

PUBLIC KNOWLEDGE ASSESSMENT REGARDING RISKS OF WATER POLLUTION IN BASRAH CITY

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ABSTRACT

The study aimed to assess the knowledge regarding water pollution, Awareness about water quality. Sources of Water supply, sanitation and storage. To axis studied the demographic information and their knowledge were collected. The result showed that persons strongly agree about water bone diseases (58%).most insure that water effect health of human (75%) with highly significant mean of score 4.56 and persons that strongly agree that washing hand water borne disease (58%) with significant mean of score(4.06) and awareness about water quality as well as taste of drinking water, Smell of drinking water, Colour of drinking water ,Provision of drinking water(47%), significant mean of score (1.4). And Habit of washing hands before meal 98% with significant mean of score (1.98).

KEYWORDS: Water, Pollution, Risks

INTRODUCTION

Since water serves industrial, domestically and agricultural sectors. water resources are generally used for multiple matters such as: drinking domestic and residential water supplies, agriculture (irrigation), hydroelectric power plants, transportation and infrastructure, tourism, recreation, and other human or economic ways [1] (Venkatramanan *et al.*,2014). Only 0.01% of the waters of the earth occur in river channels. In spite of these low quantities, running waters are of enormous significance [2](Wetzel, 2001)[3](Wright *et al.*,2012)pointed that the public awareness of drinking water safety is relevant to promotion of household water treatment ,to household choices over drinking water sources, and to the prevention of water contamination accidents.

(Mahler *et al.*, 2015)[4] evaluated the drinking water issues and concerns of the urban public and found the urban public is satisfied that their home drinking water is safe. Education related to environment should be given to the students and common people so that this problem can be reduced to a certain level. This chapter focuses mainly on the origin of different water pollutants and their current status in the environment [5]. [6]Shukri Al-Hussan found that raw sewage and other forms of pollution being dumped into the Shatt al-Arab over the last decade.

MATERIAL AND METHODS

This study was across- sectional involving fifty persons male and female to achieve the aim of the study questionnaire assessment used, to identify the knowledge about water pollution. It divided in two main parts, the first part was to identify the socio-demographic characteristics include gender and education level and social status and job status residential status, second part, seven questionnaire items to assess water awareness and two questionnaire items to assess sources and four

part nine questionnaire to assess water supply and sanitation and storage .For data analysis Percentage. Frequency, mean of score were used.

RESULTS AND DISCUSSIONS

The popular knowledge of the importance of water economically, socially and healthily reflects the role of this knowledge in correcting the concepts of water pollution and thus stand on appropriate solutions to solve the problem of water pollution. Data analysis of the recent study showed

Table 1: The Frequent and Percentage Regarding Demographic Information

Gender		
	F	%
Male	33	66%
Female	17	34%
Education		
Illiterate	7	14%
Primary	8	16%
Matric	6	12%
Bsc	26	52%
Msc	3	6%
Marital Status		
Single	16	32%
Married	34	68%
Employment Status		
Employed	18	36%
Unemployed	32	64%
Residential Status		
Owned House	39	78%
Rented	11	22%

Water is essential to life. It need not be spelt out exactly how important it is. Yet water pollution is one of the most serious ecological threats we face today. Water is one of the renewable resources essential for sustaining all forms of life, food production, economic development, and for general wellbeing [7] (Romeo and Asha 2016).

Table (2) showed that most insure that water effect health of human (75%) with highly significant mean of score 4.56 and persons that strongly agree that washing hand water borne disease (58%) with significant mean of score(4.06) and awareness about water quality.

[8] Joshua and Nauru (2016) pointed that qualitative information suggests that there may be a link between the pollution and health problems. Skin problems, allergic conditions, itching and other skin lesions are contact-type diseases. While mean score for awareness about drinking water quality ,taste of drinking water ,smell of drinking water ,colour of drinking water and Provision of drinking water were less but significant.

Table 2: The Frequents, Percentage and Mean of Score Awareness about Water Quality

No	Questionnaire	Strong Agree		Agree		Not Sure		Strong Not Agree		Objection		Ms	S
		F	%	F	%	F	%	F	%	F	%		
1	Health effects of drinking water	37	75.5	7	14.28	4	8.16	1	2.04	1	2.04	4.56	s
2	Drinking water quality	10	20	20	40	10	20	0	0	10	20	3.4	s
3	Taste of drinking water	11	22	21	42	6	12	0	0	12	24	3.38	s
4	Smell of drinking water	9	18	20	40	10	20	0	0	11	22	3.32	s
5	Colour of drinking water	7	14	17	34	17	34	0	0	9	18	3.26	s
6	Provision of drinking water	9	18	22	44	13	26	1	2	5	10	3.58	s
7	Washing hands and water bone diseases	29	58	7	14	7	14	2	4	5	10	4.06	s

MS=Mean of score, S =significance

On other hand table (3) showed most persons answer the questionnaire are not sure about the sources of water and handling of it (62%) we found that people in the city restive water from government project water net supplied from river.

Table (4) Showed that. Taste of drinking water, Smell of drinking watercolour of drinking water, Provision of drinking water (47%), significant mean of (1.4). And Habit of washing hands before meal 98% with significant mean of score (1.98).

Table 3: Sources of water

TMA water	Under ground	0	0
	water	14	28
	Dam	2	4
	Lake	3	6
	Don't know	31	62

[9]Fard *et al.*, (2012), available fresh waters are being polluted by anthropogenic factors and are reducing the availability of potable water (Water quality) becoming a major problem, as evidenced by frequent outbreaks of water borne diseases in both rural and urban areas of developing countries. Water borne diseases are still a major health burden in many parts of the world and estimated to cause about 842,000 diarrhoea disease deaths per year [10](WHO 2016). Through this, nurses must be known on the Internet to expand knowledge, The extent to which nurses have benefited from the development of technologies, especially the use of the internet in their nursing lives (11).

CONCLUSIONS

The present study concludes that public knowledge corresponding the risks of water pollution need more awareness of the seriousness of drinking water contamination.

REFERENCES

1. Venkatramanan, S. Y. Chung, S. Y. Lee, and N. Park, ("Assessment of river water quality via environmentric multivariate statistical tools and water quality index: A case study of Nakdong River Basin, Korea," Carpathian Journal of Earth and Environmental Sciences, vol. 9, no. 2, pp. 125–132, 2014.
2. Wetzel, G.W. Limnology: Lake and River Ecosystems. Academic Press, New York. 2001; Pp. 15-42
3. Wright, J.A.; Yang, H.; Rivett, U.; Gundrg, S.W.)Public perception of drinking water safety in South Africa

- 2002–2009: A repeated cross-sectional study. BMC Public Health 2012, 12, 556.
4. **Mahler, R.L.**; Barber, M.E.; Shafii, B. Urban public satisfaction with drinking water since 2002 in the Pacific northwest, USA. Int. J. Sustain. Dev. Plan. 2015, 10, 620–634
 5. **Jyoti Singh**; Priyanka Yadav; Ashok Kumar Pal and Vishal Mishra ;Water Pollutants: Origin and Status2020 .DOI: 10.1007/978-981-15-0671-0_2.
 6. **Shukri al-Hassan. Polluted** Shat al-Arab threatens life, could spread diseases News and Press Release TNH .2007
 7. Romeo, M. Singh and Asha Gupt .water pollution sources, effects and control. Centre of Advance Study in Life Sciences, Department of Life Sciences, Manipur University, Canchipur-795003, Imphal (India) (2016).
 8. Joshua N. Hader, Nazrul M. Qualitative information suggests that there may be a link between the pollution and health problems. Islam Journal of environment and human, 2015 Volume 2, Number 1.
 9. Fard RF, Bidhendi GN, Azimi AA Biosorption of nickel from batch reactor using the powder of waste activated sludge. Res J Environ Sci 2012; 5:461–470.
 10. WHO.Waterrelateddiseases.http://www.who.int/water_sanitation_health/diseases/en/. Accessed Feb 2016.
 11. (11) Luaay Abdulwahid Shihab, ISRAA HUSSIN ABD, Zeinab Faisal Abd, Zahia Abdel-Hussein Masatar , Evaluation of the nurses' knowledge about the internet , Journal of Network Computing and Applications (2018) 3: 1-7 Clausius Scientific Press, Canada.