

# **Passenger ships operations during COVID-19**

**(An exploratory study from the Norwegian context)**

**Candidate name:** Okoli, Ugo Chigozie

**University of South-Eastern Norway**

Faculty of Technology, Natural Sciences and Maritime Sciences

**MASTER THESIS**

**May 2021**

## **Abstract**

The ongoing COVID-19 pandemic has greatly impacted the maritime industry causing disruptions and operational challenges to maritime services globally. The nonunanimous national lockdowns, travel restrictions, quarantine requirements, and other social distancing restrictions being imposed by various countries to curb the spread of the virus have posed operational problems particularly to the passenger shipping industry since the pandemic outbreak in 2020. The objective of this master thesis paper is to conduct an in-depth analysis on *Passenger ships operations during COVID-19: An exploratory study from the Norwegian context*. To achieve that, a one-on-one virtual interviews were conducted using twelve structured questions with seven experienced professionals from three different companies operating in Norway. Recordings from the interviews were transcribed and thematically analyzed with NVIVO software (a qualitative analyzing software). The main findings highlight two significant themes, i.e. operational challenges and incentives keeping companies afloat. They are embedded in the following concepts: *1. Adaptation, challenges and navigation of the new rules and 2. Benefits and new concepts keeping business afloat*. Presently, there are few research studies being conducted on this topic since the situation with the COVID-19 pandemic is still relatively new and ongoing. Therefore, this study contributes knowledge to the operational challenges during the COVID-19 era for passenger ships in Norway. What is more, the study provides grounds for further research on the long term repercussion of the coronavirus pandemic in the passenger shipping industry.

## Table of Contents

Acknowledgements .....	6
1. Introduction .....	7
1.1 Research problem/challenge .....	7
1.2 Background.....	7
1.3 Goal of the thesis .....	8
2. Literature review .....	10
2.1 Passenger shipping before the COVID-19 pandemic .....	10
2.1.1 Health security and medical facilities on board of passenger ships before the COVID-19 pandemic.....	10
2.1.2 Customer experience on board of passenger ships before the COVID-19 pandemic..	12
2.2 The COVID-19 transmission on board of passenger ships in 2020 - the cases of Roald Amundsen, Diamond Princess, Grand Princess and Ruby Princess.....	13
2.3 Challenges faced and measures taken to sustain mobility in passenger shipping during the COVID-19 pandemic .....	16
3. Methodology .....	22
3.1 Research method .....	22
3.2 Research design.....	22
3.3 Refined interview questions (RIQ) .....	23
3.4 Population and sample .....	24
3.5 Ethical considerations .....	25
4. Findings .....	27
4.1 Theme one: Adaptation, challenges and navigation of the new rules brought by COVID-19 .....	27
4.1.1 Subtheme one: Employment.....	28
4.1.2 Subtheme two: Vessel layups and certifications .....	30
4.1.3 Subtheme three: New protocols.....	31
4.1.4 Subtheme four: Fun boats no more.....	32
4.2 Benefits and new concepts keeping business afloat during the COVID-19 pandemic ..	35
4.2.1 Aid packages.....	36
4.2.2 Freight, transport, new routes and themes .....	37
4.2.3 Marketing campaigns and flexible booking policy .....	39
4.2.4 New ways of working.....	40
4.3 Summary of findings .....	42

5. Discussion .....	44
5.1 Discussion of theme one - adaptation, challenges and navigation of the new rules brought by the COVID-19 pandemic .....	44
5.2 Discussion of theme two - benefits and new concepts keeping business afloat during the COVID-19 pandemic.....	47
6. Conclusions .....	52
6.1 Concluding remarks.....	52
6.2 Limitation and suggestions for further research .....	52
References: .....	54

### **List of tables**

Table 1. The 12 questions addressed during the interviews.....	23
Table 2. A table depicting respondents with the years of their working experience .....	25
Table 3. Summary of the findings .....	43

### **List of figures**

Figure 1. A thematic conceptualization of findings on adaptation, challenges and navigation of new rules that were brought by the COVID-19 pandemic to passenger shipping companies. ....	27
Figure 2. A thematic conceptualization of benefits and new concepts keeping passenger shipping businesses afloat during the COVID-19.....	36

## **Acknowledgements**

I would like to acknowledge all the people whose assistance was a milestone in the completion of this master thesis. First, I would like to appreciate my family for their encouragement and support during the writing of this paper. My special thanks to my mother Mrs. Ann Oby Okoli for all her support and prayers for the success of this project.

I wish to express my deepest gratitude to all seven respondents who participated in this project. Thank you for your time and sharing incredible experiences.

I would like to pay special regards to my supervisor Ziaul Haque Munim, Associate Professor in Maritime Logistics at the University of South-Eastern Norway, for his incredible guidance and review feedback throughout this project.

Lastly, I would like to whole-heartedly appreciate my girlfriend Agata Stasiewicz for the love and all the incredible support she gave me throughout this project. I would not have been able to do this project without her support.

## **1. Introduction**

### **1.1 Research problem/challenge**

The novel coronavirus (COVID-19) outbreak was declared pandemic by the World Health Organization (WHO) on the 11<sup>th</sup> of March 2020. Its repercussions have been posing a lot of challenges to businesses and organizations globally since the beginning of the outbreak. The economic impact of COVID-19 which has been referred to as ‘corononomics’ by some reviewed articles is highly significant and cannot be underestimated (Barua, 2020). It has revealed the exceptional power of interconnectivity and fragility of the global economy in which no country, nation or continent is an isolated island when it comes to world economies (Millefiori et al., 2020). The world is witnessing both local and international economies experiencing unprecedented setbacks in certain sectors as a result of imposed restrictions to curb the spread of the virus (‘Impact of COVID-19 on the Social, Economic, Environmental and Energy Domains’, 2021). Simultaneously, we are also noticing some benefits that arise from lesser mobility such as reduction in pollution in industrial and transportation sectors (Jiang et al., 2021) or higher rate of organizations embracing digitalization and technological innovations due to imposed measures and restriction.

Likewise, the nonunanimous restrictions and regulations imposed by various countries to confine the spread of the virus have created uncertainties across societies around the world. Those measures have led to disruptions in social behavior and global mobility patterns making business forecasting and economic activities difficult and in consequence hitting the tourism industry extensively (‘The COVID-19 Pandemic and Organisational Learning for Disaster Planning and Management’, 2021). The industries profoundly impacted by the COVID-19 pandemic are undoubtedly the aviation industry and maritime industry. This master thesis will focus on the passenger ships sector of the maritime industry. The main goal of this paper is to establish the impacts of the COVID-19 pandemic on the operational activities of passenger ships as well as discuss the implemented strategies that have kept them afloat during those challenging times. The research is based on the qualitative data obtained from selected passenger shipping companies operating in Norway.

### **1.2 Background**

Before the COVID-19 pandemic era, there was a recorded increase of about 6.07% between 2018 and 2019 in the global number of commercial shipping port calls for vessels of not less than 1000 gross tons. During the same period, port calls and vessels turn around

recorded a significant reduction of about 0.41% with regards to time vessels spent at ports. Norway ranks number one among top destinations for passenger ships with the highest number of passenger ship calls in 2019 amounting to 535,649 of vessels with at least 1000 gross tons. This is followed by the US with recorded passenger vessel port calls of about 213,902 and Italy being third with recorded passenger vessel port calls of about 192,992. The United States and Italy are home to most passenger ferries used in this data collection (UNCTAD, 2020).

Passenger shipping or cruise lines industry can be described as a maritime industry designed to provide people with unique travel experience across different destinations. The operational prospects provide passengers with the opportunity to travel not only to various destinations, but also enjoy entertainment programs while sailing, meals and beverages as well as other onboard facilities (Chua et al., 2017). In an effort to grow and stay attractive, the industry has been continuously focusing on innovating the onboard amenities and facilities designed to compete with land based vacations and ultimately enhance cruise experience for both first-time passengers and repeat passengers (Chua et al., 2017). The International Maritime Organization (IMO) depicts the COVID-19 pandemic impact for the maritime industry as a humanitarian crisis created by the various random measures implemented by governments around the world to mitigate the spread of the virus resulting in difficult challenges in crew changes and repatriation of seafarers (IMO, 2020) (*Coronavirus Disease (COVID-19) Pandemic*). Based on UNCTAD reviewed analyses and data collection between 2018 and 2019, it emerges that there has been a boost in the cruise liners industry and port efficiency management. Despite this, a drastic distortion in the industry in early 2020 with the outbreak of COVID-19 started to be observed. Maritime traffic data collected via a global network of Automatic Identification System (AIS) and analyses using cumulative navigated miles (MIL) unveiled a significant fall in maritime mobility across all segments of maritime industry (Millefiori et al., 2020). These can be directly linked to imposed restrictions which include a travel ban, quarantine requirements for onboard crew members on arrival at a port, or port entry denial due to lockdowns. Consequently, it led to severe reduction in port calls for most ships since the outbreak of the pandemic in early 2020.

### **1.3 Goal of the thesis**

In order to contribute knowledge on operational challenges caused by the COVID-19 pandemic for passenger shipping companies, the attention is directed towards disrupted and sometimes halted businesses of passenger ships in Norway. This master thesis will discuss the



COVID-19 pandemic repercussions in this branch of tourism from the Norwegian standpoint by conducting one-on-one interviews among workers within the area of operational activities from selected passenger ships operating in Norway. The entire thesis process strictly adheres to the Norwegian research data protection rules as well as to the university's thesis writing rules and regulations. The questions that will be used during the interviews have been approved by the Norwegian research data protection agency NSD (NorskSenter for Forskningsdata). They were developed in a way that intends to learn about operational challenges faced in this industry and mitigation undertakings by the key participants.

Due to the present partial national lockdown and restrictions in Norway, physical interviews are not be possible. However, interviews will be conducted virtually and recorded via Microsoft application TEAMS with the use of a laptop. The recordings will be transcribed into words and analyzed qualitatively using NVIVO data analysis software. Furthermore, a literature review will be conducted whereby the thesis topic will be researched online using the university's database and Google Scholar research engines to find relevant articles, journals or publications. During the review, the master thesis will revolve around the global impact of COVID-19 on the industry in general and on the national level from the Norwegian standpoint. Subsequently, the findings acquired during the interviews (i.e. recordings) will be explored in detail. At the end of this thesis paper, the key participants and stakeholders in the passenger ships industry will be presented with the wide spectrum of the challenges and repercussions of the COVID-19 pandemic, which may enhance future planning and decision making processes allowing for unforeseen circumstances or challenges especially.

## **2. Literature review**

This chapter conducts a literature review on the topic of COVID-19 and its impact on passenger shipping operations. The purpose of the review is to analyze and collate the available literature as well as incorporate a Norwegian standpoint into it. While the amount of literature on COVID-19 and its impact on various industries worldwide has been growing abundantly in the recent months, it is of vital importance and knowledge contribution to examine the cumulative character of the pandemic and restrictions from a domestic perspective. The literature has been selected by applying the following key words: *COVID-19, pandemic, corona virus, vessel, maritime health, passenger ferry, transmission of disease on cruise liners, mobility in shipping industry, tourism in Norway, travel restrictions*. The key words and phrases have been utilized to feed research engines Oria, Scopus, Elsevier and Google Scholar.

### **2.1 Passenger shipping before the COVID-19 pandemic**

The literature on the pre-pandemic era of passenger shipping operations offers a substantial comparative analysis and evidence for the time after the coronavirus outbreak at the beginning of 2020. In this section, closer attention will be paid to the health security and medical facilities as well as customer experience before COVID-19 in the context of passenger ships.

#### **2.1.1 Health security and medical facilities on board of passenger ships before the COVID-19 pandemic**

Passenger ships as any other branch of tourism must exhibit readiness to help their customers in case of accidents, illnesses or life-threatening events. An important element of health safety on ships is to have medical facilities and resources available. Holt et al. (2017) presented the rule that most passenger ferries - those that do not sail longer than 3 days - are not obliged to employ a medical doctor. The most often applied solution is to carry a paramedic. They studied two passenger ferries that sailed for 3 years (Jan 2014 - Dec 2016) on route of Oslo-Kiel-Oslo. According to their research, the medical resources available on a ferry, are for instance defibrillator, first-aid training for all crew members, tele-medical communication systems as well as a helipad. The Norwegian Tele-medical Maritime Assistance Service (TMAS) and Radio Medico Norway (RMN) in Bergen, Norway, in case of a life-threatening event on board decide the best means of transport - helivac, rescue boat or

ambulance while alongside. What is more, Santos et al. (2021) also argue that the ship's technical characteristics influence evacuation speed.

Another element of health security worldwide are certificates. A Ship Sanitation Certificate (SSC) issued by the International Health Regulations ("IHR (2005)") must be held by vessels sailing on international waters (Mouchtouri et al., 2018). The inspection prior to issuing a certificate includes for example actions to determine the existence of species that could pose risk to passengers' wellbeing and health, or observations of lack of not well-maintained sanitary schedules. The inspection is conducted in accordance to a designed system and put forward in the World Health Organization Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates which is the same worldwide and reduces the possibility of misinterpretations of the inspection results (Mouchtouri et al., 2018).

Furthermore, it is of paramount importance to examine the established rules and regulations that prevent the spread of diseases on vessels and aim at improving health security of tourists and crew members. Dahl (2016) convincingly suggests the susceptibility of the cruise ship industry to an outbreak of a highly contagious viral or bacterial disease onboard. He argues that an outbreak of a disease on board can impact the passengers' behavior towards the doctors and how the doctors are less available for other emergencies on board which altogether disrupts normal activities of a cruise liner (Dahl, 2006). The norovirus is the most common disease on cruise liners and even though it is more likely to catch it on land, due to the specifics of a cruise liner high passenger density and limited space, the disease becomes easily noticeable by a wider public and the media have called it "the cruise bug" or "the cruise virus" (Dahl, 2016. p.182). Dahl (2016) believes that the viruses can easily be spread by a handshake particularly during parties on cruise liners, especially smaller ships, where the passengers are more willing to socialize with the crew and the other passengers by giving each other a handshake. He further suggests two methods that can reduce the spread of a contagious disease onboard by simply not exposing the surface of the palms to touch - "the fist bump" and the "cruise tap". He believes that through raising awareness of this technique, the cruise liners companies can keep down the outbursts of infectious disease on ships as well as the number of dissatisfied customers and overburdened crew members.

Mouchtouri et al. (2019) analyzed various disease outbursts between 1990 and 2019 on ships and argue that due to the congested environment onboard a ship there exists an ineradicable likelihood of rapid transmission of a contagious disease. Moreover, apart from the common flu or gastrointestinal diseases, the so-called childhood diseases like rubella or measles tend to outburst on ships due to different national vaccination strategies. There have

been extensive measures taken in order to improve the international policies on Vaccine-Preventable Diseases (VPDs). In 2013 the European Union aimed at improving the guidelines on epidemiological situations and health protection in Europe through the decision on serious cross-border threats to health - Decision No 1082/2013/EU. Furthermore, according to the European Manual for Hygiene Standards on Passenger Ships (2016), passengers should visit their general practitioner upfront a cruise trip in order to discuss vaccination possibilities. Cleaning, disinfection, testing, illness questionnaire and quarantine guidelines are well defined in the European Manual for Hygiene Standards on Passenger Ships.

Throughout the literature, there is consistent evidence that international regulation has long strived for preventing the outbursts of contagious diseases as well as improving the sanitation controls and implementations especially on board of passenger ships. However, in the era of rapidly changing circumstances imposed by the spread of the novel coronavirus, the measures that offered substantial aid before are no longer sufficient.

### **2.1.2 Customer experience on board of passenger ships before the COVID-19 pandemic**

Although customer experience on passenger ferries depends to a large extent on a few primary factors, like location, price, entertainment or food, the customers' previous experiences cannot be underestimated while deciding on cruise trips. For instance, Santos et al. (2021) examined the situation of the cruise shipping industry on the coast of the Iberian Peninsula and the Canary Islands between 2007-2016 and compare it to the situation in the West Mediterranean area. They emphasized that more and more these are not the destinations that are sold but itineraries, which might mean longer trips or allowing for stopping at different ports, although that in turn has its limitations based on the size of a cruise liner and port's capacity. It is worth noting their observation that the decrease in ship traffic for some ports on the coast of the Iberian Peninsula may be caused by the fact that there is more availability of cruise liners in the Baltic Sea countries or Norway, hence impacting the choice of a potential customer. Another factor worthwhile looking at is the food experience on board of a passenger ferry. Altintzoglou et al. (2016) depicted the food experience and food souvenirs from the Norwegian context. They conducted a questionnaire among 277 people on a cruise ship along the coast of Norway during summer 2014. The questionnaire aimed at examining person's willingness to taste and discover new foods, their familiarity with the Norwegian food, willingness to buy Norwegian food, or whether they travelled in Norway before. One of the results was that in the group of passengers with high innovativeness the knowledge about Norwegian food was larger. What makes this study different from others is

that the questionnaire was conducted during a holiday and not when the tourists were already at home. In reviewing the study of Larsen and Wolff (2016), we can learn about the cruise passenger behaviors on the ships calling at Norwegian ports. The authors investigated whether customers on passenger ships versus inland tourists are less reluctant to purchase when they are not provided with the sufficient choice and abundance of possibilities to spend money on. Interestingly enough, the intention of revisiting a place is higher for inland rather than for cruise customers. Thus, the authors convincingly argue that a cruise trip is not a means to promote onshore holidays at the same location or country the least. Even though originally the ferries were used to carry passengers, due to insufficient inland transport infrastructure they have become sailing leisure facilities (Miotke-Dzięgiel, 2002, p. 20 as cited in Kizielewicz et al., 2017). Chua et al. (2017) were particularly interested in the differences between the experiences of first-time travelers versus repeat customers. They argue that customers rely on their preference as well as the atmosphere they can expect on board of a cruise liner. This impacts the overall interpretations or perceptions of the quality of an offer. The authors further argue that the factor that would make the customers recognize the good quality of a cruise itinerary, advertise it as well as increase the possibility of taking another cruise trip is the existence of the previous similar good experience. Santos et al. (2021) claim that over 40% of people go back to the places they have first visited while on a cruise trip.

There is a general consensus that the passenger shipping companies have invested in enhancing their customer's experience throughout Europe in the last few years. However, there is no escaping the fact that potential tourists in the era of COVID-19 have been deprived of the pleasures of a cruise atmosphere and amenities. Undoubtedly, it is going to be of crucial importance to learn how the changes imposed by the restrictions related to COVID-19 have changed the customer's experience and will affect their future decision-making process on cruise itineraries.

## **2.2 The COVID-19 transmission on board of passenger ships - the cases of Roald Amundsen, Diamond Princess, Grand Princess and Ruby Princess**

Virus transmission on board of passenger ships can undoubtedly occur rapidly and put a strain on the passengers and crew. A few examples of the COVID-19 outbreaks on cruises that took place in 2020 have been extremely challenging beyond dispute. There was an incident of coronavirus outbreak on board passenger vessel involving one of the biggest cruise liners in Norway, Hurtigruten (maritime executive.com, 2020). The case made the headlines all over Norway, however, the situation only leaked out and was escalated when the company

attempted to conceal the outbreak at the same time risking a significant dent on the image of the company. It all began on July 29<sup>th</sup> when one of the passengers from Roald Amundsen tested positive after returning from a trip. The Norwegian health official informed the cruise management and the company failed to inform the rest of the passengers as well as the onboard crew members which consequently resulted in a total of about 53 people tested COVID-19 positive (Norwegian Institute of Public Health, 2020). Regrettably, there is yet an ongoing investigation on this case and no literature is available at this stage.

It is crucial to stress the fact that outbreaks on vessels give a scarce opportunity to explore the dynamics of the virus transmission not available from the broader population perspective (Mallapaty, 2020). Moriarty et al. (2020) argue that cruise liners can facilitate the spread of COVID-19. The authors focused on two ships that experienced a coronavirus outbreak on board between February and March 2020 - Diamond Princess and Grand Princess. They recalled that on March the 13<sup>th</sup>, Cruise Lines International Association decided a 30-day halt of cruise activities in the United States. The authors further described how the situation on Diamond Princess in Japan developed right after the first confirmed case of the novel coronavirus infection, depicting the crew's inability to isolate, evacuating passengers requiring urgent medical assistance as well as testing more passengers for disembarking purposes. Almost 20% of people tested on Diamond Princess had positive tests for COVID-19 with nine mortality cases (Moriarty et al., 2020). Almost 50% of tests conducted on Diamond Princess proved to be asymptomatic (Moriarty et al., 2020). The situation on Grand Princess was also explored by the authors. The vessel sailed on the coast of California, US. The trip was divided into voyages A and B and the first COVID-19 case was confirmed after the disembarking of the passengers from voyage A subsequently leading to imposing self-isolation for the remaining passengers. On the 8<sup>th</sup> of March 2020, the passengers and crew were transported to land sites to go through a quarantine. The authors argue convincingly that ships closed environment, elderly passengers as well as contact of people from geographically distant locations may speed up the outbreak of a virus. We can also learn that the efforts to curb the spread of COVID-19 on both vessels was not only aimed at confining the disease onboard but also preventing the further spread into communities once evacuated.

Takeuchi (2020) described how the unpreparedness for the spread of a virus on board of Diamond Princess unveiled itself early February 2020. He mentioned various medical facilities in Japan that came to the aid of ill patients on board or admitted patients at their premises. The author explained the process of stratification which was applied for disembarking patients performed by DMAT - the Japanese Disaster Medical Assistance Team

and he predicted that hospitals may not be able to maintain accepting regular patients and those with infectious disease at the same time.

Similarly, Dahl (2020) undertook the case of Diamond Princess. He stated that the number of COVID-19 cases on Diamond Princess led to the second largest outbreak of the virus worldwide (over 600 cases on 19th February), with only Wuhan and mainland China reporting more. Dahl (2020) believes that some of the contributing factors include limited space on a vessel, one supply system, shared bathrooms, etc. which makes it a huge challenge to control the spread, especially when many infected people are asymptomatic. Another challenge according to Dahl (2020) was distinguishing between passengers going through common influenza and the passengers going through the novel coronavirus COVID-19, particularly because of the disease peak month of influenza the cruise was sailing in. The fact that crewmembers are yearly vaccinated against influenza made it easier to determine what disease they were going through. Dahl (2020) briefly mentioned how isolation was impacting mental well-being of the passengers and the crew, the necessity of keeping the crew members motivated during isolation onboard, and the requirement of the authorities and media to keep updating the actions onboard. He concluded that not isolating the crew members in the first place led to further development of the disease onboard, especially when they still had to manage food supplies to cabins, testing in confined circumstances as well as performing their daily regular activities.

Other group of researchers on COVID-19 spread on passenger ships aimed at forecasting the development of the disease for ten days after the early outbreak of the virus at the end of January on Diamond Princess. In light of the lack of information on transmissibility pattern at that time at Diamond Princess, Zhang et al. (2020) assumed and based their analysis on the information available from Wuhan, China applying a mathematical model at the same time admitting that it may have been biased.

In reviewing the report from New South Wales Australia, we learnt about the development of COVID-19 on board of Ruby Princess. She made three voyages from Sydney, Australia to New Zealand and back to Australia: from 11<sup>th</sup> of February to 24<sup>th</sup> of February, from 24<sup>th</sup> of February to 8<sup>th</sup> March and from 8<sup>th</sup> of March to 19<sup>th</sup> of March. Prior to the disembarkation of the passengers on the second voyage, the ship reported 22 people as having respiratory symptoms. This led to low-risk category assignment according to the guidelines of 19 February Assessment Procedure for risk evaluation of passenger ferries calling ports (New South Wales Australia, 2020). On the 8<sup>th</sup> of March, 170 people out of 2,995 passengers and 1,163 crew were reported ill. On the same day prior to disembarking in Australia and

according to the procedures at that time, the captain was asked the following question to which he answered negatively: "Are there any crew members showing symptoms of the novel coronavirus on-board or are there any ill passengers or crew on board?". This in turn caused the negligence in screening procedures while disembarking of the passengers in Sydney on 8<sup>th</sup> of March. On 15<sup>th</sup> of March, an early stage of flu outbreak was reported. The report from Australia depicted detailed accounts of passengers that developed the virus with some of them being concerned with the cost of the treatment, even though at that time respiratory disease advice was supposed not to be charged. At a later stage after being sent home, it turned out that 660 passengers received positive tests for COVID-19 with 28 deaths reported (Smith, 2020).

The three vessels - Diamond Princess, Grand Princess and Princess Ruby altogether challenged 1400 confirmed cases of COVID-19 among the passengers and the crew with 30 people dying of the infection (MMWR Morbidity and Mortality Weekly Report, 69 12 2020, pp. 347-352 as cited in Shuduo et al., 2020).

Throughout the available literature on outbreak of COVID-19 on passenger ships, a conclusion can be drawn that despite the health and safety procedures in force, the novel coronavirus caused the passenger ships to become breeding ground for disease. It emerges that the new situation filled the passengers, crews, authorities and public media with acute uncertainty, confusion and even perhaps fragile loyalty. The next section of literature review will further investigate the challenges faced by the entire cruise ferry tourism.

### **2.3 Challenges faced and measures taken to sustain mobility in passenger shipping during the COVID-19 pandemic**

For over a year the entire tourism industry has been facing challenges caused by the COVID-19 pandemic. The repercussions of the imposed lockdowns and severe measures taken in order to implement stricter health security on board may reverberate still for a long time in the aftermath of the COVID-19 pandemic. In the pages that follow the attention will be directed towards reviewing literature on passenger ships mobility and challenges they have observed so far.

Depellegrin et al. (2020) aimed at establishing how lockdown measures affected maritime activities in the Veneto Region, Italy for four types of vessels - cargo, fishing, passenger and tanker. They compared Business As Usual (BAU) in March-April 2017 to March-April 2020 when the most restrictive measures were being taken. They looked at spatio-temporal patterns of the vessels based on the data from Automatic Identification



System (AIS). The authors described the Veneto Region in detail as well as its business yearly results, implying it is a national treasure which contributes to 2,5% to the regional GDP. They developed trajectory analysis based on vessel trajectory intensity (VTI) to check intensity for example for different stages of lockdown. One of the results was that the trajectory length for passenger ships decreased by 78% (Depellegrin et al., 2020).

Another study giving insight into analysis methods of lockdown consequences on shipping industry was carried out by Millefiori et al. (2020). They claim that the shipping industry makes up 80% of the trade worldwide and that the maritime tourism industry has been severely impacted due to lockdown measures imposed worldwide. In their study, in order to see connection between reduced mobility and trade volumes, they applied the spatio-temporal method based on Automatic Identification System (AIS) with data collected between 2016 and 2020 for movements of more than 50 000 commercial ships worldwide as well as an indicator of the Cumulative Navigated Miles (CNM). The results from their study was that passenger shipping experienced 57% less mobility in July 2020 than forecasted and that there has been an increase in the presence of idle ships.

Transportation is on one hand severely contributing to the spread of the virus, and on the other has been profoundly impacted by COVID-19 (Heiland & Ulltveit-Moe, 2020). Heiland and Ulltveit-Moe (2020) described the restrictions imposed on maritime industry, in particular on ports. The ports had to keep log of the previous calls in order to determine if any country with high risk of infection was visited. They also had to keep log of crew changes, although they were limited which in turn was not in accordance to their contracts and labor regulations. Heiland and Ulltveit-Moe (2020) called vessels "floating quarantine zones" (p. 155). The authors further undertook the study to establish the impact of COVID-19 on transportation at sea and the perfect country for them to perform the research is Norway as it is a "a small open economy with a long coast and supply chains heavily relying on sea transport". They applied the satellite data from The Norwegian Coastal Administration. In the light of their research, it is evident that after the 12<sup>th</sup> of March 2020 when the Norwegian government imposed lockdown measures, the number of cruise ships departing from the Norwegian ports declined drastically. The authors concluded that crew-change restrictions play a pivotal role in decreasing the number of sailings even though the International Maritime Organization and European Union have taken measures to facilitate the crew changes.

Stannard (2020) states that ships need to regularly assess the risks onboard and apply buffers against them. The challenges onboard in connection to COVID-19 she mentioned are:

“the management of an active case on board; “the need to establish physical distancing and other measures to reduce the spread of the disease on a ship”; “access to pre-employment medical examination”; "interaction with shore staff in ports"; "crew changes"; "access to medical, dental and welfare services in port"; "reduced possibilities for shore leave; "contract extension"; and "increase in mental health issues in seafarers on board" (p.85). She reminds that the risks and precautions are incorporated in the Safety Management System for a given vessel. In the Norwegian context, we learnt that the center at which the authors works - the Norwegian Centre of Maritime and Diving Medicine assists with COVID-19 diagnosis offshore. During the first weeks and months of the pandemic, Norway introduced border closure very early on hence the operations of Color Line, Fjord Line, DFDS Seaways or Stena Line were ceased as well as the routes Sandefjord – Stromstad, Oslo – Kiel, Oslo – Copenhagen, to mention a few (Urbanyi-Popiolek, 2020). Stannard (2020) explains that when the person’s condition with COVID-19 onboard becomes worse, they should be in contact with Telemedical Assistance Service (TMAS). She further described in detail on how to treat a case on board as per the guidance from International Shipping Chamber (ICS). According to the author, the availability of personal protective equipment should also be part of the assessment risk performed by ships and in the COVID-19 pandemic the requirement is to have the amount of PPE that is going to be sufficient. Stannard (2020) emphasizes that crew members should be considered as key workers on international level so that their contracts do not have to be extended, they can return homes and are not overburdened. She argues that passengers should not be declined medical assistance when required and that it should take place without delays. Last but not least, the article argues that COVID-19 is negatively impacting mental well-being of the seafarers and that this issue should be further investigated by maritime organizations. During a webinar held by DNV GL in November 2020 on Safety in shipping during the COVID-19 pandemic, the awareness of the so called "caution fatigue" in employees was emphasized. It was claimed that it impacts crew's well-being and makes one forget about the COVID-19 behavior principles (DNV GL, 2020).

It is essential at this stage to look at the Norwegian measures for health safety on cruise ships in Norway. The Covid-19 Regulations by the Ministry of Health and Care list the requirements for passenger ferries on the coast of Norway. For instance, the requirement is that the ship-owner presents a plan for applying health security measures and has it approved by the Norwegian Directorate of Health prior to the voyage. Furthermore, there can only be 50% of people on board and neither the passengers or the crew are allowed to disembark in Norway. What is more, the Medical Officer has to perform a test if the infection is suspected

and liaise with the Municipal Doctor to acquire the results. Subsequently, isolation and quarantine measures must follow. It is worth mentioning that these rules are not applicable to the Norwegian vessels (Norwegian Coastal Administration, 2020).

Ultimately, it is important to examine how the uncertainty inflicted by the virus impacts the cruise ships industry and what the likely repercussions going forward might be. Raab (2021) argues that even though the different decisions were made by governments in Europe, they were all aimed at slowing down the spread of the virus so treatment and vaccinations could be developed. Furthermore, given the fact that the tests can be false-negative or that the spread of the virus to a large extent depends on the number of tests conducted, the uncertainty started to emerge (Raab, 2020). Ioannides and Gyimóthy (2020) used the metaphor of the fork in the road to describe the unprecedented moment in history to pause and change the track of tourism onwards in the aftermath of the COVID-19 pandemic. In their study they focused on mobility and resilience of the tourism industry. They mentioned a study conducted at the University of Florida from which we learnt that most Americans after the pandemic are more likely to travel near their place of residence. They also suspect that even long-term tourists may be more willing to travel locally. The authors raised the topic of the “risk-avoidance” trend that may take place in the aftermath of COVID-19, for example after watching the passengers being evacuated from cruise liners (p.628). They also emphasized the power of resilience that usually begins to reverberate after a crisis. This, according to the authors, together with new ideas that are being brought to life during the pandemic as well as new tools and technology, can reshape the current models of tourism practices.

Renaud (2020) also raised the concern of cruise industry status in the aftermath of the COVID-19 pandemic. He focused on mass cruise tourism industry and claims that this part of tourism industry is a very peculiar one due to various socio-environmental repercussions it generates. The article discusses if the pandemic and the sudden cessation of the operations can have an effect on future mobility and relations between the countries with regards to destinations. The uncertainty according to the author lies in ports and countries' willingness or rather lack of it to accept tourists having in mind a possible outbreak of the disease later onshore. What is more, the author argues that taking a stopover is a crucial element of cruise industry. Through the example conducted by Sachs et al. (2020) as cited in Renaud (2020) for Carnival Cruise Line, it emerges that the corporation expects assuming the operations of the business based on the vaccine potential, possible easing of travel restriction, enhancing health security as well as the presence of loyal customers. In fact, 45% of Carnival Cruise Line have

accepted a solution of not having the money returned for a cancellation but keeping it as a form of credit for trip at a later time. This apparently has become a widespread solution in the tourism industry (Panetta, 2020 as cited in Renaud, 2020). On the other hand, there has been a "tsunami of lawsuits" against Carnival Corporation due to deaths on board, the discomfort caused by the quarantine and possibility to incur the infection (Kende, 2020). It is noteworthy to mention the suggestion by Renaud (2020) that the COVID-19 pandemic allows for redetermining the sustainability of cruise industry. He believes that a good solution would be smaller vessels which he calls niche cruises. They would impact the environment less significantly and allow more destinations to accept the stopovers. The other solution the article proposes is to have a fleet of local vessels that would be governed solely by internal regulations and therefore touristic activities could continue regardless of the regulations offshore. Last but not least, the author argues that the COVID-19 should somewhat generate creative and critical thinking for local organizations and decision-makers to redesign the models in place in the best interest of their local communities as well as filling the recreational gap that the pandemic is causing. For instance, creating "travel bubbles" with neighboring countries can help keep the contagion curve under control and to some extent allow local tourism (Iaquinto, 2020).

Ahn et al. (2020) on the other hand, focused on passenger reputation and loyalty in the cruise industry. In order to investigate it, they used the criteria of Corporate Social Responsibility (CSR). The authors explained that CSR depends on companies' voluntary engagement to contribute to society or environment. Interestingly enough, companies held in high esteem through CSR have earned the trust that will help them through a crisis (Bertels and Peloza, 2008 as cited in Ahn et al. 2020). In their research, Ahn et al. (2020) applied the method of a questionnaire among 315 cruise passengers examining the areas of trust, identification and loyalty. It is argued that food donations and other charitable undertakings are noticed and recognized by people (Rhou and Singal, 2020 as cited in And et al., 2021) therefore tourism industries should be working on their CSR. Taking a long view, the authors emphasize the need to examine CSR reputation and initiatives of cruise companies under the circumstances observed during the COVID-19 pandemic.

Raab (2020) argues that the decisions taken on our behalf by the governments have also moral aspects. The concept of "social distancing" is the opposite of what we think the leisure time should be (Baum & Hai, 2020). Not being able to visit the loved-ones on the other hand has put a lot of strain on people (Iaquinto, 2020). According to Article 13 of the United Nations Universal Declaration of Human Rights, "Everyone has the right to freedom

of movement and residence within the borders of each State" and "Everyone has the right to leave any country, including his own, and to return to his country" (*Universal Declaration of Human Rights*, 2015). Furthermore, according to the same declaration we all have the right to "rest and leisure". It may be argued that undertaking touristic activities can also be incorporated into the human rights declaration (Moncada Jimenez et al., 2015 as cited in Baum & Hai, 2020). Baum and Hai (2020) argue that the COVID-19 pandemic in some way reintroduced borders in the Schengen Area. "The politics of immobility" became apparent (Iaquinto, 2020). Baum and Hai (2020) also state that all means of transportation were reduced and that for instance in Scotland the government prohibited ferry transport to all foreigners, and in Japan and California the cruise vessels had to cope with incarceration due to the quarantine requirements. The authors convincingly concluded that that tourism and hospitality became "victims" of the COVID-19 pandemic (p.2405).

The chapter of literature review has laid down the foundation of research. Firstly, it has provided an overview of the passenger shipping tourism before the COVID-19 pandemic. Secondly, it illustrated the outbreaks of COVID-19 on board of a few cruise ships and thirdly it described the challenges passenger ships have been facing for over a year now, and how it may further impact the mobility of this type of vessels worldwide. Last but not least, the Norwegian standpoint has been incorporated into the review. The purpose of this master thesis is to contribute knowledge on passenger shipping during the COVID-19 era, mainly its challenges but also new concepts that have kept these businesses afloat during 2020. The next chapters will focus on the method and design of this master thesis. Subsequently, the findings obtained during the interviews with passenger shipping employees in Norway will be analyzed.

### **3. Methodology**

#### **3.1 Research method**

This part of the thesis paper describes the technique used to collect and analyze data in connection to the main research goal. There are different ways of conducting academic research analysis, which is majorly classified into three namely, quantitative, qualitative, and mix-method depending on the research's goal and project's phenomena (Mark NK et al., 2016).

This project, established in the Norwegian context, adopted a qualitative research approach to obtain an in-depth understanding of the ongoing COVID-19 pandemic impact on passenger ships' operational activities as well as gain insight into the strategies applied in order to stay afloat businesswise. Unlike quantitative research method, which is usually based on numerical data analysis, a qualitative research method emphasizes the context and understanding which is descriptive in nature, inclined to respondents' point of view (Bell et al., 2018).

#### **3.2 Research design**

A research design comprises a structured framework for data collection and analysis of a proposed study. According to Ghauri et al. (2020), it presents the type of research be it exploratory, descriptive or causal, and the aim of the researcher. In line with the goal of this thesis, an exploratory design approach was undertaken with the pre-designed twelve questions addressing the operational challenges faced by the passenger ships industry due to the COVID-19 pandemic. Those twelve questions were applied to collect data for analysis by conducting interviews with the selected participants working in the aforementioned industry via TEAMS. Furthermore, recordings from the interviews were transcribed into text documents and analyzed with the use of NVIVO analyzing software, a procedure which is referred to as an interrelated and interactive set of processes in a qualitative research (Mark NK et al., 2016). Based on those transcripts, a thematic analysis was conducted that further categorized the responses from all interviewees to identify recurrent themes and patterns. A qualitative research design is the most appropriate design for this master thesis. This is evident in the project's inductive approach, type of data collected, social and societal analysis, and the goal of the project which is gaining an in-depth understanding of the ongoing COVID-19 pandemic impact on passenger ships operational activities. Moreover, it

guarantees ultimate flexibility in terms of respondents' word for word expressions without influencing or altering the words.

### 3.3 Refined interview questions (RIQ)

To answer the research problem, a set of refined interview questions that focus on different areas of operational activities within passenger shipping companies was drafted in collaboration with the project's supervisor. The goal was to learn about the challenges within different operational activities the professionals interviewed worked for, hence the background and roles among the respondents varied. Furthermore, the questions were composed in a way to encourage flexible answers and unbiased opinions that would in turn provide an in-depth understanding of the COVID-19 repercussions and the strategies implemented to mitigate the impact. The table below presents the twelve questions that were phrased and addressed during the interactive semi-structured interviews.

Table 1. Refined interview questions (RIQ)

RIQ1). How has COVID-19 impacted crew's daily/weekly duty shifts compared to the normal period? Which national safety recommendations regarding COVID- 19 were the most difficult to apply to daily/weekly employee schedules?
RIQ2). How has COVID-19 impacted kitchen inventory activities onboard?
RIQ3). How has COVID-19 impacted entertainment activities onboard? Can you estimate by what percentage entertainment activities in 2020 decreased compared to 2019?
RIQ4). How has COVID-19 impacted port calls compared to the normal period? Are the port calls taking more time/require more documentation compared to 2019?
RIQ5). How has COVID-19 impacted routine vessel maintenance to certify the fitness of vessels for sailing? Were regular vessel maintenance certifications delayed due to COVID-19?
RIQ6). How has COVID-19 restrictions impacted employment, especially during high season operations (summer period)? What was the HR strategy for employment during 2020?

RIQ7). How has COVID-19 impacted customer/passengers' experience? Did you perform any customer service experience surveys in 2020? If yes, would you be willing to share some of the feedback you received?

RIQ8). Was there any back-up plan or measures in place specifically for these kinds of unforeseen situations and were the procedures updated accordingly for the future to reflect the risk of a global pandemic?

RIQ9). Is there any positive impact of the pandemic effect in regard to operational activities? Can you think of any measures taken with regards to COVID- 19 that you find beneficial and would you like to maintain it in the future?

RIQ10). How did you deal with low travel demand during 2020? Did you make any offers to be used at a later time?

RIQ11). Can you explain the direct/indirect pandemic impact on the duty-free stores onboard if any, with regards to customer in/out flow, sales activities and product choice or preferences of customers? For example – was there any noticeable sales drop or increase for any product in 2020 that can be linked to the pandemic?

RIQ12). What has been done presently to mitigate the pandemic impact on each of the above case problems? What is the most successful measure you've taken so far to mitigate the impact of the pandemic in your company?

### **3.4 Population and sample**

In order to obtain an in-depth understanding of the ongoing COVID-19 pandemic in Norway and its impact on passenger ships operational activities, a population of passenger ships employees was invited to qualitative research via interviews as a means of data collection. The sample referred to as respondents in this master thesis consists of seven professionals from three different passenger shipping companies operating in Norway with an average of at least 13 years' experience. Each of the respondents participated in an interactive interview conducted via Microsoft TEAMS with questions listed above.



Table 2. A table depicting respondents with the years of their working experience

Respondents	Years of experience
A	15+
B	12+
C	9+
D	10+
E	20+
F	10+
G	13+

### 3.5 . Ethical considerations

The principles of research ethics encompass various values, norms, and institutional guidelines that help constitute and regulate scientific activities. They are referred to as codification of scientific morality in practice, which details the basic norms and values of the research community. They include the following guidelines (The Norwegian national research ethics committee, 2019):

1. norms that constitute good scientific practice, related to the quest for accurate, adequate and relevant knowledge (academic freedom, originality, openness, trustworthiness etc.)
2. norms that regulate the research community (integrity, accountability, impartiality, criticism etc.)
3. the relationship to people who take part in the research (respect, human dignity, confidentiality, free and informed consent etc.)
4. the relationship to the rest of society (independence, conflicts of interest, social responsibility, dissemination of research etc.)’

As stated in an article by forskningsetikk.no:

General guidelines for research ethics cannot replace subject-specific guidelines, but should serve as a gateway to the principles and concerns of research ethics, including for institutions and individuals who are not researchers themselves

It is argued in the aforementioned article that research within human related subjects can be fundamentally and ethically challenging, requiring ethics standards to guide researchers as well as approval and project's main goal from independent committee (Bracken-Roche et al., 2017).

Ethics as a concept refers to norms and standards of behaviour that determine moral choice of people's behaviour and relationships between one another (Bell et al., 2018). Therefore, to achieve these research ethical standards and avoid mishandling of participants' confidentiality, personal data and sensitive information, this master thesis was written in accordance to the provided research ethical guidelines by the University of Southeast Norway, and was approved by the NSD (NorskSenter for Forskningsdata). The master thesis project details, aim and purpose were submitted in for approval through an online application form 'Meldeskjema for behandling av personopplysninger' at nsd.no. The thesis proceeded after the approval and an online search was conducted to source for participants within the ramification of the project. A request form for participation with provided project details was sent to all potential participants through email. Consequently, a confidentiality and non-disclosure of personal data and sensitive information agreement was mutually signed with selected participants upon acceptance to take part in the project.

## 4. Findings

This chapter presents the findings that have been derived during the analysis of the interviews performed to understand the pandemic impact on passenger shipping industry in Norway. The process of the thematic analysis first aimed at reviewing the collected data multiple times in order to establish the recurrent topics and gain better understanding of the interviews and interviewees. The transcriptions of the interviews were thereafter uploaded to NVIVO analyzing software and by determining the similar responses among the interviewees, the codes were created. Subsequently, code analysis laid grounds for categories that transformed into well-shaped themes. Last but not least, the unique responses were also coded, analyzed and embedded in the categories. The two main themes that have emerged during the thematic analysis have been arranged in the order based on the significance as viewed by the author of this master thesis.

### 4.1 Theme one: Adaptation, challenges and navigation of the new rules brought by COVID-19

The first theme to emerge is the challenges that passenger shipping companies faced in year 2020, when the era of the COVID-19 began. The challenges were mostly driven by the frequent government updates on safety recommendations and national rules as well as by internal struggles on how to adapt fast and seamlessly. The theme has been divided into four subthemes: *employment, vessels layups and certifications, new protocols, fun boats no more*.

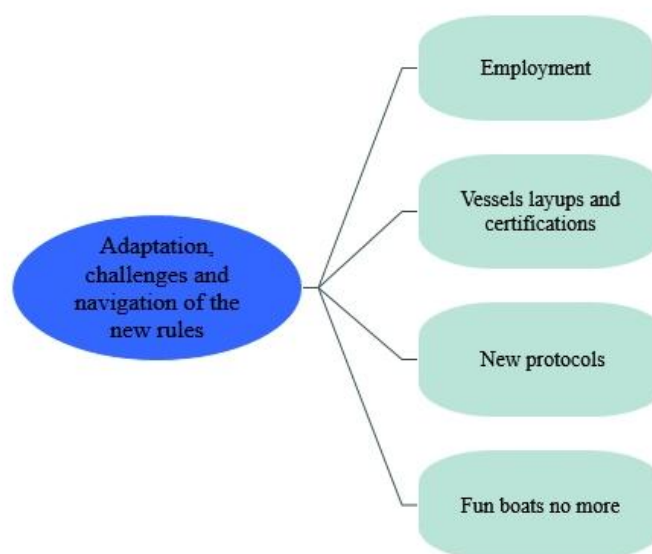


Figure 1. A thematic conceptualization of findings on adaptation, challenges and navigation of new rules that were brought by the COVID-19 pandemic to passenger shipping companies.

#### 4.1.1 Subtheme one: Employment

All of the interviewees expressed the significance of employment situation in their companies during 2020 when they realized the world was facing a global pandemic. First and foremost, they referred a lot to a temporary laying-off employees, called *Permittering* in Norway. For half of the respondents this has been a way not to lay off people permanently as explained by Respondent F: "That has been a crucial way [Permittering] for us to maintain our business and that we haven't yet had to lay off employees." Respondent B further expressed the common sense of fairness with regards to this solution in their company:

It did not take long before we started laying off employees among our crew members, and also among the employees in our administration, and each employee had to take his or her turn being laid off for a period of time, up to eight to ten weeks each. This was positively perceived among our employees, they found it to be fair that each one had to take his or her turn. And then this way, we decreased the number of active crew members...and this has helped our company to save wage costs....

Some of the respondents, who also operate in Denmark, noticed existence and differences of the system in both countries: "We had them [people] on hold because they were compensated and the Danish rules are a little bit different from the Norwegian Permittering....". Similarly, Respondent E observed more favorable compensation rules in Denmark:

We've been able to do it, even though it has been two different ways in Denmark and Norway. I think it was quite interesting to see that in the start everyone was so happy about that in Norway, it was already existing, because you actually had these kind of packages already...for other purposes in Norway...so quite fast you could actually send people home on furlough in Norway and it was not possible in Denmark, because Denmark didn't have a system for it...., but they have already fixed it and it's much better than in Norway....

Another respondent admitted that they had to honor the regulations from both countries and that the navigation of the different regulations coming from Norway and Denmark with regards to travel restrictions was especially difficult due to the Norwegian rules being stricter - this required efforts to balance out the differences.

Some of the respondents, however, work for the company in which, permanent redundancies were required at the beginning of the pandemic. In this group, Respondent D described it in the following way: "The HR strategy was that we have been through a couple of rounds of redundancies. Both onshore and offshore. We did that quite early during March and April last year and after that we have not been able to have any more redundancies.... we are not able to recruit new people". Another challenge with regards to temporary laying-off employees was simply the amount of changes taking place and efforts to follow through internally, as commented by Respondent D: "... it's hard to take people out and back again, for a very short time, so it's better to be actually put on hold for a long time". Likewise, Respondent G expressed:

From my point of view, to have your team going to work and then be furloughed and coming back, and someone is not furloughed and then some are coming back... that navigation to keep that has been difficult, because it's been really challenging people mindset and motivation for working.

Stopping new employment was another common practice throughout 2020. As Respondent E put it plainly: "...we had to stop hiring people". Similarly, Respondent B said: "...we had laid off employees for a period of time...and we have had no use of substitutes, only use of full time employees....". Furthermore, we learnt that this didn't change even in the high season due to less travelling and also as a way to keep the full-time employees. Respondent C expressed: "In 2020, we stopped all employment....We did not man up we had to man down". Similarly, respondent F highlighted: "we haven't hired any summer employees for the season, because it was a strategy to keep us within our job".

A different aspect related to the employment situation, perceived as the most difficult at a time, was a temporary absence of crew members. That worried some of the interviewees and generated costs which the company wanted to avoid:

We have also experienced a lot of short term absence of crew members to do to testing routines with symptoms of COVID-19 and we had quite a few crew members who had to stay at home with their children for home school at the first lockdown in March in 2020. I think these were the most difficult ones... having to replace crew members on a short notice...and this, of course, contributed to overtime pay for other employees.

Furthermore, for some of the employees, getting to work was difficult to begin with: "...we have some of our crews who live abroad and getting them into the country has been a challenge sometimes". The same respondent also described how county regulation made it difficult for their employees to continue working on a new built project due to the quarantine rules in that particular part of Norway.

Last but not least, the last two insights in this section allow us to see even the broader picture of the employment situation, and they are connected to shifting and rescheduling the crew and employees' time at work. Respondent A said: "...we didn't have any operational activities so then people did other stuff or they were also sent home...and the rest of the crew on board they were also sent home and some of them worked also on other ships in the company." Respondent F said: "In a normal situation our crew has their regular boat, which they work on each shift, but due to COVID, we have had much less activity on all our vessels so the crew have been shifted very much around on different boats, causing a little bit of disturbance, but it's necessary."

#### **4.1.2 Subtheme two: Vessel layups and certifications**

This section reveals the second theme - vessel layups in passenger shipping companies, which were brought by the COVID-19 pandemic. All of the interviewees experienced vessel layups due to less travelling and as a measure to reduce costs. Respondent D recalled: "We put both ships on hold from Norway in March until mid summer because of the different regulations and the lockdowns." Likewise, Respondent A said:

For now, we also don't have any ships on the Oslo-Copenhagen route because they were laid-up one more time. In the summer [2020], we started up again with the service from Oslo to Copenhagen because then the coronavirus was a bit, I'm not sure, milder and after the summer again it went really bad again and they laid up one of the ships and now it's two other ships and I'm only speaking for the Oslo-Copenhagen route ....

Respondent G described the internal and financial aspect of vessel layups in terms of some places not facilitating the layups of vessels leading to the situation that a vessel had to sail from the port in order to make space for another vessel coming in, and this generated costs for the company. Furthermore, one of the respondents admitted that to save costs, they had to sell one of their vessels and put a few on hold a few times.

The other aspect in this section is certifications in passenger shipping industry that were also impacted by the COVID-19 pandemic. The findings differ among the respondents.

On one hand, it was stated that certifications were carried out according to schedule and that routine maintenance vessel certifications cannot be avoided as they are documented to the government and Det Norske Veritas (DNV). On the other hand, it was admitted that the extensions on the certifications offered by the Norwegian government were utilized to some extent both for the vessels and for the crew members. What is more, according to Respondent C, the certifications related to upgrades were reduced as a means to save costs.

#### **4.1.3 Subtheme three: New protocols**

The third subtheme under main theme of *Adaptation, challenges and navigation of the new rules* is the new protocols that were devised to update safety procedures and risk management during the COVID-19 pandemic. To begin with, all of the respondents admitted that they did not have any kind of back-up plan for an unforeseen situation like a global pandemic before, however, Respondents D and G confirmed that they had objective plans and risk management for emergency, like fire or sickness on board in general. Respondent F described it in the following way:

I don't think anyone could have foreseen the situation that COVID-19 has brought to the world and to Norway. However, we do have a contingency plan in our company and our management made new routines very fast as the COVID-19 situation has escalated.

The pandemic forced the interviewees and their companies to work on new streams of work and majority of them admitted that the frameworks they have devised might work for similar situations in the future. Respondent C confessed:

We performed a risk assessment and we tried to help our crews as much as possible in how to meet passengers, how to restrict contact and facilitate them to do their job in the best way they could during the conditions.

Furthermore, Respondent A shared that they did COVID-19 related workshops in their company, made signage and info screens in the terminals as well as action card for ports and terminals in case of an outbreak of coronavirus. In the interview with Respondent D, we learn that the help of DNV GL was utilized to prepare new protocols that would meet the requirements of the new situation. All respondents also emphasized stricter rules and procedures during the daily operations, for example enhanced cleaning procedures and changing testing requirements. Last but not least, a comparison of the pandemic of COVID-19

to the 9/11 was made to indicate that certain procedures introduced in the aftermath of extraordinary events will remain forever.

#### **4.1.4 Subtheme four: Fun boats no more**

The COVID-19 pandemic brought complex safety recommendations and travel restrictions. For the passenger shipping industry, the combination of both made it often hardly possible to provide the services on the level as before. This section will present findings on entertainment, dining and travelling, including customer feedback on passenger ships during 2020.

In essence, in 2020 travelling on passenger ships changed entirely and all interviewees admitted that it was a challenging task to adapt to all the rules. The new rules reduced the capacity of the passengers, forced strict sanitizing procedures, testing, using masks, stopping some of the services and if the number of passengers were greater, they would have also become a challenge for embarking and disembarking. Furthermore, in order to curb the spread of the disease and limit the contact of the passengers with the crew, cash payments were not allowed and online booking became the requirement. Respondent B described the sanitizing process after a trip:

Between each route, from A to Z....when they are done [crew] with that route, they have to sanitize the boat before they start a new route....they have to clean...all touchable surfaces, like tables and door handles and all touchable surfaces and normally they clean with the soap and water, but now you have the disinfection spray on top of the normal cleaning, so it is more frequently than usual and it takes a lot more time for the crew.

According to the two respondents who work for the same company, roughly 80% of the entertainment activities on board were heavily impacted and reduced by the pandemic and the new rules it has forced. What was repeated by the interviewees was the requirement to keep social distance, which for some ships resulted in no dancing and no clubs being open. Furthermore, the band playing music could not operate anymore either, hence it was adapted to the solution of one troubadour or even only music application as a replacement. Respondent A observed:



Normally we have a band playing...the night club but we only had one guy left I think playing some songs just for the atmosphere, so entertainment was reduced...it's going from a cruise perspective to a transport perspective I would say.

What is more, the swimming pools were closed or different rules were imposed and changed at times. The sauna and the children playground were also closed. We learn from Respondent E that in order to provide some kind of entertainment, the games like bingo or quizzes took place. For smaller types of vessels, we learn that the free seat to ensure the distance also caused the additional challenge as it reduced the capacity even more. Furthermore, those boats suffered a loss in their entertainment activities as sightseeing programs, the outflow of customers, and travel bans did not allow them to continue those.

Another aspect of the direct impact of the pandemic onboard shared by the participants interviewed was reduced dining and restaurant services. Due to the requirement of social distance and very strict sanitizing rules some of the restaurants on board of the passenger ships had to be closed, buffet was not allowed and passengers had to be served at the tables. For smaller ships that have kiosks, the food was pre-prepared and wrapped, and alcohol could only be served at a table. That, however, caused the company to assign more employees to waiting and in turn reduced the capacity of the customers. Furthermore, in order to avoid food waste, the menu and offers had to be adapted to the current circumstances. For instance, Respondent G recalled:

We had some issues actually with.....spirit, some of the perfumes, because all of the factories changed their production to making hand sanitizer and that impacted the supply chain and demand, so after the worst of the pandemic, in the in the spring and the summer, last year, when people started to come back, a lot of the factories that normally made spirit, perfumes, creams, all those things, were like six months behind in their production.... So we had a lot of difficulty just getting our normal stuff, gin, vodka... for the guests.

One of the respondents rose the topic on the challenges connected to the procurement and tenders. According to the respondent, tenders and bonuses rely heavily on the historical volumes so it impacted the agreements they had with their suppliers. What is more, the forecasts were difficult to determine so the arrangements depended to a large extent on mutual trust.

Customer experience while travelling on passenger ships during the COVID-19 pandemic has also been impacted. Nonetheless, most of the interviewees admitted that the customer feedback on their services during the pandemic has been positive due to the fact that most people who decided to travel already knew what the rules and regulations were, and also because the companies made efforts to make the passengers feel safe on board. Respondent C said:

It has been very important to us to make our customers feel safe because it's very important to our reputation, that we have customers who are happy with the service we perform.... we have tried to give as much information beforehand as we could and when... the government on Friday afternoon comes with new regulations we have tried to inform our customers on upcoming cruises as much as we can. Sometimes we had to postpone cruises. Sometimes we have had to cancel but they [customers] have been given the opportunity to come again this year [2021], or similar, but usually people have been very understanding.

Furthermore, the questionnaires after a trip, monitoring customer satisfaction, were redesigned to include questions on COVID-19, for instance if the passengers feel safe enough or if measures taken by the crew were sufficient. Respondent E shared:

For instance, all the questions about a specific restaurant that people have been eating in were taken out and then it was more general questions about how the experience was on eating in general. So we did the CSS [customer satisfaction survey] that people they get when they return....We also put in some questions about COVID-19 measures, so that we could actually see whether people felt safe, if they could relax, if they could get good information from staff and board, if they had all the opportunities to use hand sanitizers and other things...

Due to changes in entertainment and food concepts, the customer experience was hugely impacted as well. One of the respondents summarized the customers experience on board of passenger cruises as follows: "it's not party boats any more, it's not like it used to be". From one of the interview we learn that people have sometimes been surprised about the changes introduced as if they did not read the information beforehand, however, in general the feedback received was good. The unused areas on board were utilized to give customers more space so it was easier to keep the social distance but also made people feel more comfortable,

and made it a more intimate experience. Respondent E gave insight on how the feedback on distance was perceived in quarter three of the year, when the capacity of passengers was increased, and then in quarter four, when the passenger capacity was reduced again:

In Q3 where you have the main season of people traveling on holiday and people were still doing that, when they could [in 2020], you also see that we have more people on board the vessels so the more people we had on board the more insecure you can say our people felt that.... it was harder to keep distance and maybe they've also seen more people eating different places,...but if you if you look at Q4 and Q3, there's not a huge difference in the concepts on board or the measures that we needed to take or the schedules on the main thing that is different from Q2, Q3 to Q4, it is [difference] actually how many people are travelling.

Sales in duty-free shops on board can also be viewed as part of entertainment. Due to COVID-19, the sales on board were affected as well. First of all, there has been an outflow of the Asian customers. Respondent D described it in the following way:

In the summertime we're quite heavily exposed to the Asian tourists traveling between the two capitals [Oslo and Copenhagen], and without them coming into Scandinavia, it is of course, reduction in the luxury goods...the Chinese and Taiwanese and the Korean usually buy the most expensive things.....watches, jewelry, cognac, etc.

Second of all, the passenger shipping companies had to reduce the stocks of their products due to the approaching expiry dates, so there were good offers and bargains during 2020. It was suggested by the two respondents that the average spent on customer has not decreased, but might have even gone up as people could not take part in entertainment activities, but they could still shop. The Danish, who could travel more, compared to the Norwegians, were also less interested in goods like tobacco or alcohol than the Norwegians would have been. On smaller vessels, where there are no duty free shops, the sales in kiosks decreased due to less passengers on board.

#### **4.2 Benefits and new concepts keeping business afloat during the COVID-19 pandemic**

Another theme discovered in the analysis performed to understand the pandemic impact on the passenger shipping industry in Norway focuses on benefits and new concepts keeping business afloat. As the passenger shipping industry continues to experience constant

changes in the restrictions as a result of the pandemic, it became necessary for companies to develop new concepts to adapt to these constant changing rules. All of the interviewees revealed that the new concepts were developed primarily to keep the business afloat but also to adapt to the imposed restrictions due to the COVID-19 pandemic. The subthemes that emerged in this part can be categorized into the following: *Aid packages freight, transport, new routes and themes, marketing campaigns and flexible booking policy, new ways of working.*

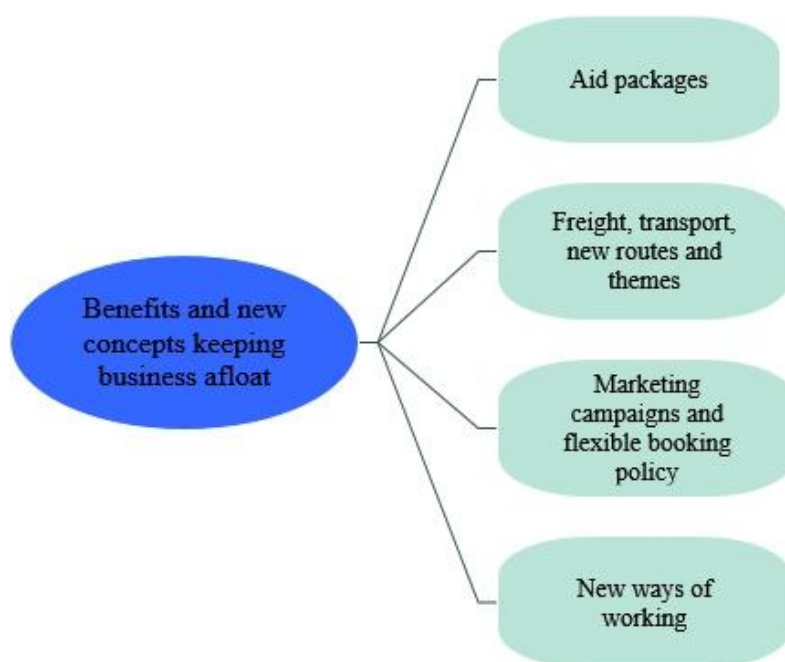


Figure 2. A thematic conceptualization of benefits and new concepts keeping passenger shipping business afloat during the COVID-19.

#### 4.2.1 Aid packages

Aid packages were offered in the form of aid or financial relief packages from the local authorities to companies affected by the COVID-19 restrictions, and for employees placed on temporal or permanent lay-off. All respondents shared the opinion that they received help packages from the government and admitted it was a relief for the fixed costs during the lockdowns, although some noted it required a lot of paperwork and it took time to obtain them. Respondent C said:

We have had benefits from that [the government's package], but it's the help is restricted. You have to fulfill quite a lot of requirements and it's been difficult. I know

that people working in the economy department, they have had a lot of work in order to make the applications and getting that right so it's a lot of documentation and so it has taken time you don't have when you have bills to pay.

Another form of packages most respondents discussed about was connected to employees and it is referred to as *Permittering* or furlough which means a temporal lay-off. These packages differ within the Scandinavian countries, for example in Denmark employees got 100% of their salary when laid off due to the COVID-19 pandemic, whereas, in Norway a different package plan applied. As shared by Respondent D: “we use the Danish regulations and they have a quite good packages for furloughed people.... I think furloughed people get paid in full by us”. Respondent E highlighted the existence of the systems in both countries and said: “aid packages in general have helped a lot... being possible to furlough people with the Danish package helped a lot”. Likewise, Respondent G said: “with more restrictions that led to the point we couldn't sail anymore, the furlough packages in Denmark are very beneficial”. Respondent G said: “Our company has benefited from the health packages from the government as we are part of Norwegian tourism industry”.

At times when the total lockdown was imposed which prohibited the movement of people and travelling, the passenger ship companies had to suspend their activity in order to save costs. Respondent A shared:

We're just waiting next week hoping for the Danish government to tell more about the compensation packages or the aid packages to see...if the package in Denmark will be prolonged and we will probably not be sailing as well.. that's to reduce the loss of money.

#### **4.2.2 Freight, transport, new routes and themes**

We learn from the analysis of the interviews that adapting to the constant changes in the rules and regulations with regards to COVID-19 has been challenging for the passenger ship industry. The repercussions caused the companies to focus less on the cruise experience part of the business and more on freight and transport of people in general. Some respondents believed this has helped in generating some revenue. First and foremost, the passenger ships facilitated a basic transport of people from A to B as shared by Respondent A:

In the summer when we had the service and people could go our routes we mostly functioned as a transport... you don't go any more on a mini cruise with the 5 hours in

Copenhagen but you go from A to B and that was the purpose this summer when he had service up and running so the focus on the entertainment wasn't there really.

Similarly, Respondent D said: "They were traveling [customers] because they needed to visit either Denmark or Norway or for relatives or work or to study". We learnt that the government restrictions exempted vessel crews and freight passengers from going on quarantine. This, in turn, impacted freight and transport segment positively. Respondent A said: "I think in the beginning when we are allowed to travel again it would probably be most transport and freight passenger because the freight passenger are an exception". Furthermore, Respondent D observed: "I think that's freight in the overall fleet, for all over Europe that has increased during recess due to the pandemic". Similarly, Respondent G emphasized the importance of freight:

As soon as the travel bans came back...we had fewer guests on board... because we are more passenger based and travel...in transportation... normally the ships are filled with cars from the mini cruises so we changed those lay meters to freight so we actually ended up sailing with a lot more freight than we normally do and that helped us increase our revenue in that period of time.

Respondent E also expressed the added value of freight and admitted that if they had not had freight or logistics, the company might have had to come up with different measures or changes, however, freight and logistics have helped to spread the risk in the company. Another finding was introducing a new route and this also contributed to the freight and transport opportunities. The respondents who work for the company which introduced a new route all said it has benefited them. Respondent E said:

That is of course something that that we want to continue and maintain for the future...a business opportunity for us to try to take over that route and explore how can we utilize it...that was a positive thing and it is a positive thing and it also makes it possible for us to continue and even sail longer or more than others maybe because of freight on that route as well.

The additional findings is the operation of ambulance vessels. Respondent B believes that the need for ambulance vessels has increased during the pandemic period and it has contributed as a crucial source of revenue for the company.

Moreover, the idea that proved to be successful for half of the respondents was the introduction of new theme routes. The company offered new types of cruises like beer or wine tasting cruises, afternoon tea or concert cruises. They sold well and the company was going to maintain them in the future. Respondent B also said: "Our sales department...developed new cruises for our expanded Norwegian group of passengers last year such as hiking cruises... it's like a hiking trip... you go to the top and then you go a hiking route back down again and the boat will be waiting for you there...". During winter time, the same company offered ski boat cruises which took passenger to a skiing area. They were also popular and fully booked when the weather was good. Another finding that emerges in this section is that the Norwegians were the main customers spending holidays in their own country due to different travel bans. Respondent B observed that the positive feedback was given by the Norwegian:

This is now well known that when the Norwegian have opened our eyes to how beautiful our own country actually is, and that there are great experiences to achieve nearby where we live and we have received really good and positive feedbacks from the Norwegians who have joined our...cruises throughout last summer.

#### **4.2.3 Marketing campaigns and flexible booking policy**

The subtheme for which the findings will be provided here focuses on how the companies managed to keep the trust of their customers and attract them to travel with them during 2020 when the regulations allowed, or how they prepared and secured business for the future in the aftermath of the pandemic. The respondents revealed that they provided a very flexible booking policy whereby passengers could book, change, cancel and get full refund tickets without any extra costs. For instance, Respondent F said:

We do have a very flexible cancellation policy so when the COVID hit Norway and the rest of the world everybody who canceled due to this got a full refund from us, and those who wanted to move the reservation until 2021 got to do so without any costs. And we normally have three days before departure, cancellation policy, but we have been very tolerant about this and that's just because we want to keep the customers happy and we want them to come back when the world open opens up again.

Another finding is that the marketing had to shift its usual focus as well. The campaigns encouraging people to travel during the pandemic were not perceived well as they were contrasted with what people were told on regular basis by the governments. Respondent E

shared:

We actually got the feedback on social media, for instance, should you stop advertising for travel abroad at the moment since the government is actually advising us not to go anywhere...So we also needed to or wanted to be careful about this, because one thing is...to keep the business running and... on the other hand you also want to act a company who is part of that the society where we are traveling to and from.

Consequently, it led to the shift in the campaigns that were then focusing on dreaming about the future cruises rather than promoting any actual itineraries. The aim of it was to keep people inspired and open to travel again when the travel bans are lifted. The other respondents emphasized the new products they launched during 2020 as a means to keep the business afloat and attract local people. Respondent F noted:

Now the situation has made us focus on the Norwegian market and the local market and these have created new possibilities for us because we have created new tours and new products for the locals and for the new Norwegian market, which we believe will endure after the COVID-19 situation as well so that is very positive.

#### **4.2.4 New ways of working**

This subtheme describes companies' new ways of working in compliance to the COVID-19 continuously changing restrictions. The emerging point is that the routines on board changed in general, particularly with regards to cleaning. Frequency of cleaning and the use of antibacterial cleansing gel increased on board tremendously since the COVID-19 outbreak. These measures are likely to be continued for the future as shared by Respondent A: "I think that for sure antibac and sanitizers will be standing there for the rest of our lives...the plexi glass... small things that is nice to have really". Furthermore, the shared opinion reflect that those activities were performed by the same or lower number of employees on board at the time when the companies introduced employment ban and furloughed people. Although this meant more work and pressure for people on duty, it was also viewed as working in a efficient way. Respondent C said the following:

They [employees] have I believe...been given more tasks and they have been really successful... they have had to think about so many more things and making sure that



they are updated on what applies... that's all changing all the time, so I believe they have done a great job.

Similarly, Respondent D shared:

We have been quite a few people less than before but we still have the same operation and efficiency, so of course, we can see that the benefits, beneficial effect of it that we will be able to cope with less people, but of course, it's been more pressure on everybody, so I think in the future we will probably get some more people back, but not to the same level as before.

The point raised by some of the respondents was that they had to ensure to offer trips that were in line with the current regulations to make the passengers feel safe. Respondent F summarized it saying: "Now we are all in the same boat... so keeping up with the current regulations that's the most important thing."

The management support and their fast adjustments of the processes in the response to the COVID-19 pandemic as well the use digital solutions for efficiency and effectiveness was also a shared opinion among the respondents. Respondent G confirmed the efforts taken on management level:

I think that the way we cooperate on a management level, has improved, really....I think from my point of view we were really close group in our management team...and I couldn't actually imagine that we could do that any better, but we could and because you were just really, really depended on your colleagues in a situation like this, especially because in some form, more or less, we have been working in a crisis mode for more or less a year now.

The respondents also highlighted the need to implement *home office* to adhere to the local restrictions. For instance Respondent A said: "working with the Teams and having these meetings like you and me now I think that's a positive thing coming out of the Covid-19 now, but I miss meeting people face to face". Nonetheless, during the interviews, it was shared that one of the companies had acquired a new working premise with a lot of space just before the COVID-19 outbreak. This became an advantage for the company as there was enough space for the required social distancing and for the disinfection of the working vicinity so people could choose to work from home or come to the office. The trust for the employees working at home proved 100% successful according the Respondent E. Furthermore, people did not

only learn the new technology to maintain daily contact, but they also became more flexible, agile and adapting to the changes fast. As Respondent E shared, the employees worked more in leaner ways and those furloughed could look into the future while not focusing on current tasks. All this was viewed as a measure against future unexpected events, Respondent A expressed:

We learnt...that we don't know what the future will bring, the days are not alike, we just have to see what's coming and deal with it, so just adapt and go with the flow and try to do things in best possible safe way.

The same respondent emphasized that the new ways of working were to a large extent "learning by doing", hence they also learnt from mistakes of others. The outbreak of coronavirus on a Hurtigruten cruise became a lesson learnt.

Last but not least, there is a finding of a new way of certification of the vessel. Respondent A believed that vessels certified by certification societies such as DNV GL as *coronafriendly* may become normal process in the future that would guarantee cleanliness and proper routines on board.

#### **4.3 Summary of findings**

To recapitulate, the main purpose of this master thesis is to gain an in-depth understanding of the operational challenges faced by the passenger shipping industry as a result of the COVID-19 pandemic as well as to learn about strategies keeping those companies afloat in the Norwegian context. In this perspective, all the findings which were presented are consistent with the goal as demonstrated by the respondents in response to the twelve questions addressed during the interviews. All respondents acknowledged the significant impact of the pandemic on operational activities in the industry, however, implemented strategies differed slightly from company to company depending on the size of vessels in their fleet and the local restrictions at a given time. The analysis of the findings provided two main themes each with four subthemes as presented in the table 3.

Table 3. Summary of the findings

1. Adaptation, challenges and navigation of the new rules:	
Employment	Employment internal challenges, Permitting, people furloughed, absence of crew due to disease
Vessels layups and certifications	Vessel-laid up due to inactivity and to reduce cost, some certifications delayed
New protocols	Update of safety procedures and risk management due to COVID-19
Fun boats no more	Direct impact on the activities on board; not being able to serve customers as used to
2. Benefits and new concepts keeping business afloat:	
Aid packages	Governments aid packages for people furloughed, laid-off
Freight, transport, new routes and themes	Freight and transport as a means to keep operating, new routes and themes as ideas to keep business afloat
Marketing campaigns and flexible booking policy	Marketing campaigns on dreaming about the future cruises; flexible booking and cancellation policy to keep customers
New ways of working	Working from home, working efficiently with less people, staying positive and adapting fast

## **5. Discussion**

This chapter's purpose is to answer questions raised in this master thesis by utilizing the results collected during the qualitative research as well to determine if the findings are in line with the current knowledge. The discussion chapter will be organized according to the two main themes that emerged in the analysis of the findings. Finally, the conclusions will be drawn summarizing the discussion. Throughout this paper, the goal has been to establish the impacts of the COVID-19 pandemic on the operational activities of passenger ships as well as to discuss the implemented strategies that have kept them afloat during these challenging times. Furthermore, for the author of this master thesis it has been vitally important to contribute knowledge by examining the cumulative character of the pandemic from the domestic, Norwegian perspective.

### **5.1 Discussion of theme one - adaptation, challenges and navigation of the new rules brought by the COVID-19 pandemic**

The COVID-19 pandemic has profoundly impacted the passenger shipping industry in Norway. Not only did it repeatedly impose the cessation of the services, but also led to the often changing circumstances causing the companies to take efforts to adjust accordingly.

First of all, the conducted interviews give a unique insight into the employment situation in the passenger shipping sector of tourism in Norway. The results provide supporting evidence that some passenger shipping companies in Norway had to lay off people permanently and temporary laying-off people has helped the companies to reorganize the employees' schedules during less mobility as well as reduce salary costs. New employment was banned entirely. Moreover, the social welfare system in Denmark proved to be more beneficial than in Norway, as reported by the passenger shipping employees operating in both countries. Some respondents mentioned the crew changes as well and reshuffling due to absences and safety obligations brought by COVID-19. This can be linked to what was written in the literature review chapter with regards to the awareness of the so called "caution fatigue" in employees that could be experienced by the crew. According to a webinar held by DNV GL in November 2020 on "Safety in shipping during the COVID-19 pandemic", "caution fatigue" can impact crew's well-being and makes one forget about the COVID-19 behavior principles (DNV GL, 2020). The results connected to the employment represent the first direct demonstration of internal struggles, and social welfare options offered to passenger shipping companies in Norway during the pandemic of COVID-19. Furthermore, due to the

international restrictions, for some of the crew employees in passenger shipping companies it was difficult to get to Norway to work and we can assume get back home as well. The past researchers have highlighted that crew members should be considered as key workers on international level so that their contracts do not have to be extended, they can return homes and are not overburdened (Stannard, 2020). We can further link it to the crew-change restrictions which play a pivotal role in decreasing the number of sailings despite the fact the IMO and EU have taken measures to facilitate the crew changes (Heiland & Ulltveit-Moe 2020). What is more, Baum and Hai (2020) imply that the COVID-19 pandemic has reintroduced borders in the Schengen Area. It would be therefore useful for future researchers to extend the current findings by examining the off-shore and on-shore employment impact separately as well as by looking closely at *Permittering*, temporary laying-off employees, its rules and limitations as well as how the laws on the level of other countries impacted the employment in passenger shipping companies in Norway.

Another result from this study is how the passenger shipping companies dealt with vessels not being used during the pandemic of COVID-19 in Norway in 2020. The research by Heiland and Ulltveit-Moe (2020) provide evidence that after the 12<sup>th</sup> of March 2020 when the Norwegian government imposed lockdown measures, the number of cruise ships departing from the Norwegian ports declined drastically. The results strongly imply that due to the imposed travel restrictions and in order to save costs, the vessels were laid-up in ports and their certifications would only cost when they were to be brought into service again. Moreover, the interviewees claimed that the option of delaying the certifications for the vessels and the crew proved helpful as well. The solution for redetermining the sustainability of cruise industry during the COVID-19 pandemic was offered by Renaud (2020). He believes that having a fleet of local vessels that would be governed solely by internal regulations would help the touristic activities continue regardless of the regulations offshore. The present study represents one of the first attempts to address those issues, especially in the Norwegian context. We believe that further research examining the specific certifications of vessels and the crew as well as vessel lay-ups, their cost and procedure of bringing them back to service may shed more light on vessel maintenance and the government's support at the time of the COVID-19 pandemic in Norway.

The purpose of this study was also to gain a better understanding on how the passenger shipping companies in Norway were prepared for unforeseen situations like a global pandemic and see how they adapted their safety and security procedures to reflect the risk brought by COVID-19. One of the important hallmarks is the susceptibility of the cruise

ship industry to an outbreak of a highly contagious viral or bacterial disease on board (Dahl, 2016). Despite the fact that the companies interviewed did not have a back-up plan for an outbreak of a pandemic in their risk assessments before, they admitted that they had risk management for sickness on board in general. This is in line what was suggested by Stannard (2020) that ships need to regularly assess the risks onboard and apply buffers against them. Furthermore, the interviewees confirmed that they have introduced new protocols and enhanced cleaning procedures that reflect the requirements imposed by the governments as well as their internal desire to make the customers feel safe while travelling with them. This pattern of results is consistent with the previous literature that proves the existence of health security measures for tourists and crew on board of passenger ships before. According to Holt et al. (2017), the medical resources available for passenger ships, are among others, a defibrillator, first-aid training for all crew members, tele-medical communication systems as well as a helipad. Dahl (2016) believes that through raising awareness of the technique of “the fist bump” and the “cruise tap”, the cruise liners companies can keep down the outbursts of infectious disease on ships as well as the number of dissatisfied customers, and overburdened crew members. Mouchtouri et al. (2019) suggest that common flu, gastrointestinal diseases, rubella or measles tend to outburst on ships due to different national vaccination strategies and that there have been extensive measures taken in order to improve the international policies on Vaccine-Preventable Diseases (VPDs). This is why, the interviewees emphasized that due to the experience with COVID-19, they may be ready for similar situations in the future as well. It is therefore tempting to suggest, as implied by one of the interviewees who made a comparison of the pandemic of COVID-19 to the 9/11, that some events will make our approach to safety and security evolve and that certain procedures introduced in the aftermath of extraordinary events will remain forever. In terms of future research, it would be interesting to learn which items have been kept in the new protocols in the passenger shipping industry after 2020, or learn how the European Manual for Hygiene Standards on Passenger Ships has been updated in the aftermath of the pandemic of COVID-19.

The key findings are also the repercussions connected to the entertainment, dining and travelling on passenger ships during 2020. It is difficult to ignore that over the years the passenger ships became sailing leisure facilities (Miotke-Dzięgiel, 2002, p. 20 as cited in Kizielewicz et al., 2017). Nonetheless, the new rules forced by COVID-19 introduced travel bans, reduced the capacity of the passengers, forced strict sanitizing procedures, testing, using masks and stopped some of the services. Let it be reminded at this point that according to Article 13 of the United Nations Universal Declaration of Human Rights, "Everyone has the

right to freedom of movement and residence within the borders of each State" and "Everyone has the right to leave any country, including his own, and to return to his country" (Universal Declaration of Human Rights, 2015). Furthermore, according to the same declaration we all have the right to "rest and leisure". The pandemic of COVID-19 in 2020 imposed restrictions that sometimes stand in opposition to basic human rights of movements and the right to leisure. What is more, keeping the social distance became the strict requirement that further induced changes to entertainment activities like dancing, swimming as well as using children playgrounds. This can be juxtaposed with what has been suggested by Baum and Hai (2020) that the concept of "social distancing" is the opposite of what we think the leisure time should be. The passenger shipping companies, similarly to restaurants, had to reduce dining and restaurant services and serve customers by the table. This certainly had impact on customer experience. In general, it was reported that the customers' feedback while travelling in 2020 on passenger ships was positive as people were aware of the safety recommendations issued weekly by the government. However, in order to monitor the customer feedback with regards to feeling safe on board during the pandemic of COVID-19, questionnaires have been adapted to include the relevant questions. Whereas past researches claim that the factor that would make the customers recognize the good quality of a cruise itinerary, advertise it, and increase the possibility of taking another cruise trip is the existence of previous similar good experience (Chua et al. 2017), the present study's limitation is that at the time of writing this master thesis, the COVID-19 pandemic is not over and the long term repercussions on customer experience are yet to be examined in detail. Another aspect that impacts customer experience is reputation as suggested by Ahn et al. (2020). They highlight the importance of examining the reputation and initiatives of cruise companies under the circumstances observed during the COVID-19 pandemic, therefore there is a need for research that would establish the passenger shipping Corporate Social Responsibility (CSR) during the pandemic of COVID-19 in Norway.

## **5.2 Discussion of theme two - benefits and new concepts keeping business afloat during the COVID-19 pandemic**

The COVID-19 pandemic in Norway has undoubtedly impacted the way the passenger shipping companies manage their businesses. Not only did it trigger ideas to mitigate the impact of the pandemic but also often led to innovation and new concepts.

The aid packages from the government offered relief and helped reducing employment costs for those employees who were temporarily furloughed. This was viewed positively by

the interviewees, however, future research can in detail examine what requirements had to be fulfilled or if the help was sufficient, and also examine the differences between Denmark and Norway as our participants highlighted them, and often benefited from the application of the Danish rules. These results are new and cannot be tied to the literature reviewed.

Another result that emerged from the research is transportation and freight that have helped the passenger shipping companies to survive the periods of lockdowns. When cruise trips could no longer take place, it became apparent that to some extent the vessels could still sail and function as a means of transport. People could still visit friends, family, work or study due to the fact that the government restrictions exempted freight passengers from quarantine. It is interesting that transport by vessels was allowed at all as Heiland and Ulltveit-Moe (2020) suggest that transportation severely contributes to the spread of the virus. It appears that this practice led to the situation experienced in the past when originally the ferries were used to carry passengers (Miotke-Dzięgiel, 2002, p. 20 as cited in Kizielewicz et al., 2017). Millefiori et al. (2020) imply that passenger shipping worldwide experienced 57% less mobility in July 2020 than forecasted, and that there has been an increase in the presence of idle ships. Nevertheless, our findings reveal that freight became the factor that helped generate business for passenger ships during 2020, and as expressed by one of the interviewees, the idle meters were utilized and changed into freight. This, as aptly concluded by a different interviewee has helped to spread the financial risk across the company.

Another point in the discussion is the result that proves that the pandemic of the COVID-19 triggered innovation endeavors. First and foremost, half of the interviewees reported that their company introduced a new route in their schedule and that further enhanced freight and transportation opportunities. Furthermore, the other half of the interviewees highlighted the fact that the management at their company decided to introduce new theme trips, like a few hour wine or beer tasting, hiking or skiing mini cruises which turned out to be very popular especially among Norwegian who due to travel restrictions spent the holidays in the country. This is line with the previous research by Renaud (2020) who predicted that the COVID-19 pandemic should somewhat generate creative and critical thinking for local organizations and decision-makers to redesign the models in place in the best interest of their local communities as well as filling the recreational gap that the pandemic is causing. There is no escaping the fact that in turn that would impact the environment less significantly (Renaud, 2020). Offering more cruises for the local Norwegian communities could also foster emergence of more studies like the one by Larsen and Wolff



(2016) on behavior of passengers calling Norwegian ports or by Altintzoglou et al. (2016) on food experience, both described in the literature review chapter.

Remaining attractive for future potential customers during the lockdown of touristic activities has also become a means of keeping the company afloat. One of the strategies that proved successful was keeping flexible booking and cancellation policies whereby the customers could book, change, cancel and get full refund tickets without any extra costs. The apparent limitation is the lack of knowledge if the shipping companies in Norway utilized the solution of keeping the money as a form of credit for trip at a later time, instead of offering a refund which review literature suggested has become a widespread solution in the tourism industry (Panetta, 2020 as cited in Renaud, 2020). Another point in the discussion is how the passenger shipping companies conducted their marketing campaigns. It was gradually realized in 2020 that the marketing campaigns had to be kept "low" during the pandemic of COVID-19 as the feedback received was not positive due to the fact that the government at that time advised against non-essential travelling. Despite this, a concept of dreaming about future cruises was introduced instead of advertising any particular itineraries or destinations. This was aimed at keeping potential passengers inspired and open when the travel bans were to be lifted. These results are consistent with the assumption that passenger shipping companies expect to resume their services based on the vaccine potential, possible easing of travel restriction, enhancing health security as well as the presence of loyal customers (Sachs et al. 2020 as cited in Renaud, 2020).

The COVID-19 pandemic has also fostered the emergence of new ways of working that were often applied in order to keep the business going. First and foremost, the cleaning practices were enhanced to ensure that the virus would not transmit on board of a passenger ship and that the passengers felt safe during a trip. Through reviewing the literature, we learnt that this as well as disinfection, testing, illness questionnaire and quarantine guidelines are well defined in the European Manual for Hygiene Standards on Passenger Ships. For future researchers it would be wise to examine how the European Union improved the guidelines on epidemiological situations and health protection in Europe in the aftermath of the COVID-19 pandemic as an update to Decision No 1082/2013/EU. Furthermore, the findings revealed that some of the interviewees believed that keeping the antibacterial cleaning gels and the so called plexi glass could be maintained in the future as a safety net which can be linked to what was suggested by Stannard (2020) that the availability of personal protective equipment should also be part of the assessment risk performed by ships. We suggest that future research is performed in order to gain full understanding of what the proper hygiene and personal

protective equipment standards for passenger ships in the aftermath of the COVID-19 should be.

The findings have also highlighted the importance of the use of digital solutions for work purposes. The results strongly imply that using *home office* has benefited the companies as they could enable and empower their employees to work during lockdowns, and was positively perceived by the employees themselves. Furthermore, these results support evidence that trust is an essential ingredient in working relations and that without it the companies would be suspicious of their employees working from home during the pandemic. The limitation, however, is the lack of knowledge of long-term effects on employees' cooperation online, or how the crew members of passenger ships utilized the online technology during the pandemic of COVID-19 in 2020 and 2021.

Another important findings is that the employees have become more flexible, adapting to changes easily and working in a more leaner way. As aptly expressed by one of the interviewees, even those who were furloughed could think ahead and look into the future while not focusing on their daily tasks which could help benefit the company in some way. As emphasized by Ioannides and Gyimóthy (2020), the power of resilience that usually begins to reverberate after a crisis, new tools and technology as well as new ideas that are being brought to life during the pandemic can reshape the current models of tourism practices.

Last but not least, a key finding is the observation of how passenger shipping companies in Norway were managing the restrictions and obligations brought by the pandemic. Learning by doing and observing others became a new way of working. Not surprisingly, the outbreak of coronavirus on a Hurtigruten cruise became a lesson learnt. That case made the headlines all over Norway due to the fact that the situation leaked to the wider public only when the company attempted to conceal the outbreak at the same time risking a significant dent on the image of the company (Maritime Executive.com, 2020). It turned out that the Norwegian health official informed the cruise management but the company failed to inform the rest of the passengers as well as the onboard crew members which consequently resulted in a total of about 53 people confirmed positive to COVID-19 (Norwegian Institute of Public Health, 2020). One of the limitations in studying this case is no literature available, therefore it is suggested for future researchers to examine that case or similar cases in Norway. As Mallapaty (2020) convincingly suggests outbreaks on vessels give a scarce opportunity to explore the dynamics of the virus transmission not available from the broader population perspective. At this stage it is important to briefly discuss the cases of outbreaks on other passenger ships in 2020. Those were extremely challenging situations and vessels

Grand Princess, Diamond Princess and Princess Ruby became breeding ground for disease. The three vessels challenged 1400 confirmed cases among the passengers and the crew with 30 people dying of the infection (MMWR Morbidity and Mortality Weekly Report, 69 (12) (2020), pp. 347-352 as cited in Shuduo et al., 2020). It can be concluded that such situations can fill the passengers, crews, authorities and public media with acute uncertainty, confusion and even perhaps fragile loyalty, and that in turn can lead to risk avoidance trend for example after watching the passengers being evacuated from cruise liners (Ioannides & Gyimóthy 2020 p.628).

This chapter has presented a synthesis of the findings as well as analysis and discussion of the interview data collected for this master thesis. The discussion was presented over two themes, examining different aspects of management of passenger ships during the COVID-19 pandemic in 2020. It was argued that even though passenger shipping companies in Norway have been tremendously impacted by the COVID-19 pandemic in 2020, their employees did their outmost to mitigate the impact of the pandemic, also with the help of the government. The discussion highlighted the significant influence of the changes taking place to tourism during the COVID-19 pandemic redetermining the sustainability of the passenger ships industry. This chapter has also made recommendations and identified the need for further research due to the lack of literature as well the fact that the pandemic has not ended yet. The next chapter concludes the study by addressing the research questions and identifying the contributions to knowledge as well as the implications this has for future research.

## **6. Conclusions**

### **6.1 Concluding remarks**

The final chapter presents the conclusions of the study. The exploratory study of the research questions examined the challenges that the passenger shipping companies have been facing in Norway as well as how they managed to keep themselves afloat since the outbreak of the pandemic in 2020. The findings that emerged were discussed in the light of available literature and it can be confirmed that operational activities of passenger shipping industry in Norway have been significantly affected by the COVID-19 pandemic repercussions. There have been different challenges faced by the passenger ships in Norway in 2020 - the cessation of the services, sailing under strict customer capacity restrictions and hygienic regime, financial struggles, and internal efforts to adapt to the government changes rapidly and explore concepts that would mitigate the impact of the pandemic. The master thesis explicated those repercussions and presented different perspectives as viewed by all participants of this study, the author included. The goal of the thesis is partially achieved as on one hand it contributed knowledge of passenger ships situation in Norway in 2020 and on the other hand, as the pandemic is still ongoing and its end is not determined, it cannot predict the further repercussions in the aftermath of the pandemic. This study is therefore not sufficiently exhaustive. Nevertheless, it is certainly one of the first published studies on this topic, hence laying grounds for future research.

### **6.2 Limitation and suggestions for further research**

This part of the master thesis describes some few limitations that suggest further studies. Limited sample size – seven respondents from three different companies participated on this project, which is three participants less than initial plan of ten. Nonetheless, it is not presumed if this has any significant impact on the trend and emerged findings for this paper, although it will be essential to expand sample size in the future research. It is worth noticing another limitation with regards to data collection and limited access to the school library - due to lockdowns and ongoing restrictions in Oslo, all interviews were conducted virtually via Microsoft Teams contrary to the traditional physical interview. This might have had an influence on the dynamics of the interviews as well as on the overall interaction between participants. The limitation was also lack of access to the school or public library due to the restriction rules. Lastly, lack of prior research studies on this topic – this is also a limitation as previous research studies help understand the phenomena being researched and contribute to

answering research questions. It is stressed that this topic is relatively new and the COVID-19 pandemic is still ongoing with very few research studies being conducted on the topic. In order to expand this project's scope, I would recommend that further researchers examine the long-term repercussions of the COVID-19 pandemic on operational activities and cruise customers experience in particular.

## References:

- Ahn, J., Shamim, A., & Park, J. (2021). Impacts of cruise industry corporate social responsibility reputation on customers' loyalty: Mediating role of trust and identification. *International Journal of Hospitality Management*, 92, 102706. <https://doi.org/10.1016/j.ijhm.2020.102706>
- Altintzoglou, T., Heide, M., & Borch, T. (2016). Food souvenirs: Buying behaviour of tourists in Norway. *British Food Journal*, 118(1), 119–131. <https://doi.org/10.1108/BFJ-05-2015-0190>
- Barua, S. (2020). *Understanding Coronanomics: The Economic Implications of the Coronavirus (COVID-19) Pandemic* (SSRN Scholarly Paper ID 3566477). Social Science Research Network. <https://doi.org/10.2139/ssrn.3566477>
- Baum, T., & Hai, N. T. T. (2020). Hospitality, tourism, human rights and the impact of COVID-19. *International Journal of Contemporary Hospitality Management*, 32(7), 2397–2407. <https://doi.org/10.1108/IJCHM-03-2020-0242>
- Bell, E., Bryman, A., & Harley, B. (2018). *Business Research Methods*. Oxford University Press.
- Bracken-Roche, D., Bell, E., Macdonald, M. E., & Racine, E. (2017). The concept of 'vulnerability' in research ethics: An in-depth analysis of policies and guidelines. *Health Research Policy and Systems*, 15(1), 8–8. <https://doi.org/10.1186/s12961-016-0164-6>
- Chua, B.-L., Lee, S., & Han, H. (2017). Consequences of cruise line involvement: A comparison of first-time and repeat passengers. *International Journal of Contemporary Hospitality Management*, 29(6), 1658–1683. <https://doi.org/10.1108/IJCHM-09-2015-0452>

Dahl, E. (2006). Norovirus challenges aboard cruise ships. *International Maritime Health*, 57(1–4), 230–234.

Dahl, E. (2016). Cruise tap versus handshake: Using common sense to reduce hand contamination and germ transmission on cruise ships. *International Maritime Health*, 67(4), 181–184. <https://doi.org/10.5603/IMH.2016.0034>

Dahl, E. (2020). Coronavirus (Covid-19) outbreak on the cruise ship Diamond Princess. *International Maritime Health*, 71(1), 5–8. <https://doi.org/10.5603/MH.2020.0003>

Depellegrin, D., Bastianini, M., Fadini, A., & Menegon, S. (2020). The effects of COVID-19 induced lockdown measures on maritime settings of a coastal region. *Science of The Total Environment*, 740, 140123. <https://doi.org/10.1016/j.scitotenv.2020.140123>

Ghuri, P. N., Grønhaug, K., & Strange, R. (2020). *Research methods in business studies* (Fifth Edition.). Cambridge University Press.

Heiland I. & Ulltveit-Moe K.H. (2020). An unintended crisis in sea transportation due to COVID-19 restrictions. In R. E. Baldwin & S. J. Evenett (Eds.) COVID-19 and Trade Policy: Why Turning Inward Won't Work (pp.151-163). CEPR Press  
[GoogleScholarCovid-19-and-trade-policy-29-April-2020-Baldwin-Evenett-1.pdf](#)  
(grupopuntadeleste.com)

Holt, T.-E., Tveten, A., & Dahl, E. (2017). Medical emergencies on large passenger ships without doctors: The Oslo-Kiel-Oslo ferry experience. *International Maritime Health*, 68(3), 153–158. <https://doi.org/10.5603/IMH.2017.0027>

*European Manual for Hygiene Standards and Communic.pdf*. (n.d.). Retrieved 28 February 2021, from [https://www.shipsan.eu/Portals/0/docs/EU\\_Manual\\_Second\\_Edition.pdf](https://www.shipsan.eu/Portals/0/docs/EU_Manual_Second_Edition.pdf)

Iaquinto, B. L. (2020). Tourist as vector: Viral mobilities of COVID-19: *Dialogues in Human Geography*. <https://doi.org/10.1177/2043820620934250>

- IMO. (2020). *Coronavirus disease (COVID-19) Pandemic*.  
<https://www.imo.org/en/MediaCentre/HotTopics/Pages/Coronavirus.aspx>
- Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. (2021). *Sustainable Production and Consumption*, 26, 343–359. <https://doi.org/10.1016/j.spc.2020.10.016>
- Ioannides, D., & Gyimóthy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, 22(3), 624–632.  
<https://doi.org/10.1080/14616688.2020.1763445>
- Jiang, P., Fu, X., Fan, Y. V., Klemeš, J. J., Chen, P., Ma, S., & Zhang, W. (2021). Spatial-temporal potential exposure risk analytics and urban sustainability impacts related to COVID-19 mitigation: A perspective from car mobility behaviour. *Journal of Cleaner Production*, 279, 123673. <https://doi.org/10.1016/j.jclepro.2020.123673>
- Kende, C. B. (2020). Cruise Lines And COVID: As the cruise industry deals with COVID litigation, a number of defenses have been successful. *Best's Review*, 121(12), 20–21.
- Kizielewicz, J., Haahti, A., Luković, T., & Gračan, D. (2017). The segmentation of the demand for ferry travel – a case study of Stena Line. *Economic Research-Ekonomska Istraživanja*, 30, 1003–1020. <https://doi.org/10.1080/1331677X.2017.1314789>
- Larsen, S., & Wolff, K. (2016). Exploring assumptions about cruise tourists' visits to ports. *Tourism Management Perspectives*, 17, 44–49.  
<https://doi.org/10.1016/j.tmp.2015.12.001>
- Mallapaty, S. (2020, March 26). *What the cruise-ship outbreaks reveal about COVID-19* (News No. 7801). Nature; Nature Publishing Group. <https://doi.org/10.1038/d41586-020-00885-w>



- maritime executive.com. (2020, November 8). *Hurtigruten's COVID-19 Fallout Continues*.  
The Maritime Executive. <https://www.maritime-executive.com/article/fallout-continues-from-hurtigruten-s-covid-19-incident>
- Mark NK, Philip, & Adrian. (2016). *Research methods for business students* (7th ed.).  
Pearson.
- Millefiori, L. M., Braca, P., Zissis, D., Spiliopoulos, G., Marano, S., Willett, P. K., & Carniel, S. (2020). *COVID-19 Impact on Global Maritime Mobility* [Preprint]. In Review.  
<https://doi.org/10.21203/rs.3.rs-100286/v1>
- Moriarty, L. F., Plucinski, M. M., Marston, B. J., Kurbatova, E. V., Knust, B., Murray, E. L., Pesik, N., Rose, D., Fitter, D., Kobayashi, M., Toda, M., Canty, P. T., Scheuer, T., Halsey, E. S., Cohen, N. J., Stockman, L., Wadford, D. A., Medley, A. M., Green, G., ... Richards, J. (2020). Public Health Responses to COVID-19 Outbreaks on Cruise Ships—Worldwide, February–March 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69(12), 347–352. <https://doi.org/10.15585/mmwr.mm6912e3>
- Mouchtouri, V. A., Lewis, H. C., Hadjichristodoulou, C., & the EU SHIPSAN ACT Joint Action Partnership. (2019). A Systematic Review for Vaccine-Preventable Diseases on Ships: Evidence for Cross-Border Transmission and for Pre-Employment Immunization Need. *International Journal of Environmental Research and Public Health*, 16(15), 2713. <https://doi.org/10.3390/ijerph16152713>
- Mouchtouri, V. A., Van Reusel, D., Bitsolas, N., Katsioulis, A., Van den Bogaert, R., Helewaut, B., Steenhout, I., Damman, D., Dávila Cornejo, M., Hadjichristodoulou, C., & The EU SHIPSAN ACT Joint Action Partnership. (2018). European Web-Based Platform for Recording International Health Regulations Ship Sanitation Certificates: Results and Perspectives. *International Journal of Environmental Research and Public Health*, 15(9), 1833. <https://doi.org/10.3390/ijerph15091833>

- Norwegian Coastal Administration. (2020, August 3). *The Coronavirus and Seagoing Traffic*. The Coronavirus and Seagoing Traffic. <https://www.kystverket.no/en/News/the-coronavirus-and-seagoing-traffic/>
- Norwegian Institute of Public Health. (2020, August 5). *News*. Norwegian Institute of Public Health. <https://www.fhi.no/en/sys/news/>
- Raab, M. (2021). How to cope with uncertainty in COVID-19 times. In *Judgment, Decision-Making, and Embodied Choices* (pp. 139–144). Elsevier. <https://doi.org/10.1016/B978-0-12-823523-2.00012-X>
- Renaud, L. (2020). Reconsidering global mobility – distancing from mass cruise tourism in the aftermath of COVID-19. *Tourism Geographies*, 22(3), 679–689. <https://doi.org/10.1080/14616688.2020.1762116>
- Santos, T. A., Martins, P. A., & Guedes Soares, C. (2021). Cruise shipping in the Atlantic coast of the Iberian Peninsula. *Maritime Policy & Management*, 48(1), 129–145. <https://doi.org/10.1080/03088839.2020.1772516>
- Shuduo, Z., Han, L., Liu, P., & Zheng, Z.-J. (2020). Global health governance for travel health: Lessons learned from the coronavirus disease 2019 (COVID-19) outbreaks in large cruise ships. *Global Health Journal (Amsterdam, Netherlands)*. <https://doi.org/10.1016/j.glohj.2020.11.006>
- Smith, P. (2020). Hard lockdown and a “health dictatorship”: Australia’s lucky escape from covid-19. *BMJ*, 371, m4910. <https://doi.org/10.1136/bmj.m4910>
- Stannard, S. (2020). COVID-19 in the maritime setting: The challenges, regulations and the international response. *International Maritime Health*, 71(2), 85–90. <https://doi.org/10.5603/IMH.2020.0016>

Takeuchi, I. (2020). COVID-19 first stage in Japan – how we treat ‘Diamond Princess Cruise Ship’ with 3700 passengers? *Acute Medicine & Surgery*, 7(1), e506.

<https://doi.org/10.1002/ams2.506>

The COVID-19 pandemic and organisational learning for disaster planning and management: A perspective of tourism businesses from a destination prone to consecutive disasters. (2021). *Journal of Hospitality and Tourism Management*, 46, 364–375.

<https://doi.org/10.1016/j.jhtm.2021.01.011>

The Norwegian National Research Ethics Committee. (2019). *Guidelines for Research Ethics in the Social Sciences, Humanities, Law and Theology*. Forskningsetikk.

<https://www.forskningsetikk.no/en/guidelines/social-sciences-humanities-law-and-theology/guidelines-for-research-ethics-in-the-social-sciences-humanities-law-and-theology/>

Urbanyi-Popiolek I. (2020). Maritime tourism in the time of COVID-19 pandemic in the Baltic Sea region - challenges for ferry and cruise operators. In L. Burilovic T. Rados, N.Recker (Eds.) *Economic and Social Development 63rd International Scientific Conference on Economic and Social Development – "Building Resilient Society"* (pp. 397-405). Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia; University North, Koprivnica, Croatia; Croatian Chamber of Economy, Zagreb, Croatia; Faculty of Management University of Warsaw, Warsaw, Poland; Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco; Polytechnic of Medimurje in Cakovec, Cakovec, Croatia. GoogleScholar Using-the-Balanced-Scorecard-for-translating-strategy-into-actions-and-for-exercising-of-effective-control.pdf

UNCTAD. (2020). *Review of Maritime Transport 2020 / UNCTAD*.

<https://unctad.org/webflyer/review-maritime-transport-2020>

*Universal Declaration of Human Rights*. (2015, October 6). <https://www.un.org/en/universal-declaration-human-rights/>

Zhang, S., Diao, M., Yu, W., Pei, L., Lin, Z., & Chen, D. (2020). Estimation of the reproductive number of novel coronavirus (COVID-19) and the probable outbreak size on the Diamond Princess cruise ship: A data-driven analysis. *International Journal of Infectious Diseases*, 93, 201–204. <https://doi.org/10.1016/j.ijid.2020.02.033>