

Assessment of Butchers Attitudes and Practices Toward Food Safety in Thi-Qar governorate in Iraq

Sameeha Naser Abed¹, Zahraa Zuhir¹

¹Department of Community Health Techniques, Kut Technical Institute, Middle Technical University, IRAQ

Abstract

Objectives: To assess of attitudes and practice of butchers in Thi-Qar governorate regarding food safety and to find out any association of different variables with practices and attitudes. **Methodology:** A descriptive cross – sectional study to assess the attitudes and practices of butchers. The data collection extended from the February 2018 and April 2018. each. The sample of (57) butchers was selected from (26) small slaughter houses in Thi-Qar governorate who agreed to participate were included in this study. **Results:** A total of fifty seven (57) butchers were selected as a sample size for this study. 46(80.7%) were in the age of <30 and from the urban area. Most of butchers interviewed were married (52.6%). Based on length of experience of butchers, The highest proportion of them (59.6%) were in the length of experience (≤ 5) and the highest percentage of butchers were in the level of intermediate (31.6%). The overall attitudes and practices on food safety was poor, (67%) and (91%) respectively. **Conclusions:** There was high poor attitudes of food safety in of butchers. As an overall, nearly three quarters of the butchers having poor practice scores relating to food safety.

Key words: food safety, personal hygiene, butchers , practices , attitudes .

Introduction

Although food is indispensable for maintaining the life on the earth(1), it can also cause food borne diseases(2) which are important public health issues worldwide(3), such diseases cause about 2.2 million human deaths annually(2,4). In this respect, meat is a major component of the food and therefore, is the important animal protein resource which is essential for life and health (5). Notwithstanding the slaughtering of animals is typically considered to be economic activity which increasing meat supply, and others products such as skin and leather, there is an increasing enteric pathogens and contaminate environment also(6,7). As one indication of the force of the hitch, it is approximated that about 27 to 38% of foodborne diseases outbreaks contribute to poor personal hygiene (8). Food safety is a social responsibility (9) and a basic need for public health in developing countries in the twenty first century (10). as well as developed world (11). Moreover, it plays numerous, critical roles to in maintaining a human's overall health (9). It has been defined as science and an international concern that is prevents from unsafe food and food borne diseases (12,13). Different factors within the poor hygiene practices such as do not washing hand

(14), do not wearing of protective clothing, unclean of butchery equipment, as well as transporting the meat in unclean container and others factors can lead to meat contamination (15) and these factors are considered to be the major risk factors to increase foodborne illness (16). More specifically, good personal hygiene and food handlers training are prerequisites for food safety. In addition it can play an important role in the effective prevention contaminated of food . (17,18,10). All of the above mentioned issues that relate to pollute the environment are common among Abattoirs (19). These conditions are better enhanced when butchers consistently pay attention to promoting personal hygiene. Hence literature regarding attitude and practice of hygiene and food safety among abattoir workers is limited (20), the present study aimed at assessing attitude and practice of food safety among butchers in Thi-Qar governorate.

Material and Method

Place of study : The study was conducted in Thi-Qar governorate. Twenty six small slaughter houses

Study sample: The sample selection was convenient sample. Butchers present in the small slaughter houses at the time of conducting the study. The sample of (57)

butchers was selected from (26) small slaughter houses in Thi-Qar governorate who agreed to participate were included in this study.

Design&time of Study:A descriptive cross – sectional study to assess the attitudes and practices of butchers .The data collection extended from the February to April 2018.

The data collection: The data collection was by interview of a previously designed questionnaire constructed by the investigator after intensive review of relevant literatures and evaluated by a panel of experts. The items of questionnaire included 28 close ended questions, including different statements concerning the attitudes and practices of various aspect of food safety arranged in the following parts:

Part I: Demographic information sheet; four items, included demographic characteristics like age, gender, marital status, occupation, residence,experiences years.

Part II: practices on food safety (12 question) : Butchers were required to respond with yes or no , for practices, scores which were assigned for response in practices as related to 2- point type likert scale and scored as (2) for yes, (1) for no. The potential range of general questionsscores was12-24; Poor practice was defined as scores of 12-17, and good practice as 18 and more

Part III: Attitude towards food safety(16 question): Butchers were required to respond with agree or disagree , for attitudes, scores which were assigned for response in attitudes as related to 2- point type likert scale and scored as (2) for yes, (1) for no..The potential range of general questionsscores was16-48; Poor attitude was defined as scores of 16-23, and good attitude as 24 and more.The subjects were informed about the study objectives during the face to face interview, the subjects responses through the employment of the application of the constructed interview as mean of data collection.

Statistical Analysis

The approach to data consisted of two steps (descriptive and analytic statistic). Tables (Frequencies, and Percents), arithmetic mean, and standard deviation were used in order to analyze . Fisher exact test was

used to determine the significant statistical association between qualitative and quantities demographic characteristics that include age group gender, education level, marital status and practices and attitudes towards food safety and assess the results of the study under application of the statistical package (SPSS) ver. (24.0). P value was used as ≤ 0.05 as the level of significance for the test of significance.

Findings

The result of this study as explained above is presented in three forms, thus, Demographic characteristic, practices and attitudes. Therefore, the result and analysis are as follows;A total of fifty seven (57) butchers were selected as a sample size for this study The demographic information of butchers as presented in Table 1 below. Based on the age of butchers , 46(80.7%) were in the age of <30 while 11(19.3%) were in the age of ≥ 30 . However, study published from Nigeria done by O. A. Olowoporoku (2016) show a prominent age groups of study were age group <40years (93.3%)(21). Concerning the residenceof butchers , 46(80.7%) were from the urban area while 11(19.3%) were from the rural area.Similar findings were seen in study of Junaidu Yakubu M et al (2013). in Nigeria. It was noticed that about eighty of the butchers interviewed were residence in urban area (20). Most of the butchers interviewed were married (52.6%), followed by single (38.6%), and the lower percentage was others (8.8%). Based on length of experienceof butchers , The highest proportion of butchers) 59.6%) were in the length of experience(≤ 5) and this is in accordance with other study done by Mirembe BB et al (2015) in Uganda(22). In regard to education level, the highest percentage of butchers were in the level of intermediate (31.6%) followed by primary level)26.3%) and secondary level (14%). While both illiterate and institute and more education level was 10.3%. Very few of butchers were reading and writing (7%).This finding is contrary to the study of KhelkarTuneer and TiwariMadhavi (2015), which found the majority of butchers were illiterate (76%)(23).

Table 1: Distribution of butchers by Demographic characteristic.

Variable		Frequency	Percent
Age	<30	46	80.7
	≥30	11	19.3
Residence	Urban	46	80.7
	Rural	11	19.3
Marital	single	22	38.6
	Married	30	52.6
	others	5	8.8
Length of Experience	≤5 years	34	59.6
	>5 years	23	40.4
Education level	Illiterate	6	10.5
	Read and write	4	7.0
	Primary	15	26.3
	Intermediate	18	31.6
	Secondary	8	14.0
	Institute & Higher	6	10.5

The figure (1) represent the practices of butchers regarding food safety , The overall practices on food safety was poor. (67%) had poor practices of food safety while (33%) had good practices.This finding is supported by Magda A. Latif et al (2014), who found the generally poor practices on food safety has been demonstrated in their study(17).



Figure 1 : Distribution of butchers by practices of food safety

The figure (2) represent the attitudes of butchers regarding food safety , The overall attitudes on food safety was poor.(91%) had poor attitudes toward food safety while only (9%) had good attitudes.This finding is contrary to the study of Magda A. Latif et al (2014)

who evaluated of food safety knowledge, attitudes and practices among Abattoir Workers’ in Khartoum State in Sudan and concluded that the overall attitudes were well (17).

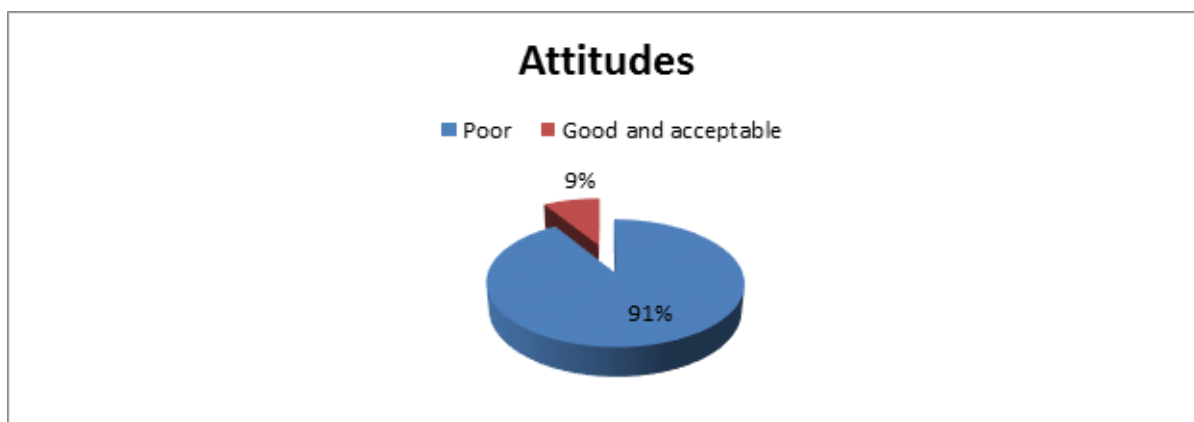


Figure 2 : Distribution of butchers by attitudes toward food safety

Table 3 shows the association between the socio-demographic characteristics, and practices levels of butchers involved in the study, with their reported involvement in food safety. As shown in Table 3, marital status and age were found to be statistically significantly associated with practice. It is also observed that residence, length of experience and education level were found to be not statistically significantly associated with practice .

Table 3 : Distribution socio-demographic characteristics and practices levels of butchers

Variable Good			practice			Total	
			Poor				
Age	<30	Count	12	34	46	0.0305	
		%	26.1%	73.9%	100.0%		
	≥30	Count	7	4	11		
		%	63.6%	36.4%	100.0%		
Residence	Urban	Count	13	33	46	0.1530	
		%	28.3%	71.7%	100.0%		
	Rural	Count	6	5	11		
		%	54.5%	45.5%	100.0%		
Marital status	Single	Count	2	20	22	0.0008	
		%	9.1%	90.9%	100.0%		
	Married	Count	16	14	30		
		%	53.3%	46.7%	100.0%		
	Others	Count	1	4	5		
		%	20.0%	80.0%	100.0%		
Length of experience	≤5	Count	8	26	34	0.0857	
		%	23.5%	76.5%	100.0%		
	>5	Count	11	12	23		
		%	47.8%	52.2%	100.0%		

Cont... Table 3 : Distribution socio-demographic characteristics and practices levels of butchers

Education level	Illiterate	Count	0	6	6	1.0000
		%	.0%	100.0%	100.0%	
	Read and write	Count	3	1	4	
		%	75.0%	25.0%	100.0%	
	Primary	Count	4	11	15	
		%	26.7%	73.3%	100.0%	
	Secondary	Count	7	11	18	
		%	38.9%	61.1%	100.0%	
	Intermediate	Count	3	5	8	
		%	37.5%	62.5%	100.0%	
	Institute or more	Count	2	4	6	
		%	33.3%	66.7%	100.0%	

Table 4 shows the association between the socio-demographic characteristics, and attitudes levels of butchers involved in the study, with their reported involvement in food safety. As shown in Table 4, residence and education level were found to be statistically significantly associated with attitudes. It is also observed that age, length of experience and marital status were found to be not statistically significantly associated with attitudes .

Table 4 : Distribution socio-demographic characteristics and attitudes levels of butchers

Variable			Attitude		Total	
			Good	Poor		
Age	<30	Count	3	43	46	0.243
		%	6.5%	93.5%	100.0%	
	≥30	Count	2	9	11	
		%	18.2%	81.8%	100.0%	
Residence	Urban	Count	2	44	46	0.044
		%	4.3	95.7%	100.0%	
	Rural	Count	3	8	11	
		%	27.3	72.7%	100.0%	
Marital status	Single	Count	0	22	22	0.355
		%	.0%	100.0%	100.0%	
	Married	Count	4	26	30	
		%	13.3%	86.7%	100.0%	
	Others	Count	1	4	5	
		%	20.0%	80.0%	100.0%	
Length of experience	≤5	Count	4	30	34	0.638

Conclusion

There was high poor attitudes of food safety in butchers. As an overall, nearly three quarters of the butchers having poor practice scores relating to food safety. There was significant relation between practice of food safety with age and marital status of butchers. Residence and education level were found to be statistically significantly associated with attitudes. The findings should be used for further strengthening food safety programs to help butchers be healthier and to enhance their educational outcomes.

Ethical Clearance: Before collecting data, necessary approvals and official permissions were obtained from butchers in The-Qar governorate. The purpose of the study was clearly explained to the butchers before filling the questionnaire.

Conflict of Interest: Nil

Source of Funding : Nil

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