Consumer Food Safety Concerns Inside the Home Compared with Outside of the Home in Lebanon

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Introduction

Food safety in Lebanon is a major public health issue (El Fadel et al., 2003), potentially associated with the country’s unique public health infrastructure and political challenges regarding policy and strategy. Foodborne illness is reportedly widespread in Lebanon, but the absence of a proper disease reporting mechanism makes incidence difficult to quantify (El Fadel et al., 2003.)

There is a lack of routine inspection and control measures as set by the Lebanese Food Safety Authority to ensure compliance in advised food hygiene regulations (Ghadia et al., 2014). Many food businesses operate without a licence of regulation (Ministry of Tourism, 2013) and studies on food safety knowledge of food business owners has been found to be insufficient (Farouk-Klingebiel et al., 2015).

Other factors such as unstable power supply may cause households and retail outlets to face electricity shortages during the day (Hassan et al., 2014) having potential impact on the safe storage of food.

Implementation of safe food preparation, storage and handling behaviours is critical to reduce the risk of foodborne illness to health. Research has established that food safety knowledge as well as attitude towards food safety practices influences behaviour (Redmond and Griffith, 2005).

A study by Hassan and Dimassi (2014), showed that Lebanese university students had low levels of food safety knowledge. Further research is required to establish consumer food safety concerns in Lebanon.

Purpose

The aim of the research was to determine and explore Lebanese consumers’ risk perceptions of food safety issues inside the home and outside of the home.

Methods

Recruitment: Consumers (aged >18 years) who approached the MUBS ‘Health Day’ stand at a shopping mall in Beirut, Lebanon on 9th September 2017 were invited to participate in the study.

Data Collection: Qualitative face-to-face interviews were undertaken with a piloted interview schedule to explore the food safety perceptions of consumers. Demographic data were captured and informed consent was obtained prior to conducting the interviews.

Data analysis: Thematic analysis of data was conducted using NVivo to identify themes in food safety perceptions.

Ethical Approval: Approval was obtained from the Health Care and Food, Ethics Panel at Cardiff Met. (reference no: 9299) and the Ethics Panel at MUBS, Lebanon.

Results and Discussion

A total of 43 Lebanese consumers took part in the study. 58% (N= 25) were male and 42% (N= 18) were female. The age of participants ranged between 18 and 69 years. Thematic analysis explored key areas of concern which related to food safety practices in the home, food safety concerns outside of the home and factors affecting choice of location to consume food. Findings highlighted food safety issues unique to Lebanon.

Consequences of unsafe food practices inside the home

Many consumers reported their food safety concerns about food prepared outside of the home caused them to make particular food choices as to where they consume their food as illustrated in Figure 3.

Food safety concern affecting choice of location to consume food

<table>
<thead>
<tr>
<th>Consumer food safety concerns unique to Lebanon</th>
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<tbody>
<tr>
<td>In Lebanon, we do not have electricity 24/24 hrs and this is a huge obstacle when storing food in fridges because the temperature inside fridges goes up.</td>
</tr>
<tr>
<td>The electric current is not always available so food in the fridge gets poisoned sometimes.</td>
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<tr>
<td>“I avoid buying from vending trolleys on the streets because the storage and handling food on those trolleys is not good.”</td>
</tr>
<tr>
<td>“I do not eat in restaurants in Lebanon to protect my health and the health of my kids and to avoid any microbes found in ready to eat food”</td>
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Consequences of unsafe food practices outside of the home

Food safety concerns outside of the home

Restaurants were cited by many consumers as a very likely place to contract a foodborne illness, with some participants reporting to avoiding eating outside of the home altogether (Figure 2).

Respondents perceived that restaurants fail to ensure supervision of staff and adherence of food safety guidelines. Furthermore, concerns regarding hygiene standards were expressed.

Consumer food safety concerns outside of the home

| Restaurants and related organisations do not abide by the necessary hygiene standards of food safety |
| “There is no supervision in restaurants” |
| “There is a lot of restaurants / food service organisations who serve expired food – there is a big chance to get food poisoning from these places” |

Significance of study

- Consumers in Lebanon indicated different food safety concerns outside of the home compared with inside of the home
- Food safety concerns impacted on the location of consumers choice of food consumption
- Food-safety concerns which are particularly unique to Lebanese consumers have been identified and these require consideration when developing future consumer training, education and prevention strategies.