



Food Poisonings at Hotels, Tripadvisor Reviews in Türkiye

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Abstract

Tourists travel long distances and visit attractive destinations. Problems that may occur in these destinations may affect visit preferences. Food poisoning is one of the health problems that may encounter during their holidays, which will create negative memories about their holidays. In this study, comments about food poisoning cases made by foreign tourists visiting Türkiye were examined. In this way, the points to be taken into consideration for hotels to avoid food poisoning cases will be revealed. Tourist comments on the Tripadvisor website constitute the examination area of the study. The study covers comments made between 2012 and 2022. The study is a qualitative research and 731 comments containing the concept of "food poisoning" on Tripadvisor were subjected to text/content analysis to obtain the data set. After the analysis, themes and categories associated with the subject of "food poisoning" were determined. The themes of these categories are "food safety, illness, staff attitude, feelings, cause and vulnerable". Accommodation business managers should pay attention to these issues in order to reduce food poisoning complaints and prevent the formation of a negative image.

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INTRODUCTION

Nutrition is one of the phenomena that has existed in human life since birth. According to the Hierarchy of Needs, food is one of the fundamental requirements (Maslow, 1943). Nutrition is not just an action to take nutrients into the body and fill the stomach. In this manner, more than fifty nutritional elements could be given to the body in the form of a mixture and nutrition could be provided in this way (Baysal, 2007). Considering the psychological dimension of nutrition, it is an inevitable fact that a person takes pleasure in the foods she/he consumes (Cankül & Uslu, 2020), and numerous foods are produced by using cooking and storage methods, taking this into consideration both traditionally and professionally. When it comes to cuisine and pleasure, the first thing that comes to mind is of course the tourism sector. Situations related to food, which is one of the main factors of a holiday (Reynolds, 1994), can change the tourist's thoughts (Nebioğlu, 2018). In this context, safe food becomes one of the crucial elements of a holiday (Mutua, 2021). Since foodborne illnesses can have a detrimental effect on a person for at least several days, an entire holiday can be negatively affected. Food safety is a problem encountered not only in the tourism sector but all over the world (Adams, 1995). Foodborne illness outbreaks happen often, but only a small percentage of cases are reported, and the aetiologic agents are rarely identified (Arcieri et al., 1999). It is estimated that 600 million foodborne illnesses occur worldwide each year and 420 thousand people die. Because foods contaminated with bacteria, virus, protozoa or various chemicals can cause more than 200 diseases (WHO 2022). The information in developed countries is more reliable due to their more advanced health and registration systems compared to other countries. Consequently, the lack of access to statistics in underdeveloped countries causes the figures to be estimated.

Over time, there has been a roughly steady number of food poisoning occurrences in the hotel and catering industry, despite efforts to improve food safety measures (Adams, 1995). Unsanitary food preparation methods can cause outbreaks of food poisoning, which is a major concern in public dining establishments like hotels (Lateefat et al., 2018). Research has demonstrated that certain foods eaten at the hotel's restaurant can be linked to outbreaks of food poisoning (Arcieri et al., 1999). In order to prevent food poisoning incidences, hotel kitchen workers must adhere to proper hygiene and sanitation practices (Şanlıer et al., 2010). It is crucial to evaluate the quality of food risk management in hotels in order to identify the causes of food poisoning outbreaks and gauge how well-informed visitors are about food safety procedures (Zaki, 2017). In order to avoid contamination that can result in foodborne diseases, it is advised that hotels maintain appropriate food and beverage storage procedures (Hassan, 2020). Food handlers in hotel kitchens need to be well-versed in food safety procedures because unsanitary circumstances can have a negative impact on both employees and patrons (Tuncer & Akoğlu, 2020).

Food poisoning outbreaks at hotels can have serious effects, including tarnishing the hotel's brand, poor commercial performance, and possibly even legal ramifications (Borovčanin & Kilibarda, 2020). Food-borne poisonings must be handled and managed carefully (Zaki, 2017). In addition to protecting companies and visitors from potential food poisoning cases and educating them about preventative measures, this study was required because no thorough investigation into the topic of food poisoning had been done previously. If tourists encounter such situations during their short holidays, it can create a negative image of the business, city, and country. Therefore, this study aims to examine food poisoning experienced by tourists staying in hotels in Türkiye, using Tripadvisor comments. By analyzing these comments, key issues in the food poisoning literature are identified based on tourists' experiences. Frequently used words in the comments are categorized, the subject is discussed comprehensively, and

the concepts are classified and explained in detail.

Conceptual Framework

Food Poisoning

Microbial food poisoning is the general definition for diseases that occur as a result of consuming food that contains live microorganisms or is contaminated with toxins produced by microorganisms (Fung, 2010; Aljamali et al., 2021). Food poisoning may occur in three ways: infection, toxicoinfection and intoxication (Zorba, 2011). The importance of this definition for accommodation establishments is that intoxication often occurs while the customer is still in the hotel. Because there is an incubation period in infection-type food poisoning, which usually show symptoms after leaving the hotel, while intoxication is within 4 hours (Morris & Vugia 2021).

The Ministry of Agriculture and Forestry is responsible for food safety in Türkiye as of 2022. This task, which was previously under the responsibility of the Ministry of Health, was given to the Ministry of Agriculture and Forestry and food safety is inspected and precautions are taken according to the provisions of the Law on Veterinary Services, Plant Health, Food and Feed (No. 5996) and the Turkish Food Codex (KAYSİS, 2024). Processes are carried out through inspections by food controllers of the Ministry of Agriculture and Forestry. The staff of the Ministry's General Directorate of Food and Control carry out announced or unannounced inspections, implement penal sanctions if necessary, detect any non-conformities. According to the Annual Activity Reports of the ministry, the number of personnel performing food inspections is 7004 in 2019, 7135 in 2020 and 7245 in 2021. As a result of a total of 1.378.185 inspections carried out in 2021, 14.353 pecuniary fines were imposed, and 146 of them resulted in a denunciation to judicial departments. In addition, the ministry has established ALO 174 Food Line and receives complaints and applications from here (TOB, 2022). Although there are no information Annual activity reports on foodborne diseases in Türkiye, between 2015 and 2020 18.314.239 medical consultations were conducted, 11.384.379 cases of food poisoning were diagnosed, and 1714 cases of foodborne infections resulted in fatalities TBMM (2021). According to the Global Food Security Index, Türkiye ranks 49th in the world with 65.3 points. Finland, Ireland and Norway top the list (GFSI 2023).

Food Poisonings at Hotels

Undoubtedly, one of the most significant concerns in the tourism industry is food safety (Kawamoto, 2017), a problem that affects almost 10% of the global population. Since being associated with food poisoning is an undesirable situation in the tourism sector and will reduce the reliability of the facility and cause reputational damage. Therefore, the issue of food safety is important (Adams, 1995; Kawamoto, 2017; Lateefat et al., 2018) and information about food safety policies is also provided on the hotels' websites. Some chain-branded hotels allocate a separate page for this issue and provide detailed explanations. On the contrary, some hotels do not provide information about food safety on their websites, nevertheless, travelers can search for information they are unable to access, on different websites in order to obtain more comprehensive information about the topic.

The chance of contracting food poisoning rises with the summertime temperatures (Adams, 1995). Poisoning cases, especially in the summer months, cause major problems in hotels whose one of the main pillars of which is food and beverage; risk human health, especially pregnant women and children (Ho et al., 2009), negatively affects the image of the country and the facility, and may cause legal sanctions. Some websites even give hotel names, which

can cause commercial damage to companies. Furthermore, law firms advertise on their websites that they provide holiday illness legal help (SM, 2024, YHC 2024). According to a survey conducted by one of UK's law firms, Slater Gordon, Spain, Egypt and Turkiye are among the countries where tourists suffer from food poisoning the most (FSF, 2015). Various studies have highlighted outbreaks associated with hotel events (Sangsawang et al., 2023; Adrian et al., 2020; Ling HongXi, 2014). Some of these poisoning claims remained as allegations because they could not be proven, besides it is reported that some malicious people claimed that they had food poisoning during their holiday in Turkiye and filed a lawsuit against the travel agency in order to receive compensation (BM, 2018). As the allegations on this issue increased, hotel associations such as GETOB took action and asked customers demanding compensation, to submit the reports they received from hospitals in case they became ill due to food during their holiday. Whether such claims are true or not, they negatively affect consumers' preferences and pose a threat to tourism revenues. As a matter of fact, on well-known sites such as Tripadvisor, it is seen that potential customers ask hundreds of questions about the fear of experiencing food poisoning during their holiday in Turkiye (TA, 2020).

According to senior hotel managers, although there are significant challenges and costs associated with food safety practices, there are benefits such as meeting legal requirements, improving food safety and quality, increasing reliability, reducing complaints, and reducing operational costs in the long term (Megahed and Abbas, 2021). Systems to be developed for traceability of food in the tourism industry can prevent food from becoming poison and avoid potentially dangerous circumstances (Zrnić, 2020). In addition, laws, regulations, norms and directives dealing with different aspects of food hygiene should be implemented by the relevant authorities. Studies reveal that standard food safety systems are effective in ensuring food safety in hotels (Mutua, 2021). Moreover, to obtain nutritious gastronomic products, hygiene and sanitation protocols should be followed, reducing allergen and contamination risks (Aleksić, et al., 2020).

Method

The subject of this research is food poisoning in hotels. Potential negative incidents related to the unreliable food produced in the accommodation establishments where tourists are hosted in the tourism sector were the determining factor in the emergence of this study. Foodborne poisoning cases experienced by tourists during or after their holidays in accommodation establishments can negatively affect the holiday process and therefore the image of the hotel, destination and country. The concepts and issues that need to be taken into consideration were analyzed in light of the challenges that the visitors had pointed out in order to positively manage the process.

In the study, Tripadvisor, where tourists plan their holidays and share their experiences in tourism establishments (hotels, restaurants, etc.) and destinations (Mancı & Tengilimoğlu, 2021; Çakmak & Sarıışık, 2020; Yetgin et al., 2020), was used for data collection purposes. The study comprehends the comments received by hotels in Antalya province between 2012 and 2022 on the Tripadvisor website and questions about food safety in the question-and-answer section in the forums. Sampling was carried out searching the keywords 'food poisoning' in the "Europe Forums / Turkiye" section search engine. The research is qualitative and content analysis was performed as data analysis. Content analysis shows which concepts, events or ideas are emphasized most by scanning the content of written texts, visuals or discourses (Kozak, 2015).

In this study, 731 results were obtained by scanning the comments on the Tripadvisor website forum section. The data were subjected to content analysis with the Maxqda program. Process in content analysis consists of coding the

data, determining themes/categories, arranging the codes and themes, defining and interpreting the findings. (Yıldırım & Şimşek, 2008). Followed by the analysis, the data were divided into categories and interpretations were made about the prominent descriptions according to their frequency of repetition.

Findings

The data obtained as a result of content analysis of 731 comments from the Tripadvisor website for the detection of food poisoning in hotels are given below. Regarding gender, it was determined that 187 comments were written by male, 284 comments were written by female, and the authors of 260 comments could not be determined.

Table 1. Demographic information

Variable	n	%	Variable	n	%	
Gender	Male	187	25,58	Albania, Azerbaijan, Belgium, Bulgaria, Egypt, Estonia, Georgia, Iran, Israel, Kyrgyzstan, Lebanon, Malasia, Portugal, Singapore, Slovakia, Slovenia, South Africa, Switzerland, Thailand, Ukraine, Uzbekistan, Wales	1	3,14*
	Female	284	38,85	Australia	3	0,45
	Unspecified	260	35,56	Canada	5	0,68
	<i>Total</i>	<i>731</i>	<i>100</i>	Denmark, Lithuania, Macedonia, Norway, Serbia, Sweden	2	1,64*
Visit type	Family	379	51,95	Finland	4	0,55
	Friends	49	6,83	Germany	3	0,45
	Solo	10	1,45	Ireland	6	0,82
	Couple	183	25,19	Netherlands	5	0,68
	Unspecified	105	14,56	Poland	3	0,45
	<i>Total</i>	<i>731</i>	<i>100</i>	Romania	7	0,96
				Russia	4	0,55
			Scotland	5	0,68	
			Spain	4	0,55	
			Türkiye	3	0,45	
			UK	344	46,25	
			USA	6	0,82	
			Unspecified	295	40,86	
			<i>Total</i>	<i>731</i>	<i>100</i>	

*Sum

In 436 comments, the country the tourist came from is stated, while the number that is not specified is 295. The distribution of those who stated their country is as follows: Albania, 1 Australia 3, Azerbaijan 1, Belgium 1, Bulgaria 1, Canada 5, Denmark 2, Egypt, 1 Estonia 4, Finland 1, Georgia 1, Germany 3, İran 1, Ireland 6, Israel 1, Kyrgyzstan 1, Lebanon 1, Lithuania 2, Macedonia 2, Malasia 1, Netherlands 5, Norway 2, Poland 3, Portugal 1, Romania 7, Russia 4, Scotland 5, Serbia 2, Singapore 1, Slovakia 1, Slovenia 1, South Africa 1, Spain 4, Sweden 2, Switzerland 1, Thailand 1, Türkiye 3, UK 344, Ukraine 1, USA 6, Uzbekistan 1, Wales 1.

49 comments exist who stated that he/she came with friends, 4 people who came for business, 183 people who came with a partner, 10 people who came solo, 379 people who came with their family, and 105 who did not specify. Comments indicated that food poisoning happened in 332 hotels in the provinces of Antalya, Aydın, Muğla, Çanakkale, Nevşehir, Diyarbakır, Ankara, İzmir, Istanbul, Trabzon, and Yalova.

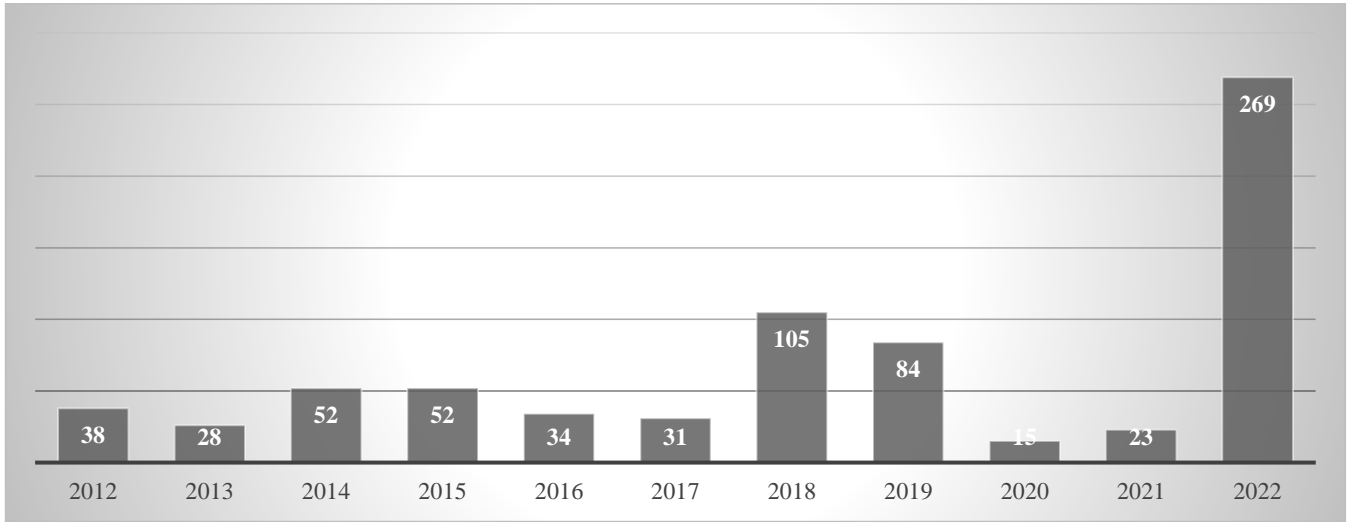


Figure 1. Number of comments by year

Figure 1 shows comments about food poisoning cases between 2012 and 2022. Number of comments are generally in double digits on a yearly basis, a decrease monitored as the closures due to Coronavirus in 2020-2021 also reduced the number of incoming tourists. Although there is a distinct increase by 2022, this can be attributed to the decrease in the number of qualified personnel in businesses (Yüksek & Kalyoncu, 2021) and the increase in the habit of visiting Tripadvisor website in general (Google Trends, 2024).

Table 2. Themes, codes and sub-codes obtained from comments.

Themes	Codes	Sub codes	Themes	Codes	Sub codes
Food safety	Hygiene	Stray cats	Staff attitude	Rude	
		Gloves		Denial/ not food poisoning	
		Flies/ants/ insect / pest		Defensive	
		Cleanliness		Dismissive	
		Cross contamination		Unhelpful/negligent	
	Uncovered	More people			
	Left out	Charge/ bill/ fee			
	Not fresh	Not apologize			
	Lukewarm / not hot	Responsibility			
	Reheat / reuse	Ignore			
	Unwashed	Feelings	Disappointed		
	Filthy/ dirty		Diabolical		
	Undercook/ pink / raw		Hope not/ surprising		
Infection/ contamination	Bacteria (<i>Campylobacter</i> , <i>E. coli</i> , <i>Salmonella</i>)	Recommend			
		Anxious			
	Virus	Ruin/spoil			
		Scary/horrific			

Table 2. Themes, codes and sub-codes obtained from comments (Cont.)

Illness	Cramp/ ache	Cause	Disaster
	Throw up/ Vomit		Spent/ in bed/ in room
	Stomach problems/gastroenteritis		Recover
	Sweating		Never return
	Symptom		Unforgettable
	Ill / sick		Pastry
	Diarrhea		Ice/water
	Ache / pain		Pizza
	Fever/ temperature		Chicken
	Dehydration		Turkey
	Many / several people		Burger
	Antibiotics/ medicine		Fish
	Drip		Rice
Stool sample/ fecal sample	Water		
Ended up in hospital	Omelet/egg		
Vulnerable	allergy	Meat	
old people	Salad		
infant / kid / daughter/ my son	Seafood		
pregnant			

After the analysis, the table of themes, codes and sub-codes are given above. When the comments were examined, it was seen that the subject consisted of 6 main themes: “Food safety”, “Illness”, “Staff attitude”, “Feelings”, “Cause” and “Vulnerable” (Table 2). “Hygiene”, “uncovered”, “left out”, “not fresh”, “lukewarm/not hot”, “reheat/reuse”, “unwashed, filthy/dirty”, “undercook/ pink/raw”, “infection/ contamination” codes explain the food safety theme. “Symptom”, “many/several people”, “antibiotics/medicine”, “drip”, “stool sample/ fecal sample”, “ended up in hospital” codes explain the illness theme. “Rude”, “denial/ not food poisoning”, “defensive, dismissive”, “unhelpful/negligent”, “more people”, “charge/ bill/ fee”, “not apologize”, “responsibility”, “ignore” codes explain the Staff attitude theme. “Disappointed”, “diabolical”, “hope not/ surprising”, “recommend”, “anxious”, “ruin/spoil”, “scary/horrific”, “disaster”, “spent in bed/in room”, “recover”, “never return”, “unforgettable” codes explain the Feelings theme. “Pastry”, “ice/water”, “pizza”, “chicken”, “turkey”, “burger”, “fish”, “rice”, “water”, “omelet/egg” codes explain the cause theme. “Allergy”, “old people”, “infant” / kid / daughter/ my son”, “pregnant” codes explain the Vulnerable theme.

Table 3. Code frequencies

Code	Frequency	%	Code	Frequency	%
Food poisoning	684	28,39	Ache / pain	10	0,42
İll / sick	177	7,35	Omelet/egg	10	0,42
Many/ several people	122	5,06	Fish	9	0,37
Infant / kid / daughter/ my son	106	4,40	Rude	9	0,37
Ended up in hospital	105	4,36	Never return	9	0,37
Spent/ in bed/ in room	77	3,20	Ignore	9	0,37
Diarrhea	70	2,91	Dehydration	9	0,37
Undercook/ pink / raw	69	2,86	Disappointed	8	0,33
Throw up/ Vomit	69	2,86	Infection/ Contamination	8	0,33

Table 3. Code frequencies (cont.)

Severe/serious/strong/ Terrible/violently	61	2,53	More people	7	0,29
Chicken	57	2,37	Filthy/ dirty	7	0,29
Stomach problems/ Gastroenteritis	50	2,08	Cross contamination	7	0,29
Flies/ants/ insect / pest	42	1,74	Not apologize	7	0,29
Hygiene	41	1,70	Sweating	7	0,29
Lukewarm / not hot	40	1,66	Cleanliness	6	0,25
Meat	39	1,62	Old people	6	0,25
Ruin/spoil	38	1,58	Hope not/ surprising	6	0,25
Cramp/ ache	30	1,25	Rice	5	0,21
Unhelpful/negligent	29	1,20	Pregnant	5	0,21
Charge/ bill/ fee	29	1,20	Responsibility	5	0,21
Denial / not food poisoning	29	1,20	Recommend	5	0,21
Salmonella	27	1,12	Campylobacter	4	0,17
Reheat / reuse	25	1,04	Diabolical	4	0,17
Antibiotics/ medicine	19	0,79	Virus	4	0,17
Drip	18	0,75	Pastry	4	0,17
Confirmed disease	17	0,71	Ice/water	4	0,17
Bacteria	17	0,71	<i>E.coli</i>	4	0,17
Fever/ temperature	17	0,71	Pizza	3	0,12
Dismissive	16	0,66	Scary/horrific	3	0,12
Burger	13	0,54	Turkey	3	0,12
Left out	12	0,50	Allergy	2	0,08
Salad	12	0,50	Defensive	2	0,08
Seafood	12	0,50	Gloves	2	0,08
Stray cats	11	0,46	Vulnerable	2	0,08
Stool sample/ fecal sample	11	0,46	Unforgettable	1	0,04
Not fresh	10	0,42	Unwashed	1	0,04
Uncovered	10	0,42	Anxious	1	0,04

In the frequency distribution of the codes (Table 3), “food poisoning” (28,39), “ill / sick” (7,35), “many/ several people” (5,06), “infant / kid / daughter/ my son” (4,40), “ended up in hospital” (4,36) attracts attention. In addition to these, the codes “spent/ in bed/ in room”, “diarrhea”, “undercook/ pink/raw”, “throw up/vomit”, “severe/serious/strong/, terrible/violently”, “chicken”, “stomach problems/gastroenteritis” and 62 other codes with a high repetition rate are included in the subject. It shows how many concepts are used to explain the subject and the depth of the subject. Table 4 displaying examples of some comments under the themes.

Table 4. Themes and comment samples

Themes	Comments
	"...On one of the few occasions I ate in the hotel I contracted food poisoning..."
Food safety	"... and my daughter and me had a food poisoning... So if you still planning to visit this place do not forget to bring some medicaments just in case..."
	"... We could not move from our rooms because we were all so ill..."
Illness	"...My partner on our last three days became very ill with food poisoning. Three full days in bed with medication, unable to get out of bed really she should of been took to hospital ..."
	"...Got food poisoning on last day, hotel completely negligent and would not take any responsibility, poor hotel management service..."
Staff attitude	"...I received food poisoning from the restaurant at the hotel, which obviously rendered the hotel a write off. The reception staff were very dismissive and unhelpful, and wouldn't do anything to help in anyway..."
	"...so after waiting two years for a holiday with cost just under 4k , we will never return to Turkey as this is not the 1st time..."
Feelings	"...I had to go doctors and get anti-biotics for food poisoning what cost me a lot of money, so it completely spoil my holiday..."
	"...Got food poisoning from raw chicken. The food was reheated..."
Cause	"...I went to my GP at home who sent a faecal sample off for testing that has come back positive for salmonella poisoning which I believe came from the seafood night; in particular the sushi..."
	"...On day 2 I became very poorly, violently sick (I haven't been physically since since I was pregnant with my daughter 8 years ago and I can't remember the time before that). I had all the signs of food poisoning..."
Vulnerable	"...My daughter who is only 2 years old was really severe I informed the manager I think his name was Mehmet Ali N****, he was so rude to me and didn't seem bothered of concerned..."

Food Safety

Visitors who stated that they had food poisoning attributed the reasons for this to lack of hygiene, left-over food, reheated food, unwashed and undercooked food and some comments were made by people with industrial hygiene knowledge. For example, the expression 'cross contamination', which refers to the indirect contact of cooked and raw products, is a phenomenon that someone who studies food, health, gastronomy or cookery may know. In addition, there have been some observations made regarding fundamental hygienic errors committed by the kitchen crew, particularly in open buffets where parts of the cooking stations are visible.

Illness

Commenters who stated that they were sick listed the symptoms and actually presented them as evidence of their poisoning due to food. Diarrhea, nausea, vomiting, weakness, abdominal pain, fever are some examples. While there are people who had the disease outpatient, there are also comments stating that they bought medicines from pharmacies with their own means. Those who thought their situation was more serious stated that they gave blood and stool samples and applied to medical care and received serum treatment. Even, while some comments pointed out that they were not the only ones affected and that they had encountered numerous ill guests which they actually presented it as supporting evidence.

Staff Attitude

People who spend part of their holidays sick, naturally blame the accommodation establishment they stay in and expect an apology. However, as can be seen at sub-codes, some staff followed a policy of denial instead of apology,

that food poisoning occurred in 332 hotels in 11 cities in Türkiye. When the distribution between 2012 and 2022 was examined, it was seen that there was an increasing trend in food poisoning cases in parallel with the number of tourists. In 2020 and 2021, which covered the pandemic period, there was a decrease in the number of cases due to travel restrictions. However, as of 2022, the number of cases has increased.

As a result of the content analysis, the conceptual foundations and scope of food poisoning were determined based on the keywords "food poisoning". As a result of the analysis, the concepts of "food safety", "illness", "staff attitude", "feelings", "cause" and "vulnerable" emerged as dimensions explaining food poisoning. These dimensions are seen as an important result about the scope and classification of the theoretical infrastructure of food poisoning.

"Hygiene", "uncovered", "left out", "not fresh", "lukewarm/not hot", "reheat/reuse", "unwashed, filthy/dirty", "undercook/ pink/raw", "infection/ contamination" codes explain the food safety theme. When the frequency of use of words (codes) is examined, it is seen that the words "undercook/pink/raw", "lukewarm/not hot", "hygiene" and "reheat/reuse" stand out. In this direction, according to Lu, (2023) foodborne infections at hotels, are often linked to time-temperature control inadequacies, poor kitchen hygiene, and the prevalence of disease carriers among food handlers. Gould et al., (2013) listed the contributing factors in restaurant-associated foodborne disease outbreaks; Staff hygiene and health, factors associated with food preparation practices, and contamination, while FDA (2020) determined five main factors as improper holding temperatures, inadequate cooking, contaminated equipment, food from unsafe sources, and poor personal hygiene. Olcay and Özekici (2015) reported that hygiene-related service errors were the most prevalent factor that looked at the association between service errors, compensation measures, and customer satisfaction in a restaurant. Based on a study done by Fatimah et al., (2011), one of the top three factors that customers look for in a restaurant is food service hygiene.

"Symptom", "many/several people", "antibiotics/medicine", "drip", "stool sample/ faecal sample", "ended up in hospital" codes explain the illness theme. When the frequency of use of words (codes) is examined, the words "Symptom", "many/several people" and "ended up in hospital" come to the fore. It was noticed that the words "ill/sick", "Diarrhea", "throw up / vomit", "Severe/serious/strong/terrible/violently", "Stomach problems/gastroenteritis" came to the fore from the sub-codes collected under the "Symptom" code. Several outbreaks were reported at accommodation facilities with some disease symptoms and the guests diverted to hospital (Love et al., 2002, Okumuş, 2014, Adjei et al., 2020, Wensley et al., 2020).

"Rude", "denial/ not food poisoning", "defensive, dismissive", "unhelpful/negligent", "more people", "charge/ bill/ fee", "not apologize", "responsibility", "ignore" codes explain the staff attitude theme. When the frequency of use of words is examined, it is seen that the words "denial / not food poisoning", "unhelpful/negligent", "charge / bill / fee" stand out. According to Ho (2019), hotel managements prefer to issue an apology first, then an implied denial, and finally an explicitly denial, in response to the three various kinds of charges of violating trust. Replies for the comments in the web sites such as Tripadvisor and Booking also included denial responds by the managements (Ho, 2017). Visitors exposed to unpleasant behavior tend to boycott or switch to another hotel (Chan et al., 2017). It has been determined that the education, profession and experience of the personnel are very important in ensuring food safety in businesses (Şanher et al., 2010; Baser et al., 2017). In this regard, the issue of personnel's ability to cope with extraordinary situations comes to the fore.

"Disappointed", "diabolical", "hope not/ surprising", "recommend", "anxious", "ruin/spoil", "scary/horrific",

“disaster”, “spent in bed/in room”, “recover”, “never return”, “unforgettable” codes explain the feelings theme. When the frequency of use of words is examined, it is seen that the words “spent in bed / in room”, “ruin/spoil” stand out. Wampande and Osunsan (2020) stated that staff attitude served as a reliable indicator of guest happiness in the hotels that were chosen.

“Pastry”, “ice/water”, “pizza”, “chicken”, “turkey”, “burger”, “fish”, “rice”, “water”, “omelet/egg” codes explain the cause theme. When the frequency of use of words is examined, it is seen that the words “chicken”, “meat” stand out. The riskiest foods in mass catering systems are estimated as leafy vegetables, fruits-nuts, fungi vegetables, root vegetables, sprout vegetables, meat and poultry (CDC, 2018). Moreover, reused rice must be considered for severe poisonings at accommodation facilities (Vella, 1997; Griffiths and Schraft, 2017).

“Allergy”, “old people”, “infant / kid / daughter/ my son”, “pregnant”, codes explain the Vulnerable theme. When the frequency of use of words is examined, it is seen that the words “infant / kid / daughter / my son” stand out. Individuals 65 years of age or older, children under 5, those with weakened immune systems, and expectant mothers are considered higher risk categories (Gursoy, 2019; CDC, 2024). According to Pigott (2008) foodborne infections have the potential to be fatal or extremely sickening, especially in vulnerable populations. Considering all themes given above, our findings compiled from tourist comments correlate with the literature.

In the study, it was observed that the cases occurred in well-known chain hotels as well as 4 and 5 star hotels. Similarly, despite the prestige of some hotels, food poisoning incidents have been reported even in establishments offering high-end buffets (Ho et al., 2009). Effective preventive measures are crucial, such as equipping hotel stores with facilities that ensure proper food and beverage storage, which helps extend shelf life and prevent contamination (Hassan, 2020). The implementation of the Hazard Analysis Critical Control Point (HACCP) system is essential in preventing food poisoning outbreaks, and hotels can adapt their processes accordingly, provided there is strict law enforcement oversight (Lateefat et al., 2018). Food poisoning in commercial businesses is not accidental and is entirely preventable (Griffith, 2010). Enhancements in inspection and tracking systems are likely to ensure the safety of the food supply and encourage supply chain intermediaries to provide safe food (Gursoy, 2019). It is also noted that some guests may not report or leave reviews about negative experiences, which can obscure the true prevalence of food safety issues in hotels (Ekiz, 2009). Managers and governments who want to manage processes related to food poisoning need to intensify their effort on all these issues.

This research provides a comprehensive overview of food poisoning issues for preventive measures in hotels. In summary, preventing food poisoning at hotels necessitates a multifaceted strategy that involves close adherence to food safety regulations, ongoing staff training, appropriate storage procedures, and informing both staff and guests about food safety precautions.

Recommendations for Researchers

Within the scope of this study, only comments made for hotels located in Türkiye were included in the research. In this context, future research can include other countries to make different comparisons and expand the universe. Since the comments included in the study are only in English, research can also be conducted in Russian, German and Ukrainian, which constitute Türkiye’s tourist potential.

Recommendations for Industry

The staff need to be aware that the issue concerns public health, business and the country's reputation thus, must follow basic cleanliness and hygiene guidelines even with heavy workload. Food safety rules must be applied from farm to fork, and Good Manufacturing Practices must be implemented. Kitchen personnel must never forget the 4 C rule: cleaning, cooking, cross-contamination and chilling. There should be no flexibility in monitoring storage temperatures and expiration dates. Attention should be paid to both cold and hot storage temperatures and times in open buffets. Risky foods should be taken to the buffet only once and should not be used again. Educated personnel is a must however repetition hygiene trainings and audits have to be done regularly.

Scope and Limitations

This study aims to examine food poisoning experienced by tourists staying in hotels in Türkiye, using Tripadvisor comments. The inability to reach every poisoning that has ever occurred in the universe and the lack of volunteers to provide feedback are the research's two main limitations. Furthermore, only English comments are obtained because of the language used in the search engine.

Declaration

All authors of the article contributed equally to the article process. There is no conflict of interest that the authors should declare.

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