Austin Journal of Nursing & Health Care

Open Access

Austin Publishing Group

Mini Review

Knowledge, Attitude and Preventive Practice Related Cholera among People in Jabal Marra

Bilal Mohamed M[1]* and Ibrahim Osman Ahmed M[2]*

[1]Head Department of Higher Education in Faculty of Nursing Science, Omdurman Islamic University, Sudan

[2]Head Department of Higher Education in Faculty of Nursing Science, Emam Elmahadi University Faculty of Nursing Science, Sudan

***Corresponding author:** Manal Bilal Mohamed, Head Department of Higher Education in Faculty of Nursing Science, Omdurman Islamic University Head Department of Higher Education in Faculty of Nursing Science, Sudan

Mohamed Ibrahim Osman Ahmed, Head Department of Higher Education in Faculty of Nursing Science, Emam Elmahadi University Faculty of Nursing Science, Sudan

Received: May 30, 2019; **Accepted:** June 19, 2019; **Published:** June 26, 2019

Abstract

Cholera is an acute bacterial enteric disease characterized in it severe form by sudden onset, profuse painless watery stool, nausea and profuse vomiting early in the course The aim of the study at hand examine the knowledge, attitudes and practices towards cholera out breaks and to find out the association between the respondents, knowledge, attitude, and selected demographic variables. Study design: A cross sectional study was conducted in jabal marra city 2018 this cross-sectional study, conducted during December - march 2019 90 enrolled in this study selected randomly from jebal marra people.

Results: The study expressed poor mean knowledge which represent *p*.011and good attitude *p*.000 practice, *p*.000 The association explained insignificantly attitude with demographic data p.188 while significant association of demographic with knowledge.154- and practice *p* 0.007.

Conclusion: Revealed a poor level of knowledge on cholera among them. Strengthening of health education activities may, improve their knowledge; the education is the corner stone in development of well-adapted attitude and practice score regarding cholera

Keywords: Knowledge attitude and practice jebel marra citizen Sudan

Introduction

Cholera is an acute bacterial enteric disease characterized in it severe form by sudden onset, profuse painless watery stool [1]

WHO divided this definition into?

i. Lack of safe drinking-water or drinking contaminated water

ii. Eating rotten food/lack of food protection against contamination

iii. Infected by cholera germ (V. cholera) [2] the Infection caused by the bacteriumVibrio cholera of the O1O139 sero group; and it can rapidly lead to severe dehydration and death if untreated [3]. There are many risk factors that can cause cholera and a review of literature showed that water source contamination (29%), rainfall and flooding (25%), and refugee settings (13%) are the most common risk factors for cholera worldwide [4]. The occurrence and severity of cholera outbreaks is mostly increased by misperception of behavior in regard to practicing healthy hygiene and sanitation [5].

Type of cholera management: Oral Rehydration Salts (ORS), intravenous fluids, home-made saline solutions lightly-salted rice water, or plain water.

Places of cholera management: When cholera occurred start early management at home by giving oral rehydration salt before arrived to health care centers where receiving proper management.

Cholera-prevention measures: Safe water, proper sanitation and health education to the community are consider preventive measures for cholera which include adherence to adequate food safety and to basic hygiene practices by individuals. This included

i) Safe water: Use of boiled or tablet-treated or tube well water for drinking and household work

ii) Proper sanitation: Use of sanitary latrine/satisfactory sewage system/proper sanitary disposal of stool/feces [6]

Table 1: Socio demographic data.

Variable	SD	Mean	%	Number
Age				
20-30 years	0.77966	2.1	25.6	23
31-40 years			38.9	35
Above 40			35.6	32
Gender				
Male	0.49831		43.3	39
female		1.5667	56.7	51
Marital status				
single	0.51154	1.6889	33.3	30
married			64.4	58
widow			2.2	2
Educational status				
None	0.67421	1.4778	62.2	56
Some primary			27.8	25
Primary			10	9
Toilette type				
Latrine	0.74292	2.1444	21.1	19
Open Defecation			43.3	39
Non-flush Toilet			35.6	32

Citation: Bilal Mohamed M and Ibrahim Osman Ahmed M. Knowledge, Attitude and Preventive Practice Related Cholera among People in Jabal Marra. Austin J Nurs Health Care. 2019; 6(1): 1050.

Table 2: Knowledge of respondents towards cholera n (90).

Variable	I don't now		no		yes	
	%	No	%	No	%	No
Cholera is Watery stool with or without vomiting	8.9	8	27.8	25	63.3	57
Lack of safe drinking-water, or drinking of polluted water	6.7	6	55.6	50	37.8	34
Eating rotten food/lack of food protection against contamination/if the food has not been covered up	40	36	23.3	21	36.7	33
Cholera Affected by cholera germ	35.6	32	23.3	21	41.1	37
Type of cholera management/ORS	22.2	20	44.4	40	33.3	30
Rice saline	20	18	52.2	47	27.8	25
IV fluid	27.8	25	36.7	33	35.6	32
Home-made saline	18.9	17	38.9	35	42.2	38
Plain water	11.1	10	13.3	12	75.6	68
Home	2.2	2	17.8	16	80	72
Health center	5.6	5	35.6	32	58.9	53
Mean knowledge Frequency %	%		frec			
Good (> 65%)	4.44		4			
Fair (50–65%)	3.33		3			
Poor (< 50%)	92.22		83			

Table 3: Attitude of respondents toward cholera no (90).

Variable	neutral		disagree		agree	
	%	No	%	No	%	No
Hands should be washed with soap and water after defecation	16.7	15	33.3	30	50	45
Indiscriminate passing of stool can cause disease	18.9	17	28.9	26	52.2	47
Hands should be washed before taking food	16.7	15	32.2	29	51.1	46
washing hands before eating and after using the toilet	16.7	15	34.4	31	48.9	44
Cholera also affects children	18.9	17	31.1	28	50	45
Cholera also affects adults	16.7	15	30	27	53.3	48
cholera is sever health problem lead to death	18.9	17	31.1	28	50	45
cholera can be prevented by vaccine	21.1	19	28.9	26	50	45
Mean attitude Frequency %	%		frec			
Good (> 65%)	55.55		50			
Fair (50–65%)	33.33		30			
Poor (< 50%)	11.11		10			

iii) Health education: Attending health-education sessions/ health-education advice to drink tubewell/ boiled/tablet-treated water, etc [7]

(iv) Food safety: Housefly-control measures/keeping food covered/taking fresh food and avoiding rotten food control files by screening and use of insecticides. Control fly-breeding through frequent garbage collection and disposal and through fly control measure in latrine construction and maintenance [8]

v) Washing hands with soap before meal/ washing hands with soap after defecation all these consider as basic good hygienic practices

Factors affects outbreak of cholera: Geographical, socio-economic and socio cultural Backgrounds of people in the affected area which influence practices may contribute to spread of cholera. These include low educational level, unhygienic food handling accelerated by poor sanitation, contaminated food, and contaminated water due to poor knowledge, negative attitude and poor practices [9]. Developing country every day facing outbreak of cholera and added to burden of water shortages, all these concern that cholera could become more difficult to control [10]. Although prevention of cholera is depend at the level of individual responsibility with regards to the practice of healthy hygiene and sanitation [11]. Because of the rapid onset and spread of the disease, the key to reduce or eliminate cholera is through prevention. As a faecal oral disease, prevention is only possible through the promotion of improved hygiene practices and through increased access to safe water and sanitation facilities [11].

Method of Control

Cholera can be prevented by good practice which based on access to safe water and proper sanitation as well as adhesion to safe food handling practice-Educate the public regarding the importance of hand washing. Provide suitable hand washing facilities, particularly for food handler and attendants involved in the care of patients and children [7]. Also cholera can be prevented by-Dispose of human feces safely and maintain fly-proof latrines. Where culturally appropriate encourage use of sufficient toilet paper to minimize finger contamination. Under field condition, dispose of feces by burial at a site distant and dawn stream from the source of drinking –water [6] other preventive measures by provide safe private supplies and Control flies by screening and use of insecticides. Control fly-breeding through frequent garbage collection and disposal and through fly control measure in latrine construction and maintenance [8]. The aim of the study at hand examine the knowledge, attitudes and practices toward cholera out breaks and to find out the association between the respondents, knowledge, attitude, and selected demographic variables Study design: A cross sectional study was conducted in jabal marra city 2018 during December - march 2019 Study setting and population. There are 90 enrolled in this study selected randomly from jebal marra people. The mountains are located in the center of the Darfur region of Sudan on the border of the states of South Darfur and Central Darfur, with a smaller part of the range in the state of North Darfur. The highest point is Deriba Caldera. The upper reaches of the massif is a small area of temperate climate with high rainfall and permanent springs of water amidst the dry savanna and scrub of the Sahel below [12]. Till conducting of this study the government of Sudan not took any response toward the outbreak of the incidence of this disease but radio of dabanga said March 2018 there were 26 cases of cholera in jebal marra in central darfor

Tools: questionnaire done face to face which include the following-Socio-demographic characteristics like age, sex, education state: Knowledge question about 11 question regard recognition of cholera and the causes and management, scored 1 for correct answer and [13] for incorrect answer. Other part of questionnaire regard attitude like washing hands are taking food and after toilet and if it is fatal or not or it is has vaccine or not 8 questions scored 1 for correct answer and [14] for incorrect answer. Last part of questionnaire regard practice like use safe water and sanitation and covered food and the needs for health education regard prevention of cholera [15] question scored 1 for correct answer and [16] for incorrect answer

Results

The majority of respondents, 35 (38.9%) were 31-40 years old, followed by 32(56.7%) 51 who were above 40years old, and 23 (25.6%) 41–50 years old. Out of the total, were female and 39 (43.3%), majority of them are married and represent 58(64.4) while 30(33.3%) are single, regard education status 56(62.2%) are non educated, 25(27.8%) are some primary and 9(10.0%)are primary, 39(43.3%)use open defecation and 32(35.6%) use non flush toilet and the rest of respondent use latrine as in Table 1 and Table 2 when asked about definition regard cholera and safe drinking water and not covered food and management of cholera the mean score knowledge of respondents is which represent poor knowledge score 83(92.22%).P.011 In Table

Table 4: Practice of respondents regard cholera.

Variable	I don't know		no		yes	
	%	No	%	No	%	No
Use of safe water			4.4	4	95.6	86
Proper sanitation			4.4	4	95.6	86
Health education	5.6	5	1.1	1	93.3	84
Food safety					100	90
Basic hygiene practice	6.7	6	4.4	4	88.9	80
Mean practice Frequency %	%				frec	
Good (> 65%)	66.6				60	
Fair (50–65%)	33.3				30	
Poor (< 50%)	o				0	

Table 5: Scores of KAP.

Score	P value	SD	Mean
knowledge	0.011	3.328	18.666
attitude	0	5.975	13.388
practice	0	1.118	5.388

Table 6: Association between mean scores of knowledge of and attitude toward the cholera with selected variables.

Parameter	p	SD	means
knowledge			
age	-.154-	0.799	21
Gender		0.498	1.566
Marital status		0.511	1.688
Educational status		0.674	1.477
Toilette type		0.742	2.144
attitude			
age	0.188	0.799	21
Gender		0.498	1.566
Marital status		0.511	1.688
Educational status		0.674	1.477
Toilette type		0.742	2.144
practice			
age	0.007	0.799	21
Gender		0.498	1.566
Marital status		0.511	1.688
Educational status		0.674	1.477
Toilette type		0.742	2.144

3 we asked about the attitude regard cholera which is about washing hands before after using toilet and wash with soap and water before taking food and if cholera affects children and adults we found that their mean score is good 50 (55.55%) P.000 In Table 4 and Table 5 the respondent have good practice regard use safe water and food and did good basic practicing of hygiene and the thinks health education is good for preventing occurrence of cholera their mean score is 60 (66.6%) P.000 In Table 6 there is significant relation between knowledge and practice and demographic data in vise versa there is

insignificant relationship attitude between demographic data.

Discussion

The mean knowledge score of cholera patients participating in the present study (92.22%) is poor< 50%. Which came as same with study done in population of Al-diwaniya Province where their knowledge score is 7.8 +2.7.wheher the researcher explained that poor knowledge score might be attributed to the fact of poor educational programs adopted by the national media regarding the general knowledge about infectious disease and cholera in particular. And lack of primary health care play an important factor in education regard prevention of cholera [13]. Also the results of knowledge in this study came in same line with study done in Daka city where the mean score of knowledge regard diarrheal disease is 23% which is poor [1] at variance results which observed in Zanzibar and other studies came. Haiti where their knowledge regards recognition of cholera is cholera as watery stool or diarrhea 60-89 % [14]. Other measured variable mean attitude score of the patients enrolled in the present study half of them is positive which represent 55.5%. This interpretation of this value is similar to Al-Diwania provence [13]. their respondents score was (7.5+1.2)the study at hand respondents have good practice regard using safe water proper sanitation95.6% and practice base hygiene88.9 %and health education 93.3% this results agree with study done in Dhaka, Bangladesh [1]. Where their respondents practice more positive regard prevention of cholera, about 89% of the respondents practiced food safety by having fresh food and avoiding rotten food and maintained good-hygiene to prevent cholera in their households. Two-thirds 86% of their respondents used safe water for drinking and household purposes [1]. The present study showed significant association of socio demographic data and knowledge score -.154- this finding agrees with some of association of Wahed T. 2013. Their results showed significant association between education and knowledge 48%. Our respondents expressed insignificant association between their demographic data and their attitude p .188 these results disagree with AL-Diwaniya. Province in demographid data except education level [14] on other hand study done by David .L in 2004 it has been shown that. Their findings of association of demographic and attitude, the results is in accordance with our study it expressed no any association [15]. Our study showed significant association between our respondents and their practice p 0.007 this results agree with Wahed 2013p < 0.001 [1]

Conclusion and Recommendation

This study was conducted with a group of people who are livening in at high risk area of jebel marra, and their knowledge of attitude toward, and prevention practices relating to cholera were analyzed. The, findings revealed a poor level of knowledge on cholera among this. Strengthening of health education activities may, improve their knowledge the education is the corner stone in development of well-adapted attitude and practice score regarding cholera by the community specially for the target groups for such an educational program should be to those who are illiterate or with lower formal education.

References

1. Wahed T, Kaukab SS, Saha NC, Khan IA, Khanam F, Chowdhury F. KAP relating to cholera and oral cholera vaccine among urban high-risk groups: findings of a cross-sectional study in Dhaka Bangladesh. 2013; 10: 13-242.
2. World Health Organization: Prevention and control of cholera outbreaks: WHO policy and recommendations.
3. Sack DA, Sack RB, Nair GB, Siddique AK Cholera. Lancet. 2004; 363: 223-233.
4. Griffith DC, Kelly-Hope LA, Miller MA: Review of reported cholera outbreaks worldwide. 2006; 75: 973–977.
5. Msyamboza KP, Kagoli M, M'Bang'ombe M, Chipeta S, Masuku HD. Cholera outbreaks in Malawi in 1998-2012: social and cultural challenges in prevention and control. Journal of infection in developing countries. 2014; 8: 720-726
6. Sur D, Dutta P, Nair GB, Bhattacharya SK. Severe cholera outbreak a northern district of West Bengal. Indian J Med following floods in Res. 2000; 112: 178-182.
7. Kondo S, Kongmuang U, Kalnauwakul S, Matsumoto C, Chen CH, Nishibuchi M. Molecular epidemiologic analysis of Vibrio cholera O1 isolated during the 1997–8 cholera epidemic in southern Thailand. Epidemiol Infect. 2001; 127: 7-16.
8. Chung A-Y. Quarantine officials issue cholera warning. The Korea Times. 2004.
9. Ali M, Emch M, Donny JP, Yunus M, Sack RB. Identifying environmental risk factors for endemic cholera arasterGIS approach. Health Place. 2002; 8: 201-210
10. Integrated Regional Information Network. Tanzania: UN office for the Coordination of Human Affairs. 2001
11. Masangwi SJ, Morsea TD, Fergusona NS, Zawdiea G, Grimasona AM, Namangale JJ. Behavioral and environmental determinants of childhood diarrhoea in Chikwawa, Malawi. Desalination. 2009; 248: 684-691.
12. Alex De Waal. Famine that Kills: Darfur, Sudan, Oxford University Press (Revised edition). 2005.
13. Fatima A Alkhaledi. Knowledge, attitude and Practice on cholera epidemic in AL-Diwaniya Province.Al-qadisiya Medical journal. 2016; 12; 22.
14. Schaetti C, Khatib AM, Ali SM, Hutubessy R, Chaignat C-L, Weiss MG. Social and cultural features of cholera and shigellosis in peri-urban and rural communities of Zanzibar. BMC Infect Dis. 2010; 10: 339.
15. Rochars VEBD, Tipret J, Patrick M, Jacobson L, Barbour KE, Berendes D. Knowledge, attitudes, and practices related to treatment and prevention of cholera, Haiti, 2010. Emerg Infect Dis. 2011; 17: 2158–2161.
16. Steffen R, Castelli F, Dieter Nothdurft H, Rombo L, Jane Zuckerman N. Vaccination against enterotoxigenic Escherichia coli. J Travel Med. 2005.

Austin J Nurs Health Care - Volume 6 Issue 1 - 2019
ISSN : 2375-2483 | www.austinpublishinggroup.com

Citation: Bilal Mohamed M and Ibrahim Osman Ahmed M. Knowledge, Attitude and Preventive Practice Related Cholera among People in Jabal Marra. Austin J Nurs Health Care. 2019; 6(1): 1050.