



Assessment of Nursing Students' Knowledge about Cholera Prevention Measures in Al-Hadi University College

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Abstract: Cholera is defined as an acute bacterial infection that is caused by *Vibrio Cholera*. A descriptive cross-sectional survey using a self-administered questionnaire involving students who study in Al-Hadi University Collage in order to Assess students' Knowledge toward Cholera Prevention Measures. The result shows that more than half of the total sample were male, while (43.33%) of participants with age group (30-39). According to marital status (40%) of them are single. Most of students' fathers have finished their secondary school, also the students' mothers. The result shows the levels of total knowledge among participants had low to moderate knowledge. Reveals that there are no significant relationships between demographic data and knowledge in domains for study at p-value= 0.05.

Introduction

Cholera is defined as an acute bacterial infection that is caused by *Vibrio Cholera*. The main clinical feature for cholera is the watery diarrhea. Although the causative bacteria have above 200 serotypes, only two serotypes are prevalent in poor sanitary and hygienic conditions which are the O1 and O 139. These particular two strains have been linked to the cholera outbreaks globally. Cholera infections are commonly severe, and highly virulent. Additionally, cholera outbreaks usually occur in areas which have contaminated water or food because of poor sanitary measures. The bacteria are transmitted along the gastrointestinal tract through contaminated food or water. *Vibrio cholera* produces cholera toxin, which causes the clinical symptoms of the infection. In addition to the watery diarrhea, other symptoms included vomiting and abdominal colic. Furthermore, the infection affects all age groups (Elimian et al, 2020).

However, the key to prevent cholera outbreaks is through improving public hygiene, water sanitation, and sewage systems. Additionally, cholera vaccination can play an important role in infection control and prevention. Recent reports have demonstrated that the annual estimates for cholera infections globally are up to 4 million patients, with up to 143,000 annual mortality. Accordingly, cholera represents a global public health hazard and a sign of under development for a country. Cholera outbreaks affected multiple countries over the past years mainly in Asia and Africa, such as India,

Sudan, Pakistan, and Bangladesh. Another contributing factor for the spread of cholera is the poor knowledge and awareness of the public about its modes of transmission and early measures of diagnosis and treatment of cholera symptoms. Hence, it is important to understand the knowledge and awareness of the public toward the disease to reduce its transmission (Rosdi et al, 2019).

Methodology

A descriptive cross-sectional survey using an self-administered questionnaire involving students who study in Al-Hadi University Collage in order to Assess students ' Knowledge toward Cholera Prevention Measures.

Random sample that includes 30 students to assess students ' Knowledge toward Cholera Prevention Measures.

Based on review of relevant literature a self-administered questionnaire was designed by the researchers. The study instrument was consisted of two parts: the first part about demographic data which include students' gender, age, marital status, scholastic stage, father education and mother education. The second part include 29 questions concerning with students' knowledge were measured by likert scale. To achieve the purpose of the present study, the responses of knowledge questionnaire were scored as (3) for I know responses, (2) for uncertain response and (1) for I don't know responses.

Data were collected through direct self-administered questionnaire Which included questions about the knowledge regarding cholera prevention measures. Using constructed questionnaire.

The following statistical approaches are used in order to analyze the data of the study under application of the statistical (spss)

Results

Table (1) Distribution of the Demographic Characteristics (N.30).

List	Items	Frequency	Percent
Gender	Male	16	53.33333
	Female	14	46.66667
Age	20 _ 29	10	33.33333
	30 _39	13	43.33333
	40 - 49	5	23.33333
	50 years and more	2	10
Marital status	Married	11	36.66667
	Single	12	40
	Divorced	4	13.33333
	Widow	3	10
Scholastic stage	Second stage	10	33.33333
	Third stage	10	33.33333
	Fourth stage	10	33.33333
Father education	Not read and write	2	6.66667
	Read and write	1	3.33333
	Primary school	2	6.66667
	Intermediate education	1	3.33333
	Secondary school	13	43.33333
	diploma	7	23.33333

		Bachelor	4	13.33333
		Higher education	2	6.666667
		Not read and write	2	6.666667
		Read and write	2	6.666667
		Primary school	2	6.666667
		Intermediate education	6	20
		Secondary school	10	33.33333
		diploma	6	20
		Bachelor	1	3.333333
		Higher education	1	3.333333

Table (1) shows that more than half of the total sample were male, while (43.33%) of participants with age group (30-39). According to marital status (40%) of them are single. The equal number of students for each scholastic stage. Most of students' fathers have finished their secondary school, also the students' mothers.

Table 2: Level of knowledge

Level of knowledge	Low	Moderate	High
	f (%)	f (%)	f (%)
	10 (5%)	10 (50%)	0 (0.0%)
	M.S 1.50		S.D. .51299

F: Frequency, %: Percentage, MS: Mean of score, SD Standard deviation

This table shows the levels of total knowledge among participants had low to moderate knowledge.

Table 3: Association Between Knowledge toward cholera prevention measures and Their Demographic Characteristics (n=30).

Knowledge	Knowledge		Total	Sig. Pearson Chi-Square.
	Low	Moderate		
Gender				
Male	9	7	16	.325
Female	6	8	14	
Total	15	15	30	

Knowledge	Knowledge		Total	Sig. Pearson Chi-Square
	Low	Moderate		
Age				
20-29	4	6	10	.350
30-39	7	6	13	
40-49	3	2	5	
50 and more	1	1	2	
Total	15	15	30	

Knowledge	Knowledge	Total	Sig.
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Marital status	Low	Moderate		Pearson Chi-Square
Married	4	7	11	.25
Single	6	6	12	
Divorced	3	1	4	
Widow	2	1	3	
Total	15	15	30	
Knowledge	Knowledge		Total	Sig. Pearson Chi-Square
Scholastics stage	Low	Moderate		
Second stage	3	7	10	.25
Third stage	6	4	10	
Fourth stage	6	4	10	
Total	15	15	30	

Knowledge	Knowledge		Total	Sig. Pearson Chi-Square
Mother education	Low	Moderate		
Not read and write	1	1	2	.751
Read and write	2	0	2	
Primary school	1	1	2	
Intermediate education	4	2	6	
Secondary school	4	6	10	
diploma	2	3	6	
Bachelor	0	1	1	
Higher education	1	1	2	
Total	15	15	30	

Knowledge	Knowledge		Total	Sig. Pearson Chi-Square
Father education	Low	Moderate		
Not read and write	1	1	2	.11
Read and write	0	1	1	
Primary school	1	1	2	
Intermediate education	1	0	1	
Secondary school	5	8	13	
diploma	3	2	7	
Bachelor	3	1	4	
Higher education	1	1	2	
Total	15	15	30	

This table reveals that there are no significant relationships between demographic data and knowledge in domains for study at $p\text{-value} = 0.05$.

Discussion of the Study Results

This chapter revealed explanation and interpretation of the study results that might lead to determine the level of teachers Knowledge regarding first aid. The discussion was methodically determined and oriented to the validation of the results that were appeared out of the data analysis in order to validity of the study goals.

Table (1) shows that more than half of the total sample were male, while (43.33%) of participants with age group (30-39). This result partially agrees with Ali EM et al, 2021 who found that (55.8) of participants were male, most of them at age 20-40 years old. According to marital status (40%) of them are single. This agrees with Bilal et al, 2019 who stated (33.3%) are single. The equal number of students for each scholastic stage. Most of students' fathers have finished their secondary school, also the students' mothers.

Table (2) shows the levels of total knowledge among participants had low to moderate knowledge. This agree with Ali EM et al, 2021 who stated that level of knowledge of the public in Saudi Arabia is poor, also the result agree with study of Bilal et al, 2019 who expressed poor mean knowledge which represent toward knowledge of cholera.

Table (3) reveals that there are no significant relationships between demographic data and knowledge in domains for study at $p\text{-value} = 0.05$. this agree with Fatima, 2016 who expressed that the demographic data dose not influence the level of knowledge.

Conclusion

All participants have low to moderate level of knowledge concerning cholera preventing measures, most of the participants were male with age 30-39 years old.

Recommendation

The current study recommends that the Ministry of Education in Iraq must be

1. There is a need to restructure the Health Education programs regarding cholera preventing measures.
2. A similar study can be conducted in large sample in order to generalize the findings.
3. A comparative study can be done in rural and urban areas.
4. An interventional study can be done on effectiveness of different strategies on total cholera guideline.

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