathers relevant information through the incorporated health related elements that allow for an efficient management of Covid-19 protocol on board the cruise vessels.

Conclusions

This article provides a comprehensive analysis of the extensive measures adopted aboard the cruise ships in compliance with the guidelines issued by the Centers for Disease Control and Prevention and recommendations of the World Health Organization in conjunction with the scientific community.

Given the socio-economic impact caused by the health emergency, the global response to mitigate the effects of the pandemic have been orchestrated reactively by the governments and in the long term it will prove to be precisely the determining factor responsible for the slow restart of the travel industry.

Besides the general stop of the economic activity which threatened the population’s overall wellbeing putting many families at severe risk, the lack of synchronicity and coordination in effective response mechanisms at the regional level triggers a long-term higher unemployment and poverty rates irreversibly affecting many industry sectors and lowering the countries’ GDPs.

Pertaining to the cruising industry as a major economic sector within the global tourism, recently CDC renewed their directives on April 2nd 2021 in relation to the Framework for Conditional Sailing in U.S. waters, which continues to be suspended until further notice. The order recommends a phased approach to resuming of cruise operations with clear specifications of guests and crew screening and the necessity of advanced collaboration agreements between cruise operators, port authorities and local healthcare facilities.

Although the industry had been for the past year in a survival mode, to adequately modify the ships with technological improvements designed to aid in the battle against the spread of the virus cruise companies allocated considerable funds in addition to the investments made in research and development to innovate and overcome this pandemic and prevent a dramatic impact of any such similar crisis in the future.

Extreme considerations ought to be given to the customers service quality aspect of the operation in such a way as to harmoniously blend the rigorous newly introduced protocols and make them part of the cruise ship travel experience. Further research may be exploring this topic.

Although significant advancements have been made in relatively short time span fighting the pandemic on both fronts: prevention and treatment of Covid-19 related illness, continuous improvement of protocols is required as the science, technology and knowledge evolves under the guidance of top expert advice.

Whether the sale of some of the old ships, the enhanced hygiene protocols, the staggered resumption of cruise operations, the controlled capacity and other effective business tactics, they all serve the highest purpose of the industry's resuscitation and its successful recovery.

With the recent creation of vaccines designed to provide immunity to the population in addition to the enhanced health protocols aboard the cruise vessels and cruise destinations, the gradual resumption of cruising in various regions around the world is expected to increase in the second part of 2021.

In the months ahead governments, policymakers, health specialists and business leaders around the world need to continue to prioritize the containment of virus proliferation by taking the necessary steps to ensure healthcare services for all citizens whilst rebooting the economic sectors.

The worlds interconnectedness implies that governments, leaders, researchers and global institutions establish partnerships to develop strategies to overcome the limitations imposed by the pandemic and accomplish social and economic restoration on a global level.

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