





ORIGINAL

Implementation of biosafety protocols in tourist services: Perception and resilience of key actors

Aplicación de protocolos de bioseguridad en los servicios turísticos: Percepción y resistencia de los agentes clave

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ABSTRACT

This research addressed the analysis of the perception and resilience of key actors in the implementation of biosecurity protocols to enhance tourist services in risky situations. A case study approach was used, and in-depth interviews were conducted to gather significant data, which were processed using the Atlas.ti software. The findings of the research underscore the essential importance of implementing biosecurity protocols for the success and growth of accommodation establishments, reaffirming their commitment to the safety and well-being of all involved. These protocols are also crucial for a safe and sustainable reactivation of the gastronomic sector. Despite regulatory limitations, providers of recreational and complementary tourism services demonstrate a clear willingness to adapt and implement biosecurity measures, ensuring a secure tourist experience. It is concluded that biosecurity protocols are fundamental for the economic reactivation of tourism establishments in the district, instilling confidence and safety in tourists, which encourages travel and visits to these places. Additionally, the significance of personnel training and the need for a well-structured contingency plan to effectively respond to risky situations in the tourism industry are highlighted.

Keywords: Protocols; Biosecurity; Accommodation; Restoration and Complementary Services.

RESUMEN

Esta investigación abordó el análisis de la percepción y la resiliencia de los actores clave en la aplicación de protocolos de bioseguridad para mejorar los servicios turísticos en situaciones de riesgo. Se utilizó un enfoque de estudio de casos y se realizaron entrevistas en profundidad para recopilar datos significativos, que se procesaron con el programa Atlas.ti. Los resultados de la investigación subrayan la importancia esencial de la aplicación de protocolos de bioseguridad para el éxito y el crecimiento de los establecimientos de alojamiento, reafirmando su compromiso con la seguridad y el bienestar de todos los implicados. Estos protocolos también son cruciales para una reactivación segura y sostenible del sector gastronómico. A pesar de las limitaciones normativas, los proveedores de servicios turísticos recreativos y complementarios demuestran una clara voluntad de adaptar y aplicar medidas de bioseguridad, garantizando una experiencia turística segura. Se concluye que los protocolos de bioseguridad son fundamentales para la reactivación económica de los establecimientos turísticos del distrito, infundiendo confianza y seguridad en los turistas, lo que incentiva los viajes y visitas a estos lugares. Además, se destaca la importancia de la formación del personal y la necesidad de un plan de contingencia bien estructurado para responder eficazmente a situaciones de riesgo en la industria turística.

Palabras clave: Protocolos; Bioseguridad; Alojamiento; Restauración y Servicios Complementarios.

INTRODUCTION

Prior to the pandemic, tourism was experiencing significant growth with 1.5 million international tourists arriving, marking the tenth consecutive year of sustainable expansion. This sector generated over 330 million jobs and observed an income of 1.7 trillion dollars in exports. It was considered the third most important sector in the tourism industry, with 50 % of its total benefiting developing countries⁽⁴¹⁾. However, since the early 21st century, the tourism industry has faced multiple health crises, such as the SARS, Ebola, and MERS pandemics⁽⁶⁾, each with varying impacts on tourism due to different measures taken by states to protect public health.⁽³⁹⁾ This halted the continuous development the industry was experiencing,⁽³⁶⁾ leading several businesses to fail to achieve their objectives due to associated risks.⁽¹⁾

In response to this situation, measures have been implemented to reduce hygienic-sanitary risks related to COVID-19 in restaurant, accommodation, and agency tourist services, ensuring safety during facility reopening.^(5,15,24,30) The term "biosecurity" has gained relevance, referring to a set of protocols and norms aimed at preventing health risks and becoming an innovative approach to address complex social and tourist needs.⁽⁴⁾ Protocols are crucial in building traveler confidence and safeguarding their well-being during their tourism experiences. They establish guidelines for the use of personal protective equipment, enhancing biosecurity and sanitary measures for both employees and customers, contributing to the reactivation of tourism activities.⁽³¹⁾ Therefore, knowledge about the processes and procedures involved becomes crucial, as establishments receive numerous people from different places.⁽¹⁸⁾ This capacity can form a favorable perception of businesses, encouraging customer flow and contributing to both the economic revitalization of tourist destinations and their positive social impact.⁽⁵⁾

Tourism, due to its unique characteristics, is vulnerable to various crises, whether political, social, economic, health-related, or natural disasters. However, the tourism sector has shown resilience in previous critical situations, fostering preventive, adaptive, and recovery measures, reducing vulnerability and disaster risks.⁽³⁸⁾ The research on the implementation of biosecurity protocols in tourist businesses in the district of Cerro Azul, Cañete, plays a crucial role in ensuring the safety of tourists visiting this attractive tourist area. Moreover, it allows the evaluation of measures taken by these businesses to prevent disease transmission risks. The focus centers on critical aspects such as staff training, cleaning and disinfection measures, crowd control, and social distancing, among others. This research would provide valuable information to identify strengths and weaknesses in protocol implementation, offering recommendations to improve existing practices.

Literature Review

Salas et al.⁽³¹⁾ highlighted in their analysis of the implementation of biosecurity protocols to prevent COVID-19 infections in the tourism industry in Tungurahua, Ecuador, the importance of providing training to tourism establishments and issuing certifications to motivate compliance. In another study related to tourism reactivation amid COVID-19 in the same province, Salas et al.⁽³⁰⁾ emphasized the need to implement these protocols according to the specific characteristics of each establishment. They also stressed the significance of recognizing compliant establishments, which would enhance visitor confidence and demand.

Andrade et al.⁽⁴⁾ investigated how the proper application of biosecurity protocols can contribute to the economic reactivation of the tourism sector in Cantón Quevedo. They concluded that it is essential for all involved in tourism to understand the need for changes, such as choosing appropriate destinations, adapting facilities, and implementing biosecurity protocols. They highlighted the importance of tourism companies adhering to these guidelines, as it boosts customer confidence and, in turn, increases visitor numbers. They consider this factor to be pivotal when travelers choose specific destinations.

In Chavarría's study,⁽⁹⁾ the author sought to identify the biosecurity standards applied in urban hotels in Santo Domingo de los Tsáchilas to prevent COVID-19. In the conclusions, the author described the disinfection and prevention procedures that these establishments should follow. Additionally, they highlighted the limited knowledge among the population regarding the necessary protocols to prevent virus spread, leading to inadequate implementation of these measures. This issue seems to be recurring in different countries worldwide, as the research suggests.

Portocarrero et al.⁽²⁹⁾ investigated how service providers in Lima, Peru, adapted to COVID-19. They observed that these providers made adjustments in facilities and activities to reactivate their businesses, and some establishments either closed or changed their focus. The researchers also noted that some providers had contingency plans in place for COVID-19. Santamaría et al.⁽³⁵⁾ analyzed how the tourism offering in the Barranco district adapted to COVID-19 in 2020, emphasizing the importance of implementing biosecurity protocols during the pandemic. On the other hand, Silverio et al.⁽³⁷⁾ researched the significance of biosecurity in the housekeeping department of Hotel Girasoles to combat COVID-19, highlighting its vital role in protecting employees in all areas of the department.

Pajuelo et al.⁽²⁷⁾ investigated the relationship between the application of COVID-19 biosecurity protocols at Café Cena Fonseca, Trujillo, and customer satisfaction. They concluded that the establishment complies

with nearly all the biosecurity protocols, which significantly impacts customer satisfaction, leading to highly contented customers.

Conversely, Ccohua *et al.*⁽¹¹⁾ examined how COVID-19 biosecurity protocols at the Saqsayhuaman National Archaeological Park affect tourist satisfaction in the Cusco reception center. Their findings indicated that the implemented protocols were not the most suitable, and a lack of personnel limited their correct application. As a consequence, this situation negatively affected tourists' sense of security and confidence, resulting in dissatisfaction among visitors.

METHODS

Objective

The study aims to analyze the importance of implementing biosecurity protocols to enhance tourist services. To achieve this, six specific objectives were established: (i) To understand the relevance of implementing biosecurity protocols in accommodation services, (ii) To explain the importance of implementing biosecurity protocols in restaurant services, (iii) To assess the relevance of biosecurity protocols in recreational or leisure services, (iv) To identify the importance of implementing biosecurity protocols in complementary services, (v) To comprehend the significance of personal protective elements in preventing and controlling risk situations for personnel involved in providing tourist services, and (vi) To recognize the importance of having a robust contingency plan for managing emergencies and safeguarding both staff and tourists in the tourism sector.

Study Approach and Design

The research was conducted using a qualitative approach, allowing for an in-depth exploration.⁽³⁾ A case study design was employed, which was suitable for obtaining a detailed understanding of specific situations.⁽¹²⁾ Interview and participant observation techniques were utilized, considered valuable for obtaining context-rich and detailed information.⁽²⁸⁾

Study Sample

The study sample consisted of eight participants: Economic Development, Tourism, and Employment Promotion Manager (I1), a Bachelor of Tourism and Hotel Management (I2), the Administrator of "Alcalá" Hotel (I3), Deputy Manager of Fiscalization and Municipal Police (I5), Administrator of "Lobito" Restaurant (I5), Administrator of the tour operator "Shasqui surf" (I6), Administrator of "Lobo de Mar" Restaurant (I7), and Administrator of "Cerro Azul" Apart-Hotel, who also serves as the president of the "AHORA" Association (I8). Each participant had specific roles and well-defined selection criteria, such as their extensive knowledge in the tourism field, reputation, and representativeness in the sector. The sampling procedure was based on a socio-structural approach, considering a prior exploratory study and selecting cases of representative subjects.⁽²⁰⁾ These informants provided valuable and enriching insights into the implementation of biosecurity protocols in tourist businesses.

Data Collection Technique and Instrument

To conduct the interviews, a structured guide encompassing relevant questions and topics was utilized. The validity of the instrument was ensured through expert judgment, evaluating its pertinence, relevance, and clarity. The construction of categories and subcategories used in data analysis was supported by relevant theoretical frameworks in the fields of tourism and biosecurity. Previous studies and conceptual frameworks were consulted to provide a strong foundation for classification, coding, subcategorization, and integration of collected data,⁽⁸⁾ establishing a solid framework for interpreting findings and establishing meaningful connections between the studied concepts (Loayza, 2020).

Data Analysis and Processing

The analysis was conducted using two main categories. Category I focused on the Implementation of biosecurity protocols and was further broken down into subcategories, including: (i) General biosecurity measures, (ii) Personal protective elements, (iii) Prevention and control, and (iv) Contingency plans. Category II addressed tourist services and was subdivided into: (i) Accommodation services, (ii) Restaurant services, (iii) Recreational services, and (iv) Complementary services. These categories allowed for a deeper understanding of key aspects related to the study topic.

However, the research remained open to the possibility of emergent categories during its development. These emergent categories were identified from the collected data and provided new perspectives and important findings that enriched the understanding of the studied phenomenon, even encompassing aspects not initially contemplated in the theoretical framework.⁽⁴⁰⁾ For the qualitative data analysis, Grounded Theory was applied, offering a rigorous approach to generating emerging categories and concepts. This highly systematic and structured method allowed for precise interpretation of the data and a more comprehensive understanding

of the obtained results.⁽¹⁶⁾

The software ATLAS.ti was used, a powerful tool for analyzing qualitative data, which enabled efficient organization and coding of the data (Saldaña, 2015; San Martín, 2014). During the analysis process, co-occurrence tables of codes were utilized to identify relationships and patterns among the different coded concepts and categories (Miles and Huberman, 1994). Semantic networks were also employed, providing quick access to the cognitive structure of knowledge and essential information for understanding and interpreting specific text, offering insights into how the researcher assimilated the information (Cipollone, 2022). Code and quote networks were used to explore relationships, offering an effective way to visualize interconnections and links among different elements of the study (Sánchez et al., 2021). Additionally, comparative tables and data triangulation were applied to strengthen the validity and reliability of the findings. These analytical techniques and tools together contributed to a profound and rigorous analysis of the qualitative data collected in the study.

RESULTS

We proceeded to construct code networks, a methodology that plays a fundamental role in identifying significant patterns and provides a holistic view of the topics addressed in the study (Miles and Huberman, 1994). These networks proved to be a valuable tool as they facilitated the identification of patterns, emerging themes, and new perspectives during data analysis.⁽³²⁾ By utilizing this analytical technique, we achieved a deeper and more comprehensive understanding of the results, which enriched the quality and relevance of the findings obtained.

Biosecurity protocols in accommodation service companies

It was identified that the district of Cerro Azul in accommodation services has a unique Apart Hotel in the entire province of Cañete, as well as hotels and hostels. Table 1 presents the list of accommodation service establishments in the district of Cerro Azul, presented by MINCETUR (Ministry of Foreign Trade and Tourism) and registered in the directory of service providers, classified and/or categorized as lodging establishments.

Commercial Name	Classification / Categorization	Tax Identification Number (RUC)	Legal Representative
Cerro Azul	Apart Hotel / ★★ ★	20491280451	Irma Alicia Sánchez Carlessi
White Sand	Hotel / ★★ ★	20508900318	Paulo Cesar Aguirre Cáceres
The Sun of Cerro Azul	Hotel / ★★	20600191188	Juana Esther Campos Arias
Juanito	Hotel / ★★	10154440670	María I. Francia Camacho
Alcalá	Hostal / ★★ ★	20600191188	Campos Arias Juana Esther








During data collection, inquiries were made about the general biosecurity measures implemented in these establishments. Adapted questions were formulated according to the role of the interviewee. Below are the fundamental data collected, which proved to be of great utility for the analysis of this subcategory:

During the pandemic, "the hotel industry faced the need to implement usage and disinfection protocols to ensure the safety of their guests due to overnight stays and frequent use of facilities" (I4). This situation had "a positive effect on many hotel establishments as it sparked an interest in improving their facilities and seeking formalization" (I5). They "recognized the importance of complying with the standards and requirements established by entities such as DIRCETUR and MINCETUR, which would not only enhance the quality of their services but also enable them to attract a more demanding market seeking high-quality standards" (I2).

In response to the health emergency, "At our establishment, we implemented various measures to safeguard the health of our guests. For example, we adopted a room-by-room documentation system to record the personal data of each guest, including name, address, phone number, and email" (I6). "This practice allowed us to have a complete record that would facilitate notifying other guests in case of detecting a positive COVID-19 case during their stay, thus reinforcing the safety and peace of mind of our clients" (I8). "Additionally, we adopted sending the reservation in PDF format to minimize physical contact, requesting guests to print it, scan it, and send it back. Thus, upon their arrival, only the key and access control were handed over, and payment was preferably processed with a card to avoid close contact with the client" (I7).

On the other hand, monitoring processes also played a crucial role in the tourism reactivation. "The authorities demanded that establishments present the operating license, as well as certificates of civil defense and fumigation" (I8). "The Public Ministry and the municipality pressured us to fumigate our premises. These

Table 2. Foodservice establishments in the district

Commercial Name	Tax Identification Number (RUC)	Legal Representative
Puente Tabla - Restobar	 10154417899	Sánchez Chiock Diana Azucena
Restaurante Puerto Azul	 20601729769	Enzo Carlos Vicente Espinoza
Juanito	 10153651448	Yesenia C. Francia Camacho
Lobito	 10403578008	Mónica D. Chumpitaz Espinoza
La Chiteria	 20602985777	Willian Alegría Quispe
Lobo del Mar	 10154412455	María Chumpitaz Espinoza
Punto Marino	 10462052753	Natali Ariana Carrillo Paucar

The following analysis questions were posed: "Does your restaurant apply and comply with general biosecurity measures? Has it undergone regular inspections?" The obtained responses were diverse: "(...) we applied a strict and proactive approach to ensure the safety of visitors and residents (I5)," "initially, certain types of operations were prohibited, including in-house delivery service, however, later on, the requirement to obtain a permit through the submission of biosecurity protocols and contingency plans to the municipality was established" (I6); "surprise visits were conducted in collaboration with the health center to verify compliance with requirements, such as the provision of differentiated trash containers, alcohol dispensers, handwashing areas, and footwear disinfection areas" (I8). "Some restaurants managed to obtain the Safe Travels seal, demonstrating their commitment to the established measures" (I2).

Overall, many services significantly improved when a firm demand was applied to all establishments to reactivate their businesses, and it is expected that they will continue to maintain these measures in the long term. Oversight has been key in ensuring compliance with safety protocols, encompassing not only restaurants but also all commercial activities in the region. This reflects a collective and collaborative approach by service providers to ensure an effective and conscious reactivation amidst a challenging context: "The rigorous oversight of safety and prevention protocols in food handling was also evident in restaurants located on the Malecón, where informative signs regarding disinfection were observed (I3)." "The adoption of safety measures extended beyond restaurants and encompassed all commercial activities, ensuring a responsible and safe reactivation in the region's tourism industry" (I4). "The staff had to have an identification card that allowed them to transport food, and a permit was required for this purpose. Special attention was paid to food handling and distribution, as well as packaging and packaging for delivery" (I4) and "with the subsequent increase in allowed capacity to 50%, verification of measures in establishments was expanded. Compliance with table spacing and proper handwashing upon entry was inspected under oversight. These actions were not only applied to restaurants but to all commercial activities (...)" (I7).

Others decided to regularize their operations according to the corresponding norms: "I represent a formal company that is part of AHORA Perú, an association of hotels and restaurants with a national scope. During the pandemic, we incorporated delivery service as a measure to continue operating" (I8). However, "we understood that providing tourist services in that context implied a delicate responsibility since the health of our customers was at stake. In order to reactivate, the State requested that we comply with numerous protocols, which we strictly adhered to and adapted to" (I5). "From my perspective, I did not see these measures as an imposition but as a necessary action that should come from ourselves to protect the health and integrity of both our customers and our staff" (I6).

The figure 2 displays the established codes for the subcategory based on the measures adopted by food service establishments, evident issues, relationship with public entities, and benefits obtained. The data has been obtained from in-depth interviews conducted with key stakeholders.

According to the guidelines from MINSA (2020), food service establishments comply with guidelines one, two, five, and seven, which include cleaning and disinfection of workplaces, mandatory handwashing and disinfection, collective preventive measures, and health surveillance of workers in the context of COVID-19. These measures are appropriate to ensure safety in such establishments.

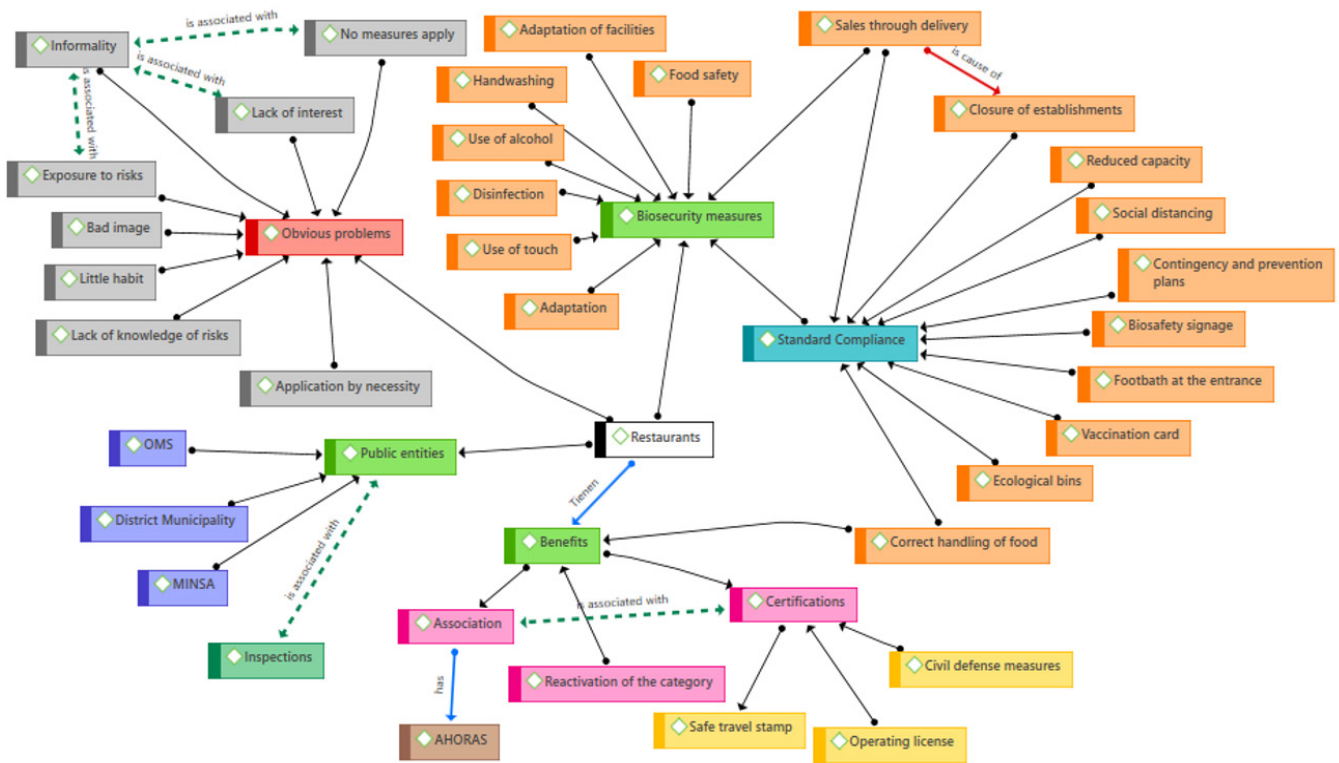


Figure 2. Subcategory 2: Food services

The data obtained in this research provides valuable guidance for the development of sustainable tourism practices. These findings underscore the importance of maintaining a determined and committed approach in implementing biosecurity measures, as they are not only crucial for the reactivation of tourism but also for fostering the trust and satisfaction of visitors. The ongoing search for safe and appealing practices for tourists is fundamental to sustain the dynamism and growth of the tourism sector in the region, thus preserving the cultural and natural wealth this place offers to its visitors (I2, I3, I4, I5, I6, I7, I8).

General measures in leisure or recreation services

Regarding the questions: Do tourist entertainment and recreation establishments in the district comply with the necessary general biosecurity measures for their operation? If so, how is this compliance verified? Some of the obtained responses are presented below. These refer to:

(i) Closure and strict control: "Initially, all entertainment establishments were closed due to the impossibility of people attending events" (I1). "Strict control was implemented with the support of the police station to oversee parties throughout the district, including venues, family gatherings, and social events, which were temporarily suspended" (I4). "As partial openings have been applied, we have worked in conjunction with social distancing and compliance with contingency plans, following the established protocols according to current regulations" (I2).

(ii) Regularization of restobars and nightclubs: "Initially, restobars and nightclubs operated without the corresponding permits. However, once they obtained the permits, about two places were identified, which functioned as restaurants with karaoke option and beverages accompanied by some snacks" (I7). "These establishments were required to submit a contingency plan and adhere to a specific protocol that included disinfection measures. These requirements were implemented to safeguard safety and ensure compliance with biosecurity measures" (I2).

On the other hand, they express (iii) the change of category from nightclubs to restaurants: "They were forced to close their doors, and some of them were transformed into restaurants nowadays. Despite this change in category, they have maintained strict compliance with the established protocols for the safety of their customers" (I5). Among these measures, it includes the installation of footbaths, providing alcohol for disinfection, taking temperature, and requesting vaccination cards, which are considered a fundamental requirement (I1). In addition, the tables have been arranged to maintain adequate distancing between each other, thus ensuring a safe environment and compliance with necessary biosecurity standards" (I3).

(iv) Reinventing during the pandemic: Some restobars and nightclubs have chosen to reinvent themselves to continue operating during the pandemic. They have sought to offer new options and services to adapt to

the circumstances, which has been a positive approach to keep their businesses running. "The municipality has played an important role in supervision and oversight, using district security cameras to verify compliance with biosecurity measures and ensure a safe environment for all citizens" (14, 15, 16, 17, 18).

The process of adaptation and reinvention was a constant in this industry, where some establishments sought new options and services to continue attracting customers and keep their businesses afloat. Oversight and supervision by authorities were crucial in ensuring compliance with biosecurity measures, which contributed to creating a safe environment for all citizens and visitors. These findings highlight the importance of adaptability and the commitment of businesses to maintaining the safety of their customers and contributing to the responsible reactivation of the tourism industry in the region (11, 12, 13, 14, 15, 16, 17, 18).

The figure 3 displays the codes associated with the actions taken by establishments dedicated to leisure or recreational services based on three axes: biosecurity measures, compliance with regulations, identification of issues, and interaction with other entities. Information provided by the interviewees.



Figure 3. Subcategory 3: Leisure or Recreation Services

General Measures in Complementary Services

In the field of tourism, complementary services play a fundamental role in meeting the needs that have not been previously addressed during the tourist's journey. These services encompass everything that has not been established beforehand but is crucial to providing a complete and enjoyable experience to the visitor. In this context, it is essential that places projected as tourist destinations have generic services from the moment of their conception to be able to meet the demands of tourists and, at the same time, benefit the local population.⁽¹⁹⁾ These services should not only be designed to satisfy visitors but also to positively contribute to the well-being of the surrounding community through their proper implementation. According to Bullón⁽⁷⁾, some examples of these services may include tourist transportation, parking lots, childcare services, tour guides, travel agencies, currency exchange, first aid, among others.

In this article, we will explore the importance and impact of complementary services in the tourism sector, as well as biosecurity protocols as safety measures. Figure 5 compiles relevant information about complementary services in the Cerro Azul district. These establishments play a fundamental role in meeting the additional needs of tourists during their stay in the area. It includes travel agencies, hospitals, shops, ATMs, gas stations, tire shops, pharmacies, among others. Each of these services is essential to provide a complete and satisfactory experience for visitors and also contributes to the benefit of the local community. Through this analysis, the importance and diversity of complementary services and their impact on tourism development and the overall well-being of the community are highlighted.

During the data collection, two essential questions were posed to the interviewees: the first one about the available tourist activities in the district and whether biosecurity measures are implemented for their realization. Some responses confirmed the existence of biosecurity protocols to ensure the safety of tourists and residents during these activities. The second question focused on the presence of other biosecurity measures in establishments, and the responses indicated that several places have adopted these measures to protect the health and well-being of visitors.

The interviews reveal a proactive and committed approach by tourism service providers to ensure visitor safety during the Covid-19 pandemic. In the case of surfing and ATVs, "contingency plans have been established, including the use of masks, disinfection, and compliance with distances and timings" (I2); "high safety and hygiene standards are maintained, and during holidays, an ATV service is hired to work with them and take care of guests, with prior actions such as fumigation, disinfection, and cleaning of the ATVs to ensure safety. Each ATV is equipped with an alcohol spray, and in case customers do not have masks, they are provided with them, ensuring compliance with all necessary care measures" (I3). "Regarding trekking, measures such as disinfection points, handwashing stations, signage, and recycling bins to separate waste have been established. Likewise, at the entrance of the pier, a disinfection point was required, and informative signs about the use of masks and what to do in case of symptoms were placed" (I2).

On the other hand, training academies also follow these protocols and have resumed their activities due to the outdoor nature of the beach. "(...) Regarding surfing, I want to emphasize that training academies require authorization and corresponding protocols from management to offer this service. Since it is an activity in open spaces, such as the beach, it has not been so problematic to resume this activity. Water and the open environment do not pose major difficulties for this type of business or industry (...)" (I4); "Regarding group classes, we have tried to avoid them as much as possible. However, sometimes there was no other option, and we have maintained distance between participants and disinfection before each training. During the class, students wear masks, which they only take off when entering the water, while instructors keep them on at all times" (I6).

In boat tours (chalana rides), capacities have been limited, and safety measures are applied to protect passengers: "In Cerro Azul, we have beautiful beaches, and a group of boatmen offers boat rides on their chalanas. Previously, a chalana used to carry up to 15 people, but with the current protocols, it is limited to a maximum of 5 people to maintain reduced capacity" (I5). In addition, preventive measures have been implemented in the resort, the Huarco citadel, and dairy product industries: "Yes, in our district, we also have the tourist attraction El Capac Ñam and a municipal museum, as well as various industries dedicated to cheese production from milk transformation. In these places, preventive measures have been implemented to ensure the safety of visitors, such as handwashing, hygiene, and the mandatory use of masks. A guide has been provided to ensure compliance with these measures at all times" (I4).

Restobars have demonstrated adaptability by offering drinks to go and implementing measures to ensure safety in enclosed spaces. On the other hand, "producers of pisco, wine, and dairy products, including the company DELA, are partners and are offering tourist tours within their establishments as a new source of income. A route of community rural tourism has already been created, including them, and all necessary measures will be applied to ensure visitor safety" (I8). These joint efforts demonstrate a commitment to providing a safe and attractive tourist experience to their visitors.

Figure 4 represents the relationship of establishments providing complementary services in the district of Cerro Azul and the implementation of biosecurity protocols. Data obtained from interviews with key individuals. The testimonies of the interviewees demonstrate the importance and commitment of complementary tourist services to adapt and ensure the safety of visitors during the pandemic. The implementation of biosecurity protocols in activities such as surfing, ATVs, trekking, and boat tours reflects a proactive and responsible attitude in caring for the health and well-being of tourists and residents. The ability to reinvent and offer alternatives in producer establishments showcases the resilience and creativity of the local community. These joint efforts emphasize the importance of collaboration and shared commitment in keeping the tourism industry active and secure, and invite us to reflect on the significance of protecting and valuing our natural and cultural heritage, even in times of adversity.

In a constantly changing world, flexibility and attention to the needs of visitors become fundamental pillars for building sustainable and secure tourism, which contributes to the development of the community and promotes a rewarding and memorable experience for all travelers.

Personal protective elements, prevention, and control in tourism service companies

During the interviews, it was observed that tourism establishments implemented various personal protective measures to counter the spread of COVID-19. The most commonly used elements were masks, gloves, and hairnets, which were adopted by the majority of the interviewees (I1, I2, I3, I4, I5, I6, I7, I8). Additionally, some establishments also used coveralls and face shields to provide additional protection (I1, I3, I4, I5, I8).

These prevention elements were selected according to the needs and characteristics of each tourism establishment, adapting to their specific operations and activities. Alcohol was also mentioned as an essential element for disinfecting both hands and surfaces (I1, I2, I3, I4, I5, I6, I7, I8).

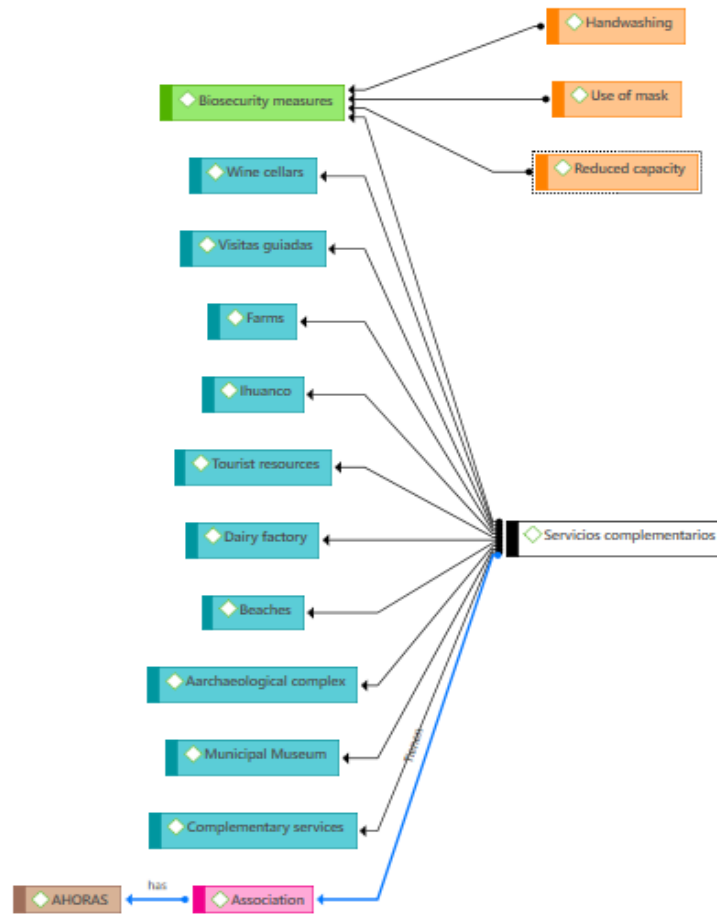


Figure 4. Subcategory 4: Complementary Services

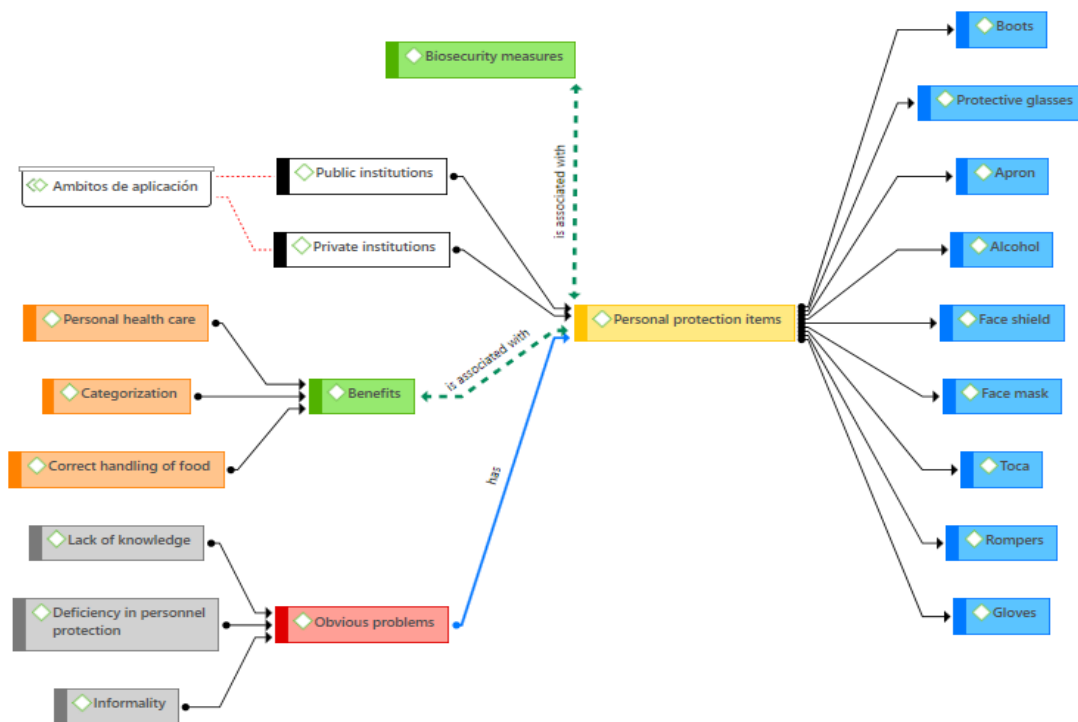


Figure 5. Subcategory 2: Personal Protective Equipment

Figure 5 shows the personal protective equipment related to the codes referring to evident problems and benefits. Data obtained through interviews.

It is important to highlight that these personal protective measures adopted by establishments comply with the "Personal Protective Measures" established by the Ministry of Health (MINSA) in guideline six, which details the minimum actions for each risk level. In this way, tourism establishments have demonstrated a commitment to safety and contagion prevention, providing a safer environment for both their employees and customers. The implementation of these uniforms, equipment, and prevention elements has been crucial in mitigating the risk of contagion and ensuring a safer experience in the context of the pandemic.

It can be noted that tourism services have complied with the "Personal Protective Measures" established by the Ministry of Health (MINSA) in guideline four. These emphasize the importance of providing information to workers about COVID-19 and basic hygiene practices, as well as the biosecurity measures that must be implemented when providing services in their establishments. The interviews reflect the impact of these informational training on the staff: "The National University of Cañete (UNDC) and CENFOTUR have been of great help" (I1), showing collaboration with educational institutions to strengthen knowledge. The efforts of the municipality were also recognized, as another interviewee mentioned: "The municipality held several free and digital training sessions for the general public, addressing not only COVID but also care for various illnesses" (I5, I7, I8).

These training sessions have been accessible through various channels, as highlighted by another interviewee: "We have received information through digital platforms such as television, radio, and social media, as the topic was extensively discussed (I8). Additionally, we receive regular training every semester through a private company, which covers topics such as the virus, first aid, and the use of fire extinguishers" (I5). Overall, the proactive approach towards training and continuous education demonstrated by tourism service providers has contributed to their compliance with the established biosecurity measures. The collaboration between public entities and private organizations has played a vital role in ensuring that staff is well-prepared to face not only the challenges of COVID-19 but also other potential health risks. These measures ultimately contribute to maintaining a safer and well-informed environment for both workers and customers.

Therefore, it is established that tourism services complied with the "Awareness of Contagion Prevention in the Workplace" indicated by the Ministry of Health (MINSA) in guideline four, which details the need to provide information to workers about COVID-19, as well as basic hygiene practices and biosecurity measures that must be implemented when providing services in their facilities.

Furthermore, the municipality was mostly responsible for supervising and enforcing compliance with general biosecurity measures. This was done through a representative from the monitoring area, along with a representative from the Health Center and the Peruvian National Police. Additionally, it is noted that the guards and local security personnel conducted continuous supervision, not only of the mentioned establishments but also of the general public.

Therefore, compliance with what was established by the Presidency of the Council of Ministers (PCM) in Supreme Decree No. 080-2020-PCM, in Article 4, specifically the section on supervision and monitoring, was met, which establishes that: "Sanitary authorities, local governments, and the National Labor Inspection Superintendence - SUNAFIL (...) exercise the inspection and supervision of compliance with the provisions" (p.5).

The figure 6 presents the relationship of codes with the subcategory of prevention and control of personnel: training, compliance with regulations, protective equipment, related entities, and identified issues. Information obtained from the processing of interviews with key individuals.

Contingency plan in tourism service companies

Owners and administrators of tourist services in the district complied with the essential requirement of submitting a contingency plan for the reactivation of their activities, following the phases established and the guidelines issued by the PCM (2020) and MINSA (2020). This plan, known as the "Plan for Surveillance, Prevention, and Control of COVID-19 at Work," included measures such as disinfection procedures, protocols for suspected cases, the use of personal protective equipment for staff, among other aspects to ensure the safety and health care of workers in the businesses. Compliance with these guidelines and the approval of the plan by MINSA were fundamental requirements to obtain the permission to reactivate tourist activities.

In addition to the plans related to COVID-19 prevention, contingency plans have also been presented for other aspects, such as natural disasters and the prevention of other diseases, even though these were not mandatory for reopening. It is important to consider multiple risks to ensure comprehensive safety management in the tourism sector, even though the main focus has been on addressing the COVID-19 pandemic.

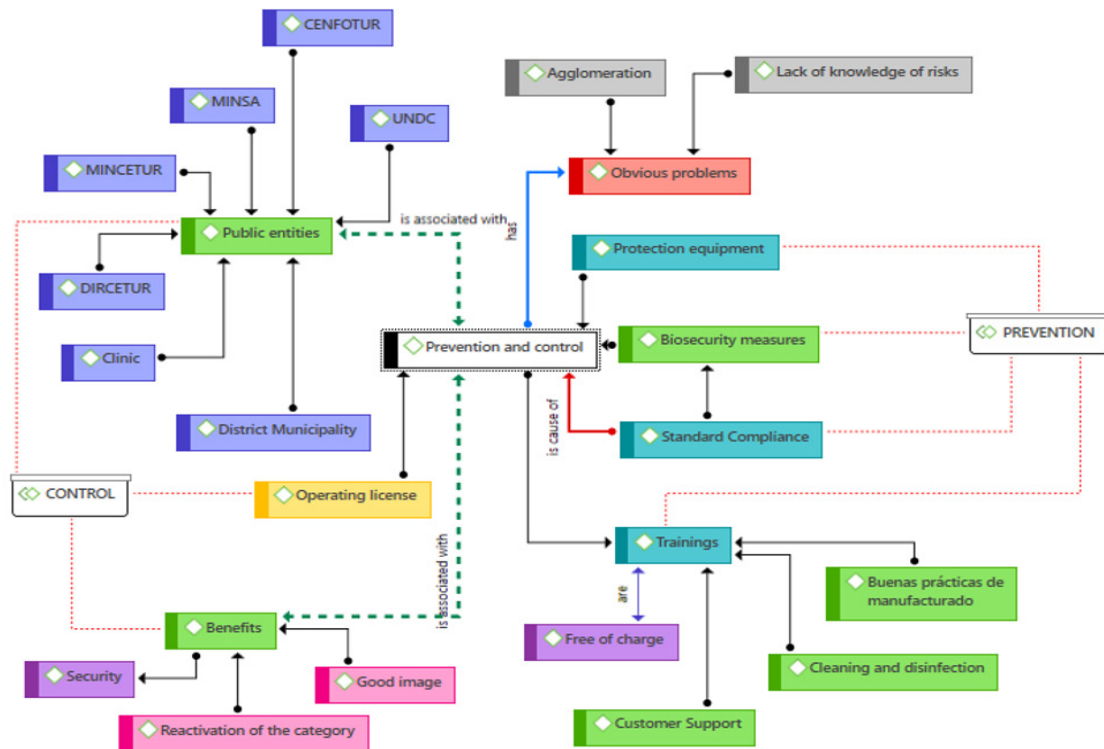


Figure 6. Subcategory 3: Staff Prevention and Control

The reactivation of tourist services during this context has been a challenge for many establishments. They carried out the reopening process with a rigorous focus on the implementation of contingency plans to protect the health of visitors and workers. This article presents the data obtained through interviews with owners and administrators of tourist services, highlighting the most relevant aspects of the implemented contingency plans and the role of the municipality in the reopening process.

"A fundamental requirement was implemented: each establishment had to have its own contingency plan, adapted to its specific sector, and submit it to the municipality to obtain authorization for reopening" (11). "These plans focused on preventing contagion and establishing protocols for action in case of suspected or confirmed cases of COVID-19 in their facilities" (12). "The municipality provided us with support and formats to guide businesses in developing these plans, ensuring they included appropriate disinfection processes and measures to protect the health of workers and customers" (13). "Furthermore, it was emphasized that the requirement to have a contingency plan applied to all establishments and focused on detailing how operations would be carried out in compliance with established norms" (14). "To develop these plans, owners and administrators of establishments had to undergo training and ensure a clear explanation of how security measures would be implemented" (15).

Likewise, it was mentioned that "these contingency plans were not limited solely to COVID-19 but also included measures to address other risks, such as natural disasters or emergency situations" (16). In this way, "the reopening of tourist services was accompanied by rigorous and exhaustive planning, ensuring compliance with regulations and the protection of the health of workers and visitors" (17, 18). The data collected demonstrates the commitment of establishments to protect their customers and workers. Collaboration between businesses and the municipality was crucial to ensure compliance with regulations and constant monitoring of the implementation of the measures. These findings provide valuable insights for managing tourist services during times of pandemic and highlight the importance of planning and adaptation to maintain safety in the tourism sector during other risk situations.

The implementation of general biosecurity measures in tourist services has had significant consequences for service providers in the district of Cerro Azul, as revealed by the responses of the interviewees. Some establishments have managed to obtain the coveted Safe Travels international certification, which has reinforced confidence in the safety of their facilities not only locally but also throughout the district (11). Collaboration with the municipality has been key, providing advice and guidance in the classification and categorization of establishments, leading to an overall improvement in service quality, customer safety, and ultimately an increase in profits, contributing to the economic reactivation of the area (12, 17, 18).

Additionally, biosecurity measures have encouraged the formation of associations among different providers of tourist services, such as restaurants, hotels, and quad bike rental companies, among others. This network

of contacts has facilitated cooperation and the exchange of best practices in safety matters, strengthening the overall health protection of individuals (I1, I2, I3, I7). The Association of Hotels, Restaurants, and Related Services of Peru (AHORA) has been an important pillar in supporting establishments, contributing to the reactivation of activities and ensuring the health safeguarding of both customers and staff (I1, I2, I4, I5). They also mentioned receiving significant assistance from state entities such as the Municipality, CENFOTUR, PROMPERÚ, and even MINCETUR, through constant advice and training (I1, I2, I3, I4). Overall, the implementation of these measures has allowed tourist service providers to care not only for themselves but also for their customers, avoiding unnecessary risks and promoting a safe and reliable experience for all (I6, I7, I8).

On the other hand, the informants noticed a gradual increase in customers after implementing biosecurity measures in tourist establishments: "Now, the district of Cerro Azul is rated as one of the best in the province of Cañete, with Lunahuaná being first and us being second" (I1), "as people saw that places were meeting protocol standards, they came with more confidence, which created a multiplying effect" (I1, I3, I5). Transparency in the application of these measures generated trust among tourists, resulting in a higher influx of visitors (I1, I2, I3, I4, I5, I6, I7, I8). This aligns with the findings of Ccohua et al.⁽¹¹⁾, who highlight that staff's unfamiliarity with health protocols can affect customer confidence and cause dissatisfaction.

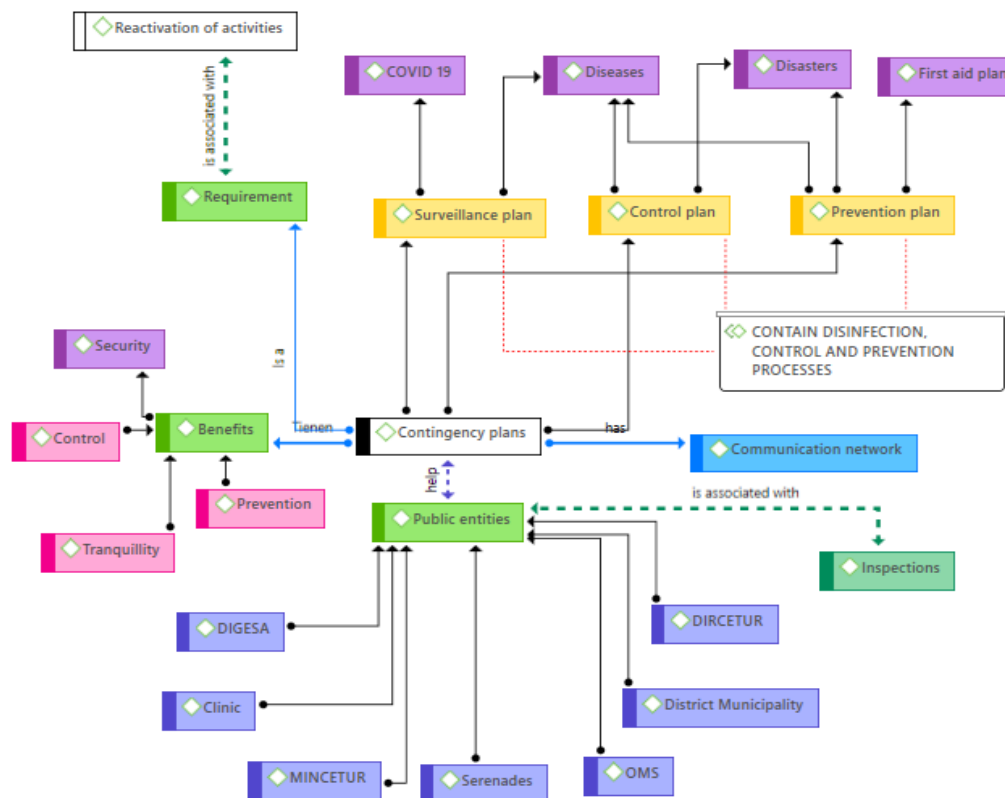


Figure 7. Subcategory 4: COVID-19 Contingency Plan

Figure 7 represents the codes associated with contingency plans, such as their benefits, involved entities, prevention plan, and surveillance and control plan. Data provided by the interviewees.

The implementation of biosecurity measures should not have been initiated solely due to the virus, but unfortunately, that was the reality. However, we have learned from this difficult situation. Now, most of us understand that it is essential, especially for service providers who are constantly exposed to various risks, including other diseases. The responsibility for prevention lies with administrators, owners, and competent authorities. This perspective aligns with what was established by the UNWTO⁽⁴¹⁾, stating that "biosecurity protocols remain key and indispensable to ensure the highest possible levels of safety for users and employees in the tourism industry, generating trust and fostering the reactivation of the sector" (p. 6).

DISCUSSION

The results of the study, whose purpose was "To describe the importance of biosecurity protocols in tourist service companies in the district of Cerro Azul," indicate that the implementation of these protocols was essential for the start of the district's economic recovery. The adoption of these measures generated confidence in customers, which, in turn, led to an increase in tourist flow. These findings align with the research conducted by Andrade et al.⁽⁴⁾, who also emphasized that the application of biosecurity protocols inspires confidence and

has a positive impact on attracting customers, as they play a crucial role in choosing safe travel destinations. Additionally, these protocols have been vital in preserving the lives and health of individuals, both employees and visitors, and have contributed to reducing the high mortality rates observed at the beginning of the pandemic.

Despite this, there is still some resistance from some individuals to comply with these measures, which affects the effectiveness of the precautions. However, many establishments have become aware of the importance of adapting to the new reality to improve their services, and this is supported by the findings of Portocarrero et al.⁽²⁹⁾ They also highlighted that service providers in the tourism sector were forced to make changes to their facilities and adhere to established guidelines in order to reactivate their activities. Furthermore, it has been verified that this place holds the prestigious international Safe Travels seal, which has also been obtained by some of its tourist service establishments. This certification confirms the truthful adherence to biosecurity protocols, strengthening the confidence and security of tourists when choosing this destination for travel.

The first specific objective of the research was "To understand the importance of implementing general measures in accommodation services in the district." The results showed that many accommodation establishments complied with biosecurity measures, such as the use of masks, hand sanitizers, protective suits, facility disinfection, social distancing, reduced capacity, footbath at the entrance, area ventilation, vaccination card requirement, temperature checks, and placement of biosecurity signs. This aligns closely with Chavarría's findings,⁽⁹⁾ who mentions similar measures that these establishments should implement to protect the health of their staff and guests.

The inclusion of these measures aimed to safeguard the health of both staff and guests, which is consistent with the information collected by Silverio et al.⁽³⁷⁾, who emphasizes that hotel staff adhered to biosecurity protocols, and the main objective is to ensure the health and safety of workers within the hotel premises. Additionally, many establishments sought to be classified and/or categorized to offer more to their guests. To achieve this, they adapted and conditioned their facilities according to the "Regulation for Lodging Establishments," which brought them benefits such as improved services, increased clientele, and higher profits. However, it was also observed that some establishments did not implement these biosecurity measures.

The second specific objective of the research was "To explain the importance of implementing general biosecurity measures in the food service establishments in the district." The results revealed that these establishments properly implemented these measures, especially when they began their operations through delivery services. This finding aligns with the findings of Salas et al.⁽³¹⁾, who highlighted that food and beverage establishments significantly implemented biosecurity protocols, especially during the initial stage through delivery services.

Regarding the service provided to diners at their premises, these establishments applied the protocols with greater rigor, as their staff, such as waiters, had direct contact with customers. The health care of both staff and customers was a priority for them. This resulted in an increase in customer influx, as clients felt secure and confident seeing these measures being followed. This information is supported by the findings of Pajuelo et al.⁽²⁷⁾, who mentioned that the correct application of biosecurity protocols for COVID-19 has a positive impact on increasing customer satisfaction in a restaurant.

The third specific objective of the research was "To understand the importance of implementing general measures in recreational or leisure services in the district." The results revealed that the district does not have many establishments offering these services, and those that existed had to close or change their business due to the pandemic. This was because they were not authorized to provide services in any of the phases of the economic reactivation. This information is in line with what Salas et al.⁽³⁰⁾ state, emphasizing that each country establishes its own biosecurity protocols according to its reality, which implies that they are subject to constant modifications to ensure necessary actions are taken for customer care. Therefore, all stakeholders in the tourism sector must stay informed and comply with the established guidelines.

According to the fourth specific objective, which aimed to "Identify the importance of implementing general measures in complementary services in the district," the results revealed that various businesses not exclusively dedicated to providing tourism services, such as wineries that only sold liquors, agro-industrial companies like DELA, and farms present in the district, had to adapt during the pandemic to generate income. These companies started offering visitation and guided activities within their facilities, including the necessary biosecurity measures to provide this service. This attracted the interest of many tourists to visit these establishments, demonstrating how these measures contributed to customer confidence in experiencing new activities. This finding aligns with what Ccohua et al.⁽¹¹⁾ mentioned, indicating that the incorrect implementation and insufficient knowledge of sanitary protocols by staff can limit the improvement of the provided service, directly affecting customer confidence and safety, leading to dissatisfaction.

Furthermore, the district offers various tourist activities such as surfing, trekking, quad biking, among others, and features tourist attractions like the municipal museum, the pier, and archaeological sites, which have also implemented general biosecurity measures. These measures have been fundamental for the reactivation of

their activities, providing tourists with more recreation options, and most importantly, instilling confidence and safety by including measures that safeguard their health. This approach is in line with what Santamaría et al.⁽³⁵⁾ mentioned, highlighting that resources are crucial to promoting the implementation of health measures and economic reactivation. Additionally, they mention that tourist activities in the district of Barranco appropriately implement protocols with the aim of reassuring visitors.

According to the fifth specific objective, which aimed to "Explain the importance of applying personal protective elements, prevention, and control for personnel regarding COVID-19 in tourism service companies in the district," the results revealed that the majority of tourism service establishments that implemented biosecurity protocols also provided personal protective equipment to protect their workers. Additionally, they conducted training that covered not only aspects related to COVID-19 but also first aid, customer service, among other topics. This approach pointing out that accommodation establishments in the Tungurahua province had a limited understanding of general biosecurity measures, as only some of them applied them. However, after receiving training, a significant increase in knowledge and awareness about the consequences that could arise from incorrect implementation or omission of protocols was observed.

The sixth specific objective focused on "Identifying the importance of having a contingency plan for COVID-19 in tourism service companies in the district." The results revealed that all establishments that complied with the State regulations developed a contingency plan called the "COVID-19 Surveillance, Prevention, and Control Plan at Work." This plan was a requirement for establishments during the reactivation phases and outlined the biosecurity measures to prevent infections and how to respond in case of suspicion. This information aligns with what Portocarrero et al.⁽²⁹⁾ pointed out, who also mentioned this plan established by the Ministry of Health (MINSA) and the government to prioritize the health of workers and customers, and highlighted that the majority of tourism services in Lima Metropolitana have presented it.

CONCLUSIONS

Biosecurity protocols are a key factor in the economic reactivation of tourism establishments in the district, as they instill confidence and security in tourists, making them feel comfortable traveling and visiting these places. Moreover, they play a crucial role in safeguarding the health and safety of both employees and customers.

The existence of certifications, such as the international Safe Travels seal, validates the correct implementation of biosecurity protocols and further enhances customer confidence. Consequently, this contributes to an increased influx of tourists to the district.

Likewise, the proper implementation of biosecurity protocols in accommodation establishments is essential to ensure the safety of guests and staff. Complying with established regulations allows for classification and brings benefits like facility improvements, public assistance, and higher guest traffic. It is a strategy to stand out in the market and ensure customer satisfaction, contributing to the sustainable and secure development of the sector.

Similarly, the correct implementation of biosecurity protocols in dining services is crucial to protect employees who have direct contact with diners and to provide a safe environment for both staff and customers. Adhering to the State's guidelines, whether for delivery services or in-house dining, is vital to prevent contagion and safely and sustainably reactivate the gastronomic sector. The effective adoption of these measures fosters public trust and strengthens the overall restaurant service industry.

On the other hand, the district lacks a wide variety of establishments dedicated to leisure and recreation for tourists, such as nightclubs, karaoke bars, and pubs. Some restobars attempted to adapt to the situation by offering alcohol delivery services to avoid losses and implemented the biosecurity protocols recommended by the State to ensure the safety of their customers and employees against COVID-19. However, a lack of attention was observed in preventing other diseases.

Similarly, in complementary services, such as tourism activities and attractions, the importance of implementing biosecurity protocols is evident, although it is more generalized due to the lack of detailed regulations for these service providers, such as quad biking, surfing, and wineries. Despite this limitation, genuine interest and commitment were observed among these service providers in implementing protocols to reactivate their economy and provide safety to their customers, who sought to enjoy new experiences when visiting these businesses or participating in the offered activities.

Providing personal protective equipment (PPE) to employees is essential for the majority of tourism service companies. This ensures they have the necessary tools to protect their health and prevent the spread of diseases. It is also important to encourage staff participation in training and complement these sessions with topics related to first aid and prevention.

Finally, it is imperative that all tourism establishments develop a contingency plan that includes measures to ensure safety and confidence in the provided service. This involves establishing clear protocols for workers and customers, as well as a procedure to follow in case of symptoms related to diseases. A well-structured contingency plan ensures an effective and responsible response to any risk situation in the tourism industry.

RECOMMENDATIONS

Public and private entities should promote the importance of strict implementation of biosecurity protocols in all tourism establishments within the district. This measure will not only contribute to economic reactivation but also strengthen the confidence and safety of tourists. Special attention should be given to protecting the health and safety of employees and customers, ensuring a safe and satisfying tourism experience for everyone involved.

The municipal authorities should provide guidance and support to tourism establishments in obtaining international certifications such as the Safe Travels seal or other similar accreditations. These certifications validate the proper implementation of biosecurity protocols and enhance customer confidence. With such endorsements, establishments can attract more tourists, positively impacting the influx of visitors to the district and fostering safe and sustainable economic reactivation.

It is crucial for accommodation establishments to properly apply biosecurity protocols according to established standards. Compliance not only ensures the safety of customers and employees but also offers opportunities for classification and various benefits. Relevant public entities should exercise stricter and more continuous oversight and inspection of dining establishments that fail to comply with formalization and biosecurity protocols.

The municipal authorities, in collaboration with health agencies, should develop, whenever possible, and include as a requirement a basic guide for the correct implementation of biosecurity protocols against various risks for newly emerging establishments. This will ensure that these establishments incorporate safety measures from the outset.

Tourism service companies are strongly recommended to provide their employees with the necessary Personal Protective Equipment (PPE) to safeguard their health and prevent the spread of diseases.

Active promotion of staff participation in training related to prevention and first aid is advised. These actions will enhance staff preparedness and ensure a safe and reliable environment for both workers and customers, promoting a responsible and satisfying tourism experience.

All tourism establishments are urged to develop and implement a solid and detailed contingency plan. This plan should include clear and effective protocols to ensure the safety and confidence of both staff and customers. Additionally, a clear procedure for responding to symptoms related to diseases should be established. A well-structured and responsibly applied contingency plan will guarantee an effective response to any risk situation, ensuring the protection of health and providing a safe and satisfying tourism experience for visitors.

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CONFLICT OF INTEREST

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