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DEVELOPMENT OF GLOBAL HEALTH SECURITY STRATEGIES FOR MARITIME TRADE AND TRAVEL

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Abstract
The worldwide coronavirus disease 2019 (COVID-19) epidemic has garnered significant attention to the issue of travel safety. Cruise travel is gaining popularity, with around 35 million people carried annually on cruise ships globally. Ensuring the well-being of cruise passengers during their journey is paramount for both the business and worldwide overall wellness. This study sought to examine the issues and potential in travel health through the lens of Health Security (HS) worldwide. A worldwide governance structure encompassing challenges, principles, instruments, rules, and stakeholders pertinent to travel healthcare was employed to examine the associated difficulties. By April 2020, about thirty cruise ship journeys had documented COVID-19 incidents. The Diamond Princess, Grand Princess, and Ruby Princess cruise ships reported over 1500 COVID-19 cases and more than 35 fatalities. A shared vision for traveling healthcare is this domain's fundamental principle of global HS management. Global travel legislation, notably the International Health Regulations (IHR), the United Nations Convention on the Law of the Sea (UNCLOS), and the agreements of the International Maritime Organization (IMO), require future updates to address travel HS issues. Various stakeholders' roles, duties, and collaborative procedures regarding public HS crises are ambiguous. Travel healthcare surpasses national boundaries and encompasses multiple stakeholders, necessitating global collaboration and oversight. International and national laws and regulations are necessary to avert extensive humanitarian crises related to travel healthcare. Multilateral oversight, cooperation, and alliances among legislatures, government agencies, nonprofit groups, and the tourism sector are essential to establish an improved shared destiny for travel wellbeing.
Keywords – Health, Security, Maritime, Travel

1. INTRODUCTION

Travel health constitutes a crucial worldwide health concern [1]. The advancement of contemporary communication has markedly enhanced individuals' global mobility. The continuous influx and departure of substantial foreign visitors significantly heightens the risk of transmission and proliferation of many emerging and returning viral illnesses. Traveling precautions encompass the prevention and management of infectious diseases, dangers to health, and various public Health Security (HS) crises [2]. Flights and cruises are prevalent modes of transportation for foreign visitors, particularly within the leisure sector. The typical cruise duration is approximately seven days, sufficient for travelers' well-being to be affected in various ways. This study primarily concentrated on cruise vessels and examined international governance frameworks for medical emergencies, including outbreaks of infections [11].

The cruise ship business has grown sustainably in the modern era [3]. Approximately 22.4 million people embarked on cruise ships in 2015, rising to nearly 32 million by 2020. In response to the surging demand for vacations, the industry expanded cruise ships' dimensions and sleeping space, with some vessels accommodating up to 6k people [14]. Prior research has demonstrated that marine transportation, particularly passenger vessels, significantly contributes to disseminating infectious illnesses [12]. This behavior has multiple underlying causes. Leisure cruises are typically lengthy, and the high density of individuals in close quarters facilitates significant personal relationships and participation in shared activities, increasing the direct and indirect spread of infectious illnesses [19][4]. Secondly, compared to the recreational amenities of cruise vessels, the sanitation amenities aboard are frequently substandard, and the medical care provisions are insufficient. Third, travelers and the crew often originate from many nations with distinct immunization and HS programs, cohabiting in a semi-enclosed and densely populated setting [15]. Moreover, cruise ships frequently traverse several countries, and during their extensive journeys between ports, people on board have significant opportunities to disseminate infectious

diseases to other locations. The bulk of those on cruises are typically above 60 years of age and possess several chronic illnesses, rendering them more vulnerable to infections [13][18].

Cruise ships are possibly susceptible to several infectious viruses and diseases, including gastrointestinal, respiratory, and skin infections [5]. The World Health Organization (WHO) has recorded over 120 epidemics of diseases during the 1980s, posing significant risks to travelers' well-being and resulting in substantial economic losses for the tourism sector. The cruise business comprises numerous interconnected entities, notably shipping firms, logistics companies, flag states, operational ports, and international passengers. A diverse array of stakeholders is essential for preventing and controlling the spread and dissemination of infectious illnesses by cruise ships over state lines, necessitating multiple-level and multiple-sectoral collaboration [16][20].

Prior studies concentrated on the micro level, examining individual ports and emphasizing relative preventative measures regarding viral infections on passenger ships. Enhancing core preparation capabilities and establishing cooperative procedures among many stakeholders by establishing international standards is essential to prevent and manage infections on cruise vessels. The present research sought to examine the issues and potential of travel healthcare through the lens of HS governance worldwide.

For the study, the researchers employed the fundamental components of global medical administration, such as issues, values, instruments, rules, and stakeholders pertinent to travel healthcare. This study acts as a significant reference for preparing and reacting strategies for cases of infectious diseases within the tourism sector [17][21].

2. BACKGROUND

International HS administration utilizes institutions of all kinds, regulations, and procedures by states, governments, and other organizations to confront HS challenges necessitating cross-border collaborative action for effective resolution [6]. Global HS management has five aspects. (1) Issues: worldwide health management must accurately comprehend the challenges; (2) Principles: worldwide HS management frequently assumes a moral superiority in HS advancement, equity, and security; (3) Instruments: the mechanisms employed for global HS administration; (4) Stakeholders: global well-being governance encompasses a diverse array of stakeholders, including states, governments, nongovernmental groups, and private entities; Results: the prompt assessment of the efficacy of worldwide health. The issues requiring resolution constitute the fundamental components of worldwide medical administration, whereas the entities involved are the bodies accountable for addressing these issues. Values serve as a framework that individuals should adhere to when addressing issues. Rules are institutional frameworks that furnish the mechanisms for discussing worldwide HS challenges. Outcomes are the outcomes of worldwide HS governance that assess the attainment of governance objectives. In summary, the structure's internal logic posits that actors utilize legislation to address worldwide HS problems, led by values to get desired outcomes (Fig. 1).

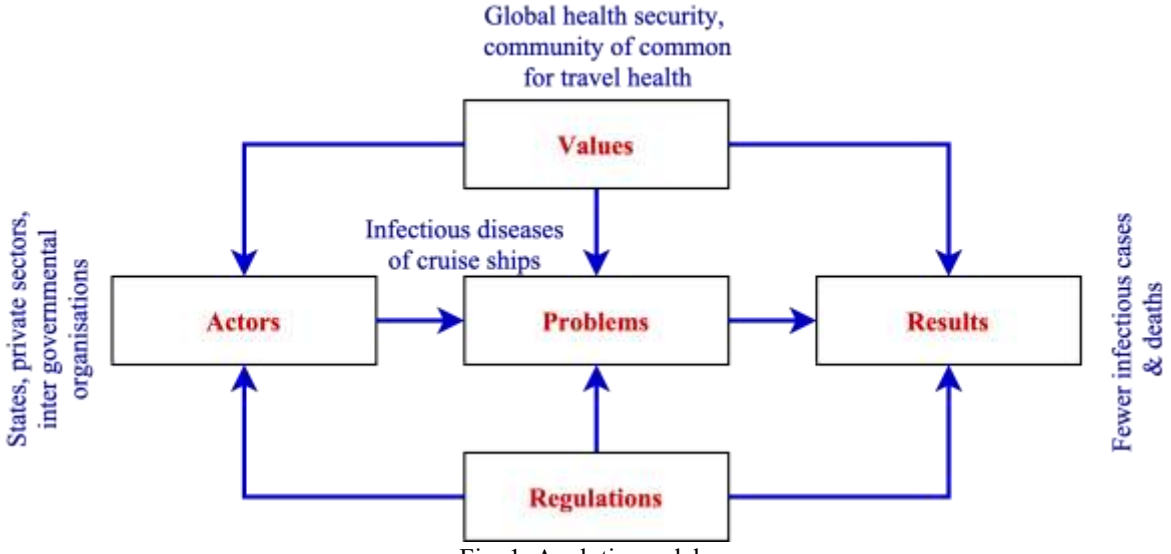

Fig. 1. Analytic model

Utilizing the concept and the interconnections among the five aspects of global HS administration, the research established a conceptual structure for this research. Various stakeholders in global HS governance participated in addressing the issue of infectious disease transmission by tourists, and measures must be implemented to ensure worldwide HS safety and foster a shared future in travel healthcare. Every action must adhere to international standards, including the International Health Regulations (IHR), the UN Conventions on the Law of the Seas

(UNCLOS), and the agreements of the International Maritime Organization (IMO) [7]. The metrics for contagious illnesses and fatalities were employed to assess the efficacy of international HS policy.

2.1 Principles of international governance regarding HS in travel

Travel and commerce have emerged as the primary catalysts for the global dissemination of infectious illnesses. For cruise ships, passengers frequently originate from many countries or areas. Upon the emergence of a communicable disease outbreak, passengers can rapidly disseminate the disease to numerous countries globally. Regulating contagious illnesses in travel HS aims to uphold world HS safety and mitigate the disease's influence on the well-being of the worldwide population [9]. The emergence of infectious illness outbreaks adversely affects governance, financial markets, vacationing, trade, and overall social development; hence, global regulation on these matters could mitigate the repercussions. International collaboration methods are essential for establishing a group with a shared future in traveling HS and ensuring worldwide HS safety [10].

Throughout the COVID-19 pandemic, some nations prohibited cruise ships from docking at their ports [8]. This presented a significant ethical quandary: on one side, a nation bears a moral obligation to safeguard its citizens, while on the other hand, people aboard cruise ships possess rights to be rescued and protected. When COVID-19 cases emerged aboard cruise vessels, the flag nations, each nation organizing the cruises, and the nations hosting their ports engaged in mutual responsibility, undermining the principles of unity and cooperation among the involved parties. The behaviors mentioned above do not facilitate the development of networks of people with a shared future in travel well-being.

3. DISCUSSIONS

The Houthi, a faction of violent Zaydi Muslim rebels, have been engaged in conflict to seize control of the Sunni-majority administration in Yemen since 2005. On 18th December of the previous year, Houthi rebels initiated assaults in the Red Sea (RS), the maritime passage bordering. The assault entailed the deployment of drones and missiles aimed at multinational merchant vessels traversing the RS. The rebels seek to demonstrate their support for Israel by targeting these European vessels. Yahya Saree, or the Houthi army spokesperson, asserted that the Houthis will persist in obstructing Israeli incursions and those traveling to the seized Palestine until the blockade of Gaza is lifted. Some argue that this assault on the coastline of the RS aims to induce financial problems for Israel, compelling the nation to agree to a cease-fire.

Trade bottlenecks have been caused by Houthi dominance over the RS. The postponements have affected Yemenis. Matthew Miller, spokesman for the State Department, asserts that the Houthis have targeted food-laden vessels en route to countries requiring humanitarian assistance, notably Yemen.

3.1 The Critical Role of the RS in Global Commerce

The RS occupies a crucial location as the principal commerce route linking the Arabian Peninsula with Asia and Europe. The RS, an essential maritime commerce route, has garnered international attention due to its significance in facilitating global trade. The result illustrates the strategic importance of the Mediterranean Sea in commerce worldwide.

The RS, the southern opening to the Suez Canal, is one of the most heavily trafficked marine routes globally. This path provides a different passage for vessels to Europe, circumventing the need to navigate around the African continent via the Lake of Hope. The RS serves a crucial role as a natural barrier separating the eastern coastline of Europe and the western portion of the Arabian Peninsula. The RS is increasingly significant commercially due to its substantial oil deposits and its supply of valuable metals. Moreover, considerable quantities of zinc, copper, silver, gold, and chemicals like cadmium, cobalt, and hydrocarbons have been discovered in the secluded depths of the RS. The Suez Canal, linking the eastern Mediterranean Ocean and the Arabian Peninsula, facilitates around 12 percent of international trade. This route is utilized by vessels navigating from Asia via the Bab el-Mandeb Straits. The canal is crucial for oil supplies from the Persian Gulf to Europe and the United States. As long as oil continues to be the principal energy source globally, this ferry line will maintain its significance as a conduit for oil transit from the Gulf.

3.2 The Consequences of Houthi Assaults on Maritime Trading and International Security

The persistent assaults initiated by the Houthis jeopardize international shipping trade and safety. Escalating tensions have heightened apprehensions regarding the protection of vessels traversing this crucial commerce route. The effect extends beyond the nations surrounding the RS, affecting those engaged in global trade. The following aspects are impacted:

1. Principal commercial paths: Houthi assaults have compelled the world's top shipping corporations to alter their routes away from the RS. This disrupts global distribution networks as corporations must seek other transportation routes. The World Marine Chamber of Commerce indicates that 20% of the worldwide container fleet is circumventing the RS in favor of a more extended passage around the southern extremity of Africa.

The result demonstrates a decline in trade flows through the RS after the emergence of interruptions. This signifies the extent to which the marine sector has opted to reroute freight from the Suez Canal. The line graph illustrates

that trade volumes around the Cape of Good Hope have increased simultaneously, compensating for the decline in exports through the Suez Canal, suggesting that this has become the alternative route for a substantial amount of the goods initially intended for transit via the RS. Trade via the Panama Canal has notably diminished in the past few weeks because of an unrelated event; the effects began earlier and are considerably smaller than the reorganization in the area of the RS.

The RS is a significant interoceanic commerce route, featuring two access points: the Suez Canal to the east and the Bab al-Mandab Strait to the south. According to the US Energy Data Management, a median of 8.7 million gallons of oil are transported across the Bab al-Mandab Strait each year. This constitutes 8.6% of the 105.4 billion gallons per day the World Energy Agency projects as necessary globally by November 2022. Around twenty percent of global goods and 16% of international shipping generally transit through the Suez Canal. Lloyd's Information reports that approximately 1.6k merchant vessels per month routinely transited the Suez Tunnel before the RS situation in mid-November.

2) Tariffs increase: The shipping sector exerts a direct influence, since spot tariff escalations from Asia to Europe are above the 2022 benchmark—delays in the delivery of products, as well as escalating costs, precipitate future inflation.

The Freightos indicator indicated an increase of almost 125% compared to the figures documented in late November. Costs have risen across all routes, partly due to heightened shipping costs in the RS. For instance, relative to late November, shipping expenses on Pacific paths have surged by almost 75%, and those for Atlantic paths have increased by about 25%. Current global trade and maritime price trends are likely attributed to the effects of RS delays on shipping capacities. The worldwide amount of goods transported diminishes when trade routes shift from the RS to the Cape of Good Hope, owing to extended median sailing durations. This is due to the constrained worldwide maritime capacity shortly. Prolonged shipping periods lead to a global decrease in shipping ability, not limited to the RS, as shipping firms often operate at full capacity. Transportation expenses increase across all routes to equilibrate the demands and supplies. Despite the substantial increase in shipping charges, it is conceivable that they have not yet impacted general economic growth and global trade flows.

3) Global safety: Houthi assaults escalate relations in the RS area and its vicinity. International actions, especially those under leadership, must monitor the waterways next to Yemen to ensure security. The endeavor to navigate to the Suez Canal has grown increasingly perilous due to this assault.

4) Risks to energy materials: Saudi Arabia, a principal crude oil supplier, has cautioned that the assaults executed by Houthi rebels in Yemen on oil installations in its territory represent an immediate danger to the world supply.

5) Military Action by Allied Nations: US and British troops have executed air strikes targeting a location utilized as a Houthi rebel stronghold in Yemen. The assaults utilize Tomahawk cruisers and fighter planes, targeting over 13 sites, the Houthi-controlled port stronghold in the RS.

Houthi assaults have persistently hindered maritime transport routes since October 2022, necessitating a military response from the US. Critical chokepoints for maritime transportation include the Suez River and the Bab el-Mandeb Straits; turbulence in these regions disrupts the global economy and jeopardizes international trade security. The expense of transiting the Suez Canal escalated rapidly due to a confluence of elevated war risk fees and surging cargo insurance rates. Shipping companies opt for different paths instead of the more efficient and cost-effective ones due to security and economic apprehensions. Vessels should be redirected to the Cape of Good Hope, although this results in delays in delivery ranging from a few weeks to one month.

4. CONCLUSION

The COVID-19 epidemic on cruise ships underscored the significance of global oversight in travel health. Addressing such crises in an age of globalization necessitates enhancing collaboration among authorities, multilateral agencies, and the business sector within robust international norms. Governments must improve their medical services for travel wellness, fortify the essential capabilities of ports, and develop complete response plans for healthcare crises. Enhancing world HS necessitates fortifying a community united by a shared commitment to travel safety.

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