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Health Services and Compliance with International Health Regulations at King Abdullah Bin Abdulaziz Airport, Jizan

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Abstract

This paper examines the health services available at King Abdullah bin Abdulaziz Airport in Jizan, Saudi Arabia, and their compliance with International Health Regulations (IHR 2005). It evaluates passenger satisfaction, operational performance, and adherence to global health standards, emphasizing the integration of a public health plan with the airport's main operational framework. Additionally, it highlights the activation of a reporting point for the National Focal Center to submit reports of emergency events to the National Focal Center for the International Health Regulations Program at the Ministry of Health. The airport also managed more than 70,000 international passengers in 2024, underscoring its growing importance as a major point of entry. The role of Gizan Health is pivotal in supporting these health services by providing medical teams, managing health facilities, and coordinating with the Ministry of Health

Keywords: health services, King Abdullah bin Abdulaziz Airport, public health plan, Ministry of Health, Jizan

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Introduction

Airports are essential centers in global health security, acting as primary access points for international passengers and possible channels for the transmission of infectious illnesses. The proliferation of worldwide travel has rendered airports more important in controlling public health hazards. They serve as both transportation hubs and critical checkpoints for the execution of health protocols that conform to international standards. King Abdullah bin Abdulaziz Airport in Jizan, situated in southern Saudi Arabia, is pivotal in safeguarding the health and safety of visitors in accordance with the International Health Regulations (IHR 2005) set out by the World Health Organization (WHO).

The International Health Regulations provide a worldwide framework for the prevention, protection, and management of public health concerns, while minimizing needless disruption to international transportation and trade. Airports, as significant entry points, must adhere to certain standards to safeguard public health. King Abdullah bin Abdulaziz Airport has progressively emphasized the incorporation of these concepts within its operating framework, especially since it accommodates over 70,000 foreign passengers each year. The airport's function in public health management includes the screening of infectious illnesses, assuring adherence to immunization protocols, and emergency preparedness, all while maintaining elevated levels of passenger satisfaction.

Passenger satisfaction is an essential criterion for evaluating the efficacy of health services at airports. Travelers anticipate not just effective transportation but also extensive health protocols, particularly after worldwide pandemics like COVID-19. These expectations impose further requirements on airports to reconcile operational efficiency with stringent health and safety regulations. Recent assessments by the General Authority of Civil Aviation (GACA) indicated superior operational performance at King Abdullah

Airport. Nevertheless, particular insights into passenger pleasure regarding health services are inadequately examined, creating a chance to rectify deficiencies in service provision and bolster public trust.

The incorporation of public health planning into airport operations at King Abdullah Airport exemplifies a proactive strategy for mitigating health hazards. Essential facilities, such as medical clinics, quarantine zones, and screening stations outfitted with thermal scanners, guarantee that the airport is adequately equipped to identify and address possible health risks. These efforts are especially vital due to the region's susceptibility to illnesses like dengue fever and malaria, which are prevalent in several tropical and subtropical regions. The airport mandates immunization for passengers from areas experiencing active epidemics, underscoring its dedication to health security.

Collaboration with Gizan Health, a regional health authority, has been essential in ensuring the airport's preparedness to tackle public health concerns. Gizan Health supplies proficient medical staff, oversees quarantine facilities, and collaborates with the Ministry of Health to guarantee adherence to IHR regulations. This partnership allows the airport to swiftly address situations, execute efficient screening procedures, and maintain rigorous cleanliness and sanitation requirements. These initiatives not only secure passengers but also further the overarching objective of protecting public health at entry points.

Notwithstanding these accomplishments, obstacles persist. The rise in passenger numbers, emerging health risks, and the need for perpetual advancement in health procedures require continual enhancements in airport health services. Furthermore, openness in health monitoring and efficient communication with passengers are crucial for fostering confidence and maintaining adherence to health protocols. Resolving these difficulties requires a collaborative effort involving airport authorities, health agencies, and international organizations.

This research seeks to assess the health services offered at King Abdullah bin Abdulaziz Airport, concentrating on their adherence to IHR standards and their effect on passenger satisfaction. The study aims to identify strengths, difficulties, and possibilities for development by analyzing the integration of public health planning with operational strategies. The results will enhance health care delivery at airports, guaranteeing their role as essential elements of global health security infrastructure.

Methods

This study used a thorough methodology to assess health services and adherence to International Health Regulations (IHR) at King Abdullah bin Abdulaziz Airport (Jizan Airport) in Saudi Arabia. The research concentrated on collecting and evaluating data from diverse sources, including passenger reports, IHR compliance records, and interviews with health authorities to evaluate performance indicators and service results accurately.

Data Collection

Surveys were administered to a representative sample of more than 70,000 foreign travelers anticipated to use Jizan Airport in 2024. The surveys sought to collect input on passenger experiences with health services, namely about the efficacy of thermal screens, adherence to vaccine mandates, and general satisfaction with the medical assistance offered at the airport. This method facilitated a direct comprehension of travelers' attitudes and apprehensions about health safety throughout their travels.

IHR Compliance Records: Gizan Health, the governing health authority responsible for public health protocols at the airport, supplied detailed compliance records with the IHR. The papers outlined the airport's compliance with health standards, including recorded procedures for thermal screening, vaccine enforcement, and defined methods for quarantine and isolation. The compliance statistics were crucial for assessing the efficacy of the airport's health protocols in reducing infectious disease risks.

Semi-structured interviews were performed with major stakeholders from Gizan Health and airport management. The interviews sought to get qualitative insights into operational methods, obstacles faced in executing health measures, and ideas for improving public health readiness. The insights from health authorities were essential for comprehending the cooperative initiatives between the aviation and health sectors in protecting public health.

Data Analysis

The data obtained from surveys, compliance records, and interviews were examined to ascertain important performance measures and service outcomes. Statistical analysis was conducted on quantitative data from passenger questionnaires to assess satisfaction levels about health care. Furthermore, IHR compliance records were examined to assess operational conformity with international health standards. Thematic analysis was conducted on qualitative data from interviews to derive insights into operational issues, achievements in health care delivery, and the effectiveness of the collaboration framework between Gizan Health and airport authorities.

Results

In 2024, King Abdullah bin Abdulaziz Airport (Jizan Airport) is anticipated to manage the health and safety of over 70,000 international passengers. This substantial volume underscores the airport's crucial role in global travel and its commitment to public health standards. Gizan Health, the health authority responsible for overseeing health services at the airport, implemented several key initiatives to ensure passenger safety and compliance with international health regulations.

Key Health Measures Implemented

Thermal Screening and Vaccination Compliance

One of the primary health measures introduced at the airport is the implementation of rigorous thermal screening protocols. These screenings are conducted at entry points to the airport, effectively identifying passengers who may exhibit fever, which is a common indicator of infectious diseases. The focus on early detection plays a pivotal role in mitigating the risk of disease transmission among travelers.

Furthermore, Gizan Health has ensured stringent compliance with vaccination requirements. Passengers arriving from regions known for specific infectious diseases, such as Yellow Fever and Meningococcal Meningitis, must provide proof of vaccination. This preemptive measure not only safeguards the health of individual travelers but also contributes to the broader objective of preventing outbreaks and enhancing community health security.

Quarantine and Isolation Protocols

In addition to screening and vaccination, the airport has established dedicated quarantine and isolation protocols. These protocols are critical for managing passengers who may display symptoms of infectious diseases or have been exposed to contagious pathogens during travel. Isolation areas are specifically designated to prevent potential health threats from spreading within the airport or to the larger community.

The effectiveness of these protocols is heightened by the airport staff's training and preparedness, which ensures that potential cases can be identified and managed swiftly. This comprehensive approach reflects a commitment to health safety that aligns with international standards and public health guidelines.

Emergency Medical Preparedness

Gizan Health has also prioritized emergency medical preparedness at Jizan Airport. This involves the establishment of fully equipped medical teams stationed at the airport, ready to respond to health emergencies as they arise. These teams are essential for addressing immediate medical needs, stabilizing

passengers in distress, and implementing appropriate protocols in case of suspected infectious disease scenarios.

The presence of trained medical staff not only ensures rapid response capability but also enhances passenger confidence in the health services available at the airport. This proactive medical infrastructure is vital for managing public health risks effectively, particularly in the context of increasing passenger volumes and evolving health challenges.

Compliance and Effectiveness

The results of these health measures reveal a remarkable achievement: a 100% compliance rate with the IHR requirements. This compliance underscores the airport's dedication to maintaining high health and safety standards, positioning it as a leader in public health initiatives within the aviation sector. The excellent adherence to international health regulations is a testament to the collaborative efforts between Gizan Health and airport authorities, highlighting the effectiveness of their partnership.

Collaborative Efforts

The collaboration between airport authorities and Gizan Health is a cornerstone of the successful implementation of health measures. This partnership facilitates the exchange of knowledge, resources, and best practices in managing health risks associated with travel. By working together, both entities have created a robust framework that not only meets but exceeds health compliance requirements.

Moreover, this collaboration enables rapid emergency response capabilities, ensuring that any health threats can be managed swiftly and efficiently. The integration of health services into airport operations lays the foundation for a comprehensive approach to traveler safety, reinforcing the airport’s commitment to public health.

Despite these successes, Jizan Airport faces several challenges as it prepares for the anticipated influx of passengers. Increasing passenger volumes can strain existing health protocols, necessitating ongoing evaluations and adaptations of health measures to ensure effectiveness and efficiency.

Additionally, the evolving nature of health threats, particularly with the potential emergence of new infectious diseases, requires that the airport remain vigilant and adaptable. Continuous monitoring of public health trends and timely updates to health protocols will be essential in maintaining safety standards.

Discussion

The proactive measures implemented at King Abdullah bin Abdulaziz Airport highlight its essential function in protecting public health and addressing the challenges posed by infectious disease outbreaks. The airport's compliance with International Health Regulations (IHR) standards and the smooth incorporation of a thorough public health plan into its operational strategies underscore its critical role in global health security.

The airport adheres to IHR standards, overseen by Saudi Arabia's General Authority of Civil Aviation (GACA) and the Ministry of Health, guaranteeing its operations align with rigorous international guidelines designed to mitigate the transmission of infectious diseases. The regulations set forth by the World Health Organization (WHO) offer a structured approach for airports to improve their ability to identify, evaluate, report, and address public health risks.

A study conducted by Morse et al. (2012) highlighted the significance of IHR compliance in strengthening global health security. The analysis highlighted that airports adhering to IHR standards possess enhanced capabilities to manage public health emergencies, consequently reducing the likelihood of disease spread across borders. The high compliance rate of King Abdullah Airport, as indicated by GACA, demonstrates a strong dedication to upholding rigorous health and safety standards.

Incorporating a public health plan into the airport's operational framework is essential for reducing health risks. This plan encompasses medical clinics designed to manage emergencies, designated quarantine zones for isolating potential infectious disease cases, and screening stations featuring thermal scanners and health declaration forms. These facilities guarantee that the airport is equipped to handle health emergencies with efficiency.

An analysis of the findings by Kluge et al. (2018) indicates that airports implementing comprehensive public health strategies not only address health risks more effectively but also improve the overall experience for passengers by fostering a sense of safety and well-being. The findings indicated that the availability of well-equipped medical facilities and proactive health measures at airports greatly enhances passenger confidence and satisfaction.

Although GACA reports indicate strong operational performance, additional investigation is necessary to evaluate passenger satisfaction regarding health services at King Abdullah Airport. Grasping passenger perceptions and experiences is essential for the ongoing enhancement of health services. It is essential to assess specific metrics, including the efficiency of medical responses, the comfort and cleanliness of quarantine areas, and the effectiveness of communication during health screenings.

A study conducted by Lopez-Valpuesta and Casas-Albala (2023) examined passenger satisfaction with airport health services amid the COVID-19 pandemic. The findings highlighted that clear communication, efficient health screenings, and the presence of medical facilities were significant factors affecting passenger satisfaction. The results indicate that increasing transparency in health surveillance and enhancing communication with travelers at King Abdullah Airport may further strengthen public confidence.

Improved clarity in health monitoring requires delivering precise and prompt information to travelers regarding health protocols and possible hazards. This clarity fosters confidence and guarantees that travelers are adequately informed about the measures implemented to safeguard their well-being. Gizan Health is pivotal in this area through the implementation of screening protocols, management of quarantine operations, and assurance of compliance with IHR guidelines.

A comparison with the study by Arora et al. (2021) on health surveillance at international airports indicated that airports characterized by elevated transparency and communication experienced improved passenger adherence to health measures and increased satisfaction rates. The investigation highlighted the significance of timely updates and explicit guidance for passengers in ensuring efficient health monitoring.

Gizan Health's engagement guarantees that King Abdullah Airport is adequately equipped to tackle public health challenges. This entails the strategic placement of qualified healthcare professionals, the establishment of effective screening procedures, and the supervision of health infrastructure upkeep. Cooperation between airport authorities and public health organizations is essential for efficient management and prompt actions during health crises.

Earlier investigations, including those conducted by Alvarado-Ramy et al. (2021) and Nieuwborg et al. (2024), have emphasized the advantages of cooperative initiatives in overseeing public health at airports. The findings indicate that airports that established robust collaborations with local health authorities demonstrated greater efficacy in preventing and managing infectious disease outbreaks. The collaborative model at King Abdullah Airport exemplifies these findings, highlighting the significance of coordinated efforts in managing public health.

An analysis of King Abdullah Airport's measures alongside those of other international airports reveals important insights into effective practices and potential areas for enhancement. For example, Incheon International Airport in South Korea and Changi Airport in Singapore are recognized for their sophisticated health security protocols and high levels of passenger satisfaction. The airports have adopted advanced

technology, including biometric screening and AI-driven health monitoring systems, to improve their public health capabilities.

Building on the achievements of these airports, King Abdullah Airport has the opportunity to improve its public health measures by implementing comparable technologies and practices. Future investigations should concentrate on uncovering novel solutions and strategies that can be applied to enhance health services and elevate passenger satisfaction.

Conclussion

The proactive measures established at King Abdullah bin Abdulaziz Airport highlight its essential function in addressing public health risks linked to international travel. The airport's dedication to following International Health Regulations (IHR) standards, along with the incorporation of a thorough public health plan into its operational procedures, has greatly reduced the risks associated with possible infectious disease outbreaks. This method not only protects the well-being of travelers and personnel but also supports wider public health goals.

To improve the effectiveness of health services at the airport, it is essential to conduct further assessments of specific passenger satisfaction metrics related to these services. Grasping passenger perceptions will be crucial in pinpointing areas for enhancement and guaranteeing that health surveillance and communication initiatives are clear and impactful. The partnership between Gizan Health and the airport plays a crucial role in enhancing the capacity to tackle public health challenges. This is achieved through effective management systems, prompt interventions, and collaborations with global health organizations.

Furthermore, the airport's continuous implementation of cutting-edge practices and technologies is crucial for upholding its elevated standards of health security. Through the ongoing refinement of its health protocols and the implementation of sophisticated monitoring systems, King Abdullah Airport is positioned to effectively address existing public health threats while simultaneously bolstering its readiness for future challenges. This dedication to superior health management not only upholds the airport's operational integrity but also enhances global health security by establishing a standard for other airports to emulate. In summary, the airport's comprehensive strategy exemplifies a robust framework for managing public health risks associated with international travel.

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