

Bird flu crisis and its impact on the hospitality industry

By

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Abstract

The aim of this study is to assess the current precautions of workers and customers in hospitality establishment during bird flu crisis. Structured questionnaires were distributed to workers in some hotels, restaurants and fast food restaurants. The collected data were by personal observations, revealed that 84% of those establishments did not serve poultry as a result of the bird flu crisis. Furthermore, about 68% of these establishments replaced poultry with another meat product without increasing selling price. When the crisis starts to fade down, these establishments start to offer poultry under restriction from the Ministry of Tourism. Most of the employees used regulation in their deal with poultry that were restricted in, purchasing, storing, handling, cleaning hands and preparing areas, cooking and serving. Personal observations revealed relatively a high standard sanitary regulations. The potential implications for staff education were discussed.

Introduction

Bird flu is caused by a form of influenza virus that mainly infects birds. There are lots of different strains of bird flu. Some of these strains cause only mild symptoms in birds, others are most dangerous to birds – it spreads quickly, cause more severe symptoms and almost always kill the birds. The strain of the bird flu that has infected people is called H5N1 and it is fatal to birds¹.

Migrating birds, like ducks and geese, can carry and spread the virus to other domestic birds, leading to death. The virus also spreads from farm to farm if birds-infected feces and saliva get on farming equipment, like tractor wheels, clothing, and cages. The people who became infected with H5N1 strain of flu caught it directly from birds².

From mid-December 2003 through early February 2004, outbreaks caused by the H5N1 virus were reported in eight Asian nations (listed in order of reporting):

¹ World health organizations (W.H.O.) 2005. Responding to the avian influenza pandemic threat. Recommended strategic actions. Global Influenza programs. P:1:22

² Food & agriculture organizations (F.A.O.) 2006. Fly-tech to shed light on wild bird role in avian flu spread. Avian flu: FAO in actions, No.4, p:1.

the Republic of Korea, Vietnam, Japan, Thailand, Cambodia, Lao People's Democratic Republic, Indonesia, and China. Most of these countries had never before experienced an outbreak of highly pathogenic avian influenza in their histories.

In early August 2004, Malaysia reported its first outbreak of H5N1 in poultry, becoming the ninth Asian nation affected. Russia reported its first H5N1 outbreak in poultry in late July 2005, followed by reports of disease in adjacent parts of Kazakhstan in early August. Deaths of wild birds from highly pathogenic H5N1 were reported in both countries. Almost simultaneously, Mongolia reported the detection of H5N1 in dead migratory birds. In October 2005, H5N1 was confirmed in poultry in Turkey and Romania. Outbreaks in wild and domestic birds were under investigation elsewhere. Japan, the Republic of Korea, and Malaysia have announced control of their poultry outbreaks and are now considered free of the disease. In the other affected areas, outbreaks are continuing with varying degrees of severity¹.

In Egypt, H5N1 virus has appeared in 21 governorates (Cairo, Giza, Qalyubiya, Daqahliya, Alexandria, Beni Sueif, Qena, Beheira, Menoufiya, Kafr el-Sheikh, Gharbiya, Menya, Damietta, Sharqiya, Fayyoun, Sohag, Luxor City, Ismailia, Aswan and Asuit). In April 23rd 2006, 812 farms had reported infections with El-Sharqia reporting the highest number of infected farms (271), with the largest number occurring in Menya El-Qamh (73). El-Qalubia had the second highest number of infected farms (177), with the largest number occurring in Banha(57). El-Giza had the third highest number of infections (107), with the largest number occurring in El-Badrasheen (35). Deaths among chickens reached 63790 in Fayoum, Beni Sueif, Menoufiya, Sharqiya and Gharbiya governorates. The number of birds culled under the supervision of veterinary medicine reached 117962 in Gharbiya, Beheira, Alexandria, and the Red Sea. Total humans infected with bird flu were 14, of them 6 cases died, and 8 recovered completely. The Ministry of Health was daily analyzing up to 100 human specimens all over Egypt². Since Egypt announced the discovery of avian influenza virus in a

¹ Steven Dowshen (2006). Bird flu (Avian flu). The Nemours Foundation, the annual report.

² Al-Ahram Journal (2006). Different numbers " As the Ministry of Health reported "

³ Egypt state information service (2006). Bird flu, at <http://birdflu.sis.gov.eg>

the virus. These measures included burying dead birds and getting rid of the birds, closing shops, as well as poultry farms and preventing the movement of transport and sales of birds between governorates, thereby causing poultry industry to collapse completely and contribute significantly to an increase in unemployment among those working in poultry industry.

In the absence of accurate data on the production of this industry, where the vast majority of producers of this industry are not registered officially- the extent of the damage suffered by the economics of this industry, was summarized by Health Committees as follows³:

- Financial losses as a result of this crisis: about two billion pounds in last October borne by the national economy, educators and ranchers. • About two million workers halt either directly or indirectly on farms and the poultry industry and existing industries relating to poultry, they bear the burdens of families of approximately eight million people.

- Owners of poultry shops were affected by the decision on banning the sale and circulation of poultry 85% of production was damaged and the remaining 15% were slaughtered in the massacres. The daily production which was about two million poultry and chickens dropped to 500 thousand chickens. • Confection plants (which total about 800) were exposed to some problems that may lead to the stoppage or the disappearance of eggs or products which relies on many of egg products.

- On the other hand, the fast food shops were exposed to financial losses estimated at about 70% and consumer reluctance to deal with these shops. As it has become clear, there was a remarkable decline in the demand for chicken in the meal since the emergence of the disease. • Egyptian citizens lost one of the cheapest animal protein, on which they mainly depend in their daily diet (birds and eggs). • The impact of the panic and rumors surrounding it, and the lack of awareness led to more complications than the avian flu itself .We have seen in France, for example, that the volume decline in poultry consumption did not exceed 30% due to the rise in awareness of that disease transmission.

Human flu symptoms¹ are fever, cough, sore throat and muscle aches that spread from person to person. In spite of the previous symptoms, it is safe to eat poultry and poultry product with certain precautions if hygienic practices and proper cooking were observed. The H5N1 virus is sensitive to heat. Normal temperatures used for cooking (70°C in all parts of food) will kill the virus. Consumers' needs to be sure that all parts of the poultry are fully cooked and that egg, too, are properly cooked² (no "runny" yolk).

Travelers to areas affected by avian influenza in birds are not considered to be at elevated risk of infection unless direct and unprotected exposure to infected birds (including feathers and undercooked meat and egg products) occurs. WHO³ continues to recommend that travelers to affected areas should avoid contact with live animal markets and poultry farms, and any free-ranging or caged poultry. Large amounts of the virus are known to be excreted in the droppings from infected birds. Populations in affected countries are advised to avoid contact with dead migratory birds or wild birds showing signs of disease. Direct contact with infected poultry, or surfaces and objects contaminated by their droppings, is considered the main route of human infection. Exposure risk is considered highest during slaughter, butchering, and preparation of poultry for cooking. There is no evidence that properly cooked poultry or poultry products can be a source of infection. Travelers should contact their local health providers or national health authorities for supplementary information.

Furthermore, persons take some precautions when they need to travel to an area already infected by bird flu⁴. These precautions are such as: 1. Pack a thermometer and antiviral alcohol hand cleaning and use it frequently. 2. Find a doctor in advance of your travel in case you get flu symptoms. 3. Avoid places such as poultry farms and bird markets. 4. Do not consume uncooked poultry or poultry products. 5. Avoid going where there are crowds and places with sick people.

¹ BUPA's health information team (2005). Avian flu; symptoms and risk. Bupa health news, mht.

² Laura Bly (2006). Bird flu fears haven't scared off travellers. USA Today, Travel news.

³ W.H.O.(2006). Epidemic and pandemic alert and response. Avian influenza frequently asked questions, mht

⁴ Health Institute (2005). Bird flu: What you can do! A frequently updated publication. Birdflubeacon.com

Objectives

This study was carried out to:

1. Study the effect of bird flu in some hospitality establishment;
2. Estimate the sanitation process during the crisis;
3. Provide recommendation based on the study to maintain personal hygiene in poultry handling;
4. Provide precautions for the travelers.

Methods

The study presented was based on 6 months (May to October 2006) of observation and discussion with personell in a group of hospitality establishment in Cairo and Giza. This group includes 50 different establishment covering 20 hotels, 20 restaurants and 10 fast food restaurants. Executive chefs and F&B managers were interviewed and data were collected by using questionnaires concerning their personal observations and response during the crisis and its effect on their establishments.

The following points were evaluated and analyzed:

A. During the crisis:

1. Prohibition of serving poultry and poultry products (eggs, soups ...etc.);
2. Guest order for poultry dishes;
3. Addition of other items (meat or fish, .) as exchanges;
4. Effect of bird flu in the selling price of other main courses;
5. Methods for modification of the items served and price in the menu cart.

B. After the crisis:

1. Efforts to recover the poultry dishes in the menu;
2. Sanitation practices with birds dealing with storing, handling, cleaning, cooking, serving
. and waste disposal.

Furthermore, some questions were employed for hotel management personell who were asked about regularity of supervision and training system for personal hygiene and sanitation habits. In addition they were asked about methods used to increase staff awareness about the crisis.

Results and Discussion

The evaluation of the questionnaire about the first stage "during the bird flu crisis" is recorded in Table (1).

This (Table) revealed that about 84% of the hospitality establishments prohibited handling of poultry and poultry products as a result of the bird flu crisis. Many of these establishments get rid of all stored poultry, others used only the stored stock of poultry but did not purchase any new products. On the other hand, 16% of the establishments did not stop poultry purchasing or serving. As they have sufficient data for sanitary handling of poultry during the bird flu.

Table (1) : Questions asked to executive Chefs in the different establishments during the bird flu crisis

Answer	Hotels (total 20)	Restaurants (total 20)	Fast food restaurants (total 10)	Total (50)	%
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1. Did you prohibit serving poultry or poultry products ?

Yes	15	19	8	42	84
No	5	1	2	8	16

2. Did guests order previous items ?

Yes	9	2	1	12	24
No	11	18	9	38	76

3. Did you add other items (meat , fish , ... etc) ?

Yes	14	17	3	34	68
No	6	3	7	16	32

4. Did the crisis affect the selling price ?

Yes	1	1	--	2	4
No	19	19	10	48	96

5. If you had additional items , which method did you follow for adding in your menu ?

*Method 1	5	3	7	15	30
*Method 2	6	10	1	17	34
*Method 3	7	--	--	7	14
*Method 4	2	7	2	11	22

*Methods include: 1. Design a new menu. 2. Not adding, but waiter orally says to guests. 3. Write on apology in the Menu for not serving poultry dishes. 4. Advertise about one or two items at the entrance.

Many of the guests (76%) did not order eating poultry or pastries which contain eggs (especially Egyptians). About 24% of the guests were aware of that high temperature of cooking (70° C or over) was sufficient to kill the virus, most of them were Europeans,

The results in Table (1) also showed that 68% of the establishment added another items to cover the decrease in poultry. with the selling price of these items (different kinds of meat and fish) dishes being almost unchanged. Different methods were followed to modify the menu cart (Table1). For example, cover the poultry item with white stickers, or black lines. Others replaced the menu by another in order to modify more items. Others did not modify or change the menu but tried to apologize for not serving poultry by waiters either orally or by writing at the table mat.

At the second stage (after crisis), the Ministry of Tourism announced some hygienic conditions to the hospitality establishment as shown in Table 2 and Table 3. The data in Table (2) elucidate some of the efforts that were made to get back the poultry items into establishment menu.

Table (2): Question about efforts made to recover poultry and its products on the table.

Answer	Hotels (total 20)	Restaurants (total 20)	Fast food restaurants (total 10)	Total (50)	%
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1. Did you mention few sources only for purchasing poultry?

Yes	18	16	9	43	86
No	2	4	1	7	14

2. Did you mention few sources only for purchasing eggs?

Yes	18	16	--*	34	85
No	2	4	--	6	15

3. Did you try to use pasteurized eggs ?

Yes	16	4	--*	20	25
No	4	16	--	20	25

4. Did you begin serving poultry for staff?

Yes	15	17	8	40	80
No	5	3	2	10	20

5. Did you begin serving poultry and pastries for guests ?

Yes	18	17	10	45	90
No	2	3	--	5	10

*Most of fast food restaurants do not use raw eggs.

The results in Table (2) revealed that 86% of the establishments complied with purchasing slaughtered poultry from legalised sources and obtained eggs also from official establishments. Some establishments (25%) began to use pasteurized eggs² (the new technology for egg preservations). On the other hand, 80% of the establishments began to serve poultry dishes to staff to put an end to their fear. After that, 90% of the establishments introduced poultry dishes and used eggs in all pastries.

Data in Table (3) illustrated the sanitation practice for handling poultry and extent of establishment obligation. Results in Table (3) clearly depict that 88% of the establishments stored the frozen poultry in separated places from other meats. Also, thawing was completed in aseparate fridge.

The percentage of establishments that handled poultry with gloves represented 80%. On the other hand, over 96% of the establishments used good detergents and antiseptics for hands and cutting boards. Most of them reported using sanitizer sprays for cutting boards, knives and other kitchen utensils. In addition, some Chefs used

¹ The Ministry of tourism (2006).Circular publication No. (8) To all hospitality establishments

² F.A.O.(2002). Risk assessments of Salmonella in eggs and broiler chicken. www.fao.org.htm

coloured cutting boards for poultry to differentiate them from those used for other foods.

Table (3): The extent of obligation to sanitary conditions*

Parameters	Obligation to sanitary conditions									
	Good					Fair				
	¹ H	² R	³ FF	Total	%	H	R	FF	Total	%
Storing of poultry	19	17	8	44	88	1	3	2	6	12
Handling poultry with gloves	17	15	8	40	80	3	5	2	10	20
Using detergent & antiseptic for hands and cutting boards	20	18	10	48	96	--	2	--	2	4
Efficient cooking and serving	20	20	10	50	100	--	--	--	--	--
Waste disposal controlled	20	20	10	50	100	--	--	--	--	--

* The Ministry of tourism (2006).Circular publication No. (8) To all hospitality establishments.

¹H: Hotels ²R: Restaurants ³FF: Fast food restaurants

Managers had an important role towards the staff awareness of the bird flu crisis to educate them the right behaviors towards another crisis¹. This role included the use of the following: Table (4) ;

- a). Guiding papers or photos and/or boards on the kitchen and staff corridors;
- b). Internet for staff in the establishment;
- c). Seminar and lectures;
- d). Reactions to the data obtained from newspaper and media.

¹Griffith, C.J. and Hewedi, M.M.(2001).The role of risk analysis crisis management in the tourism and hospitality industries: an overview. The international conference on culinary arts and science, University of Cairo, Egypt.

Table (4): The manner of acquainting staff with the crisis

Item	Hotels (total 20)	Restaurants (total 20)	Fast food Restaurants (total 10)	Total (50)	%
Guiding boards	11	8	2	21	42
Internet	3	2	--	5	10
Seminar & lectures	3	1	2	6	12
News paper & media	3	9	6	18	36

Results in Table (4) showed that using of different guides (paper, board or photosetc.) was the major method followed by 42% of the staff.

Recommendations

According to the present study, the following recommendations should be put into considerations:

1. Bird flu has spread through the world, but it affects primarily poultry and remains extremely difficult for humans to catch till now.
2. Availability of risk management in hospitality field to control the crisis.
3. Managers and supervisors should be engaged in training program to inform and educate food handlers about the importance of food safety and danger of unsanitary practices, as well as to educate them to maintain an appropriate degree of personal and place cleanliness.
4. Cooking poultry or poultry products at 70° C will kill the virus.

REFERENCES

1. Al-Ahram Journal (2006). Different numbers; As the Ministry of Health reported.
2. BUPA's health information team (2005). Avian flu; symptoms and risk. Bupa health news, mht
3. Egypt state information service (2006). Bird flu, at <http://birdflu.sis.gov.eg>
4. F.A.O. (2002). Risk assessments of *Salmonella* in eggs and broiler chicken. www.fao.org.htm
5. F.A.O. (2006). Fly-tech to shed light on wild bird role in avian flu spread. Avian flu: FAO in actions, No. 4, p: 1.
6. Griffith, C.J. and Hewedi, M.M. (2001). The role of risk analysis crisis management in the tourism and hospitality industries: an overview. The international conference on culinary arts and science, University if Cairo, Egypt.
7. Health Institute (2005). Bird flu: what we can do! A frequently updated publication. Birdflubeacon.com
8. Laura Bly (2006). Bird flu fears haven't scared off travellers. USA Today Travel news.
9. Steven, D. (2006). Bird flu (Avian flu). The Nemours Foundation, the annual report.
10. The Ministry of Tourism (2006). Circular publications No:8, To all hospital establishments.
11. W.H.O. (2005). Responding to Avian influenza pandemic: three Recommended strategic actions. Global Influenza programs. P:1-22.
12. W.H.O. (2006). Epidemic and pandemic alert and response. Avian influenza frequently asked questions, mht

الملخص العربي

تأثير أزمة أنفلونزا الطيور على صناعة الضيافة

منال محمد الخولي

استهدف هذا البحث تقييم أثر أزمة أنفلونزا الطيور على كل من العاملين والزلاء في عدد من مؤسسات الضيافة في مصر. تم عمل دراسة ميدانية على عينة من الفنادق والمطاعم ومطاعم الأغذية السريعة للوقوف على كيفية مجابتهم للأزمة. وقد أظهرت النتائج امتناع حوالي ٨٤% من هذه المؤسسات الفندقية عن تقديم الدواجن ومنتجاتها بسبب انتشار فيروس H5N1 المسبب لأنفلونزا الطيور خلال انتشار هذه الأزمة. كما حاولت بعض هذه المؤسسات (٦٨%) تقديم أنواع لحوم أخرى مع المحافظة على ثبات سعر البيع. أوضحت النتائج أيضاً أنه بعد انحسار الأزمة جزئياً، بدأت هذه المؤسسات الفندقية في إعادة تقديم لحوم الدواجن ومنتجاتها تحت مجموعة من الاشتراطات الصحية الخاصة بتوجيهات من وزارة السياحة. وقد تم في هذه الدراسة قياس مدى الالتزام بهذه الاشتراطات، والتي تمثلت في تحديد موردين للدواجن ومنتجاتها، فصل الدواجن أثناء التخزين عن غيرها من اللحوم، استخدام مطهرات ومنظفات خاصة للأيدي والأدوات بالإضافة للعناية بالطهي والتقديم. وقد أثبتت الدراسة التزام أغلب هذه المؤسسات بهذه الاشتراطات الصحية. كما تم دراسة جهود الإدارة في توعية العاملين في المجال بالتعامل مع هذه الأزمة.