

Level Of Knowledge Among Local Community Regarding Health Hazard Caused by Drinking Contaminated Water at Karachi, Pakistan.

Sami Shoukat¹ Sana Sultan² Ambreen Ramzan³ ImtiazAhmed⁴ Naik Perveen⁵
Khizer HayatShah⁶Adeel Ilyaz⁷

RegisteredNurse¹²³⁴⁵⁶⁷(BscN)

Abstract:The water borne diseases are major cause of morbidity and mortality. The World Health Organization (2010) estimates that worldwide about 1.8 million people die from diarrheal diseases annually. Thus it is important to create awareness of water purification in order to decrease morbidity and mortality rate. The study was conducted in May 2016 to assess the level of knowledge in local community of Karachi Pakistan regarding health hazard caused by drinking contaminated water.

Objective :The aim of the study was to assess the hazardous impact due to contaminated water in the community

Method: This cross-sectional study was conducted using a close ended self developed questionnaire consisting of 10 closed ended items were used. convenient sample (n=50) was selected. Written consent was taken from each participant before filling of questionnaire. SPSS version 20.00 was used for data analysis

Result:Out of 60 participants, 34 were females and 26 were males. All of the participants were aged between 20 to 60 years. Out of 60 study participant 60% participants knew that contaminated water can cause fatal diseases and 40% were unaware of the hazardous disease can be caused by drinking impure water.

Conclusion ;As the results highlighted that 40% of participants are completely unaware of the consequences for drinking contaminated water, therefore awareness sessions should be conducted to educate people regarding different methods of water purification. Government should also provide awareness through mass media, so that the mortality and morbidity rates can be reduced.

Key word: health risk, unsafe water

Introduction:

Water is the essential source of survival of human life, and it is the definitely the source of human living but it can also be the cause of death if people drink unclean water because many harmful bacteria and tiny worms live in water naturally, and these worms and bacteria cause devastating disease in humans.(Anderson, 2010) , since they can't be seen, they can't be avoided. Every glass of dirty water is a potential killer.Countries throughout the world are doing research on the effect of unclean water because it will birth various types of disease such as .water-borne, water washed disease and cholera. The water borne diseases are a major cause of morbidity and mortality (c.f. Clasen et al.2007; The World Health Organization (2005) estimates that worldwide about 1.8 million people die from diarrheal diseases annually. The water borne disease is occurs due to drinking unclean water and it leads to various disease such as typhoid, dysentery, cholera and diarrhea.(Anderson, 2010), in pakistan un safe drinking water can cause several disease which lead to ward death an estimated number 250,000 death occur due to water born disease (Nazir, 2012) There are multiple factor by which disease can occur for example poor supply of water from government, lack of resources and so on, one of the important ant factor of this leading disease is the lack of awareness of water filtration methodamong the people in the community .UNICEF (2010: 7-9) reports that in 2010, 884 million people in the world use animpure drinking water source, and estimates that in 2015, 672 million people will still usean impure drinking water source. Thus it is important to create awareness of water purification in order to decrease morbidity and mortality rate which is arising due to unsafe water.(Anderson, 2010)

Literature Review:

The use of unclean water for drinking purpose has various effect on human health and sometime it also be the cause of death .Study which is conducted in united nation that says that 62% of Pakistan's industrial population and 84% of Pakistan's rural population does not pure water properly hence, it results in more than 100 million cases of diarrhea being registered within the hospitals of Pakistan. This further leads to around 40% deaths within the country as a result of contaminated water consumption.(Nazeer, 2012)Several

disease cause due to unsafe water such as diarrhea typhoid, hepatitis due to which an estimated number of 250,000 death occur with in the country (Nazeer, 2012)

World health organization estimate that 250million cases were identify that was related to polluted ground water including cholera, typhoid dysentery and liver damage In Pakistan as of 2005 (38.5) million people don't have access to safe drinking water so if this condition exist in 2015 52.8 million people will be without safe drinking water (Jabeen, 2011)

Unicef state that this report found that both ground and underground water reserve of pakistanis polluted by the sewerage and agriculture waste According to survey of paksitan in 2002 60% of infant death cause by water born disease and 40% have don't access of safe drinking water (TANWIR, 2003)

In Pakistan the sector has faces many challenges quality of service is poor, limited waste water treatment and sanitation lead to major water born disease beside that the cost of operation don't cover due to poor efficiency (khatak, 2011)

Accordingto the National drinking water policy Pakistan goal is to provide universal access to drinking water in an equitable, efficient and sustainable manner in 2025 (khatak, 2011)

The lackof safe water cause many disease which is experiencemillions of visitor annually in which most of them are suffer from skin disorder allergies headaches and eye infection (David, 2000)

water born disease are vulnerable to those who use unclean water due to which 1.8 million people death from water born disease that mostly occur in less developed countries (Anderson, 2010)

Methodology:

The study was conducted in shireen Jinnah colony Karachi Pakistan, it was an quantitativeconvenient study design in which we select 60 people and fill questioners from them while a questioners was self-administered and we take data from 60 individual participant data was collected from house hold, shopkeeper and community people we obtained informed consent from every participant for ensure that their confidentiality will be maintainedDuring data analyses we identify that mostly people has well aware about preventive measure from contaminated water but they don't implement due to which diarrhea , vomiting and hepatitis are common in the community of people Data was analyses from spssversion 20

Data Analyze:

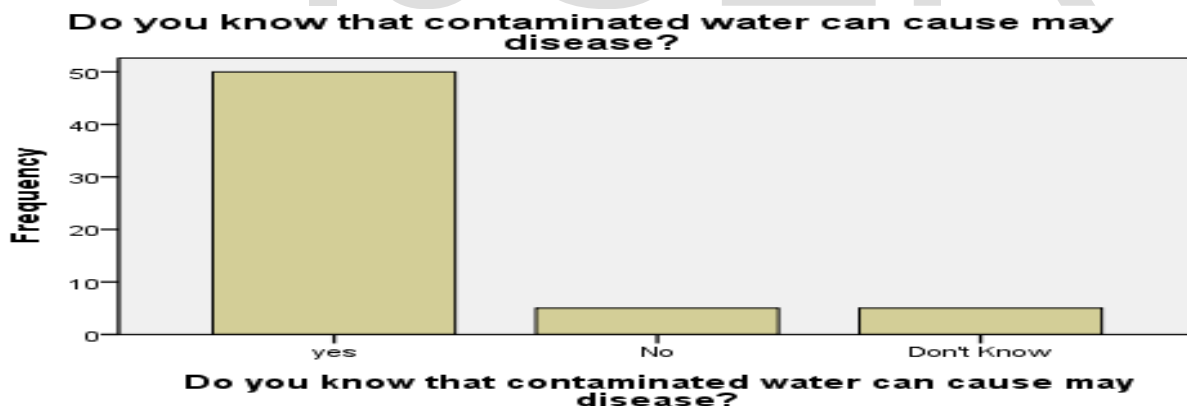


Figure 1 explain that Do you know that water can cause many disease ? in which 50 out of 60 participant respond that yes water can cause many disease, 5 out of 60 respond No ,5 out of 60 participant respond that they don't know

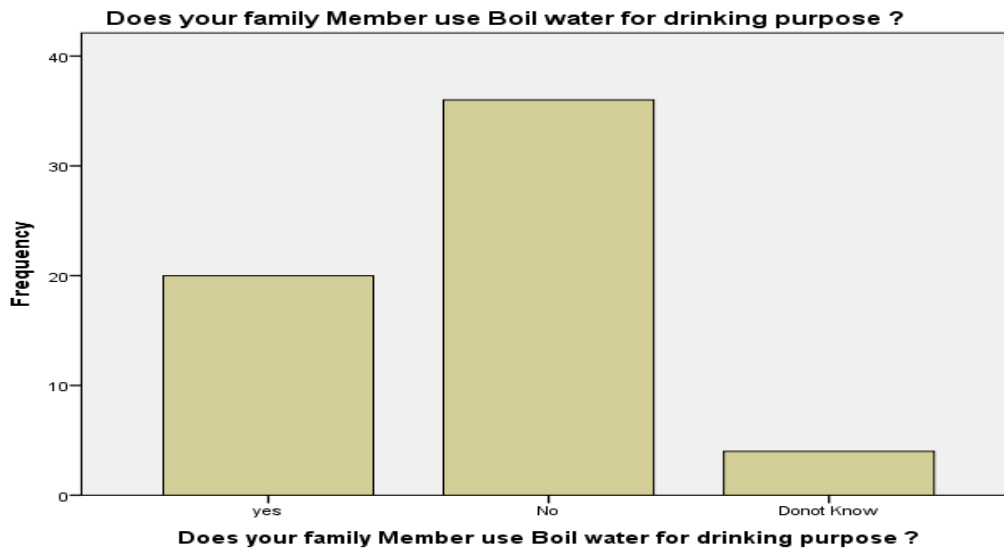


Figure 2 explain that Does your family member use boil water for drinking purpose in which 37 out of 60 participant respond that they don't use boil water for drinking purpose, 20 out of 60 respond yes they use boil water and 3 ot of 60 respond they Don't Know

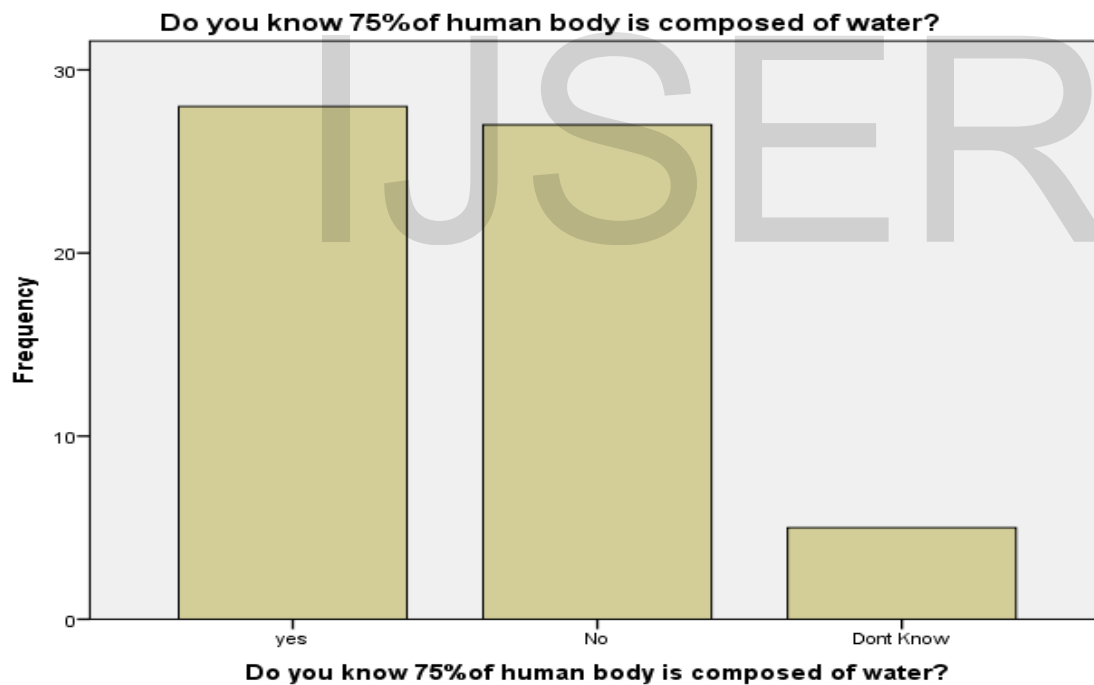


Figure 3 explain that Do you know 75% of human body is composed of water? In which 27 out of 60 respond yes they know human body is composed of water , 26 out of 60 respond No , and 7 out of 60 respond that they Don't Know about human Body is composed of water

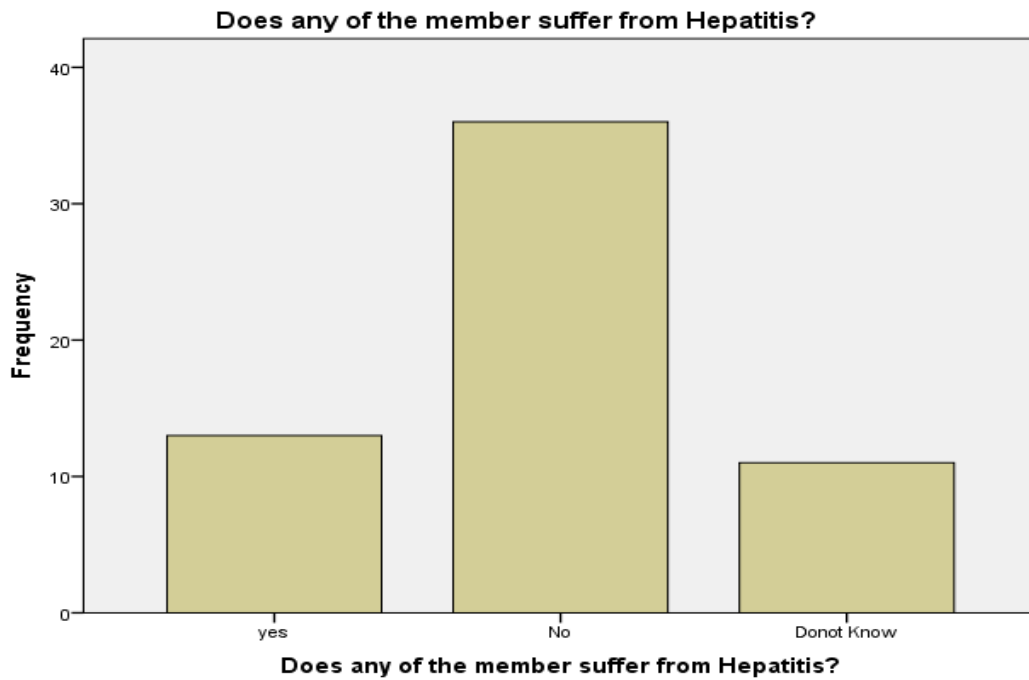


Figure 4 Explain that Does any of the member suffer from hepatitis? 12 out of 60 respond yes their family member are suffer from hepatitis 37 out of 60 participant said No any family suffer from hepatitis 11 out of 60 participant said that they don't know about any of the member suffer form hepatitis

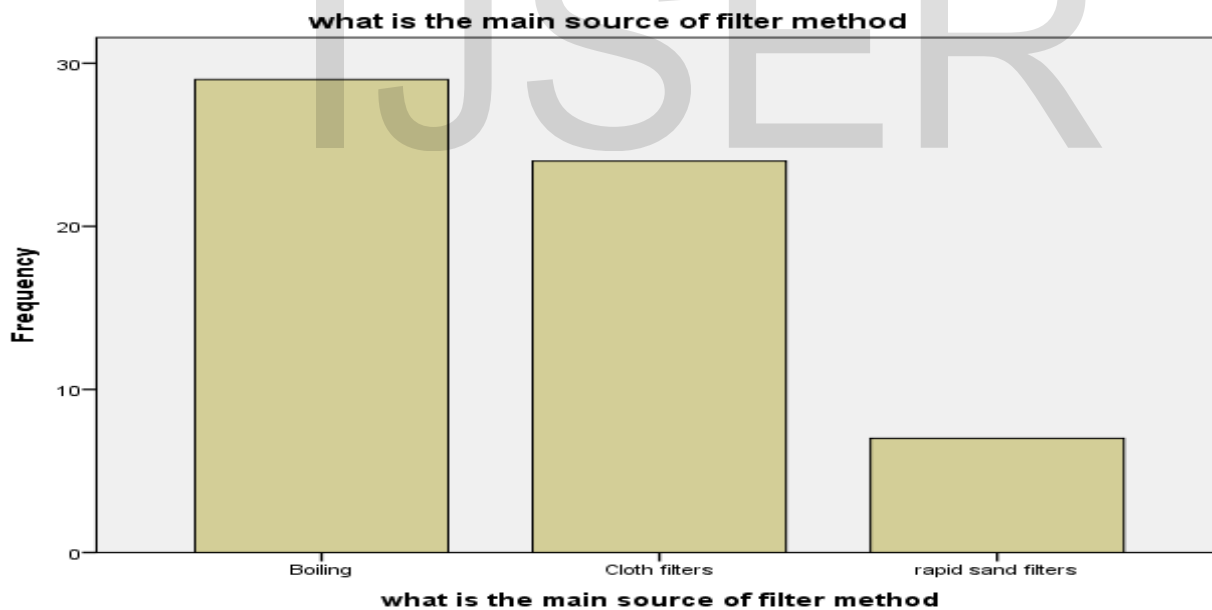


Figure 5 explain that what is the main source of filter water 29 out of 60 participant said they use Boiling for source of filter method and 26 out of 60 participant said they use cloth filters as a source of filter method 5 out of 60 study participant said they use rapid sand filter as the main source of filter method

who will be the most vulnerable person in the family by drinking unsafe water ?

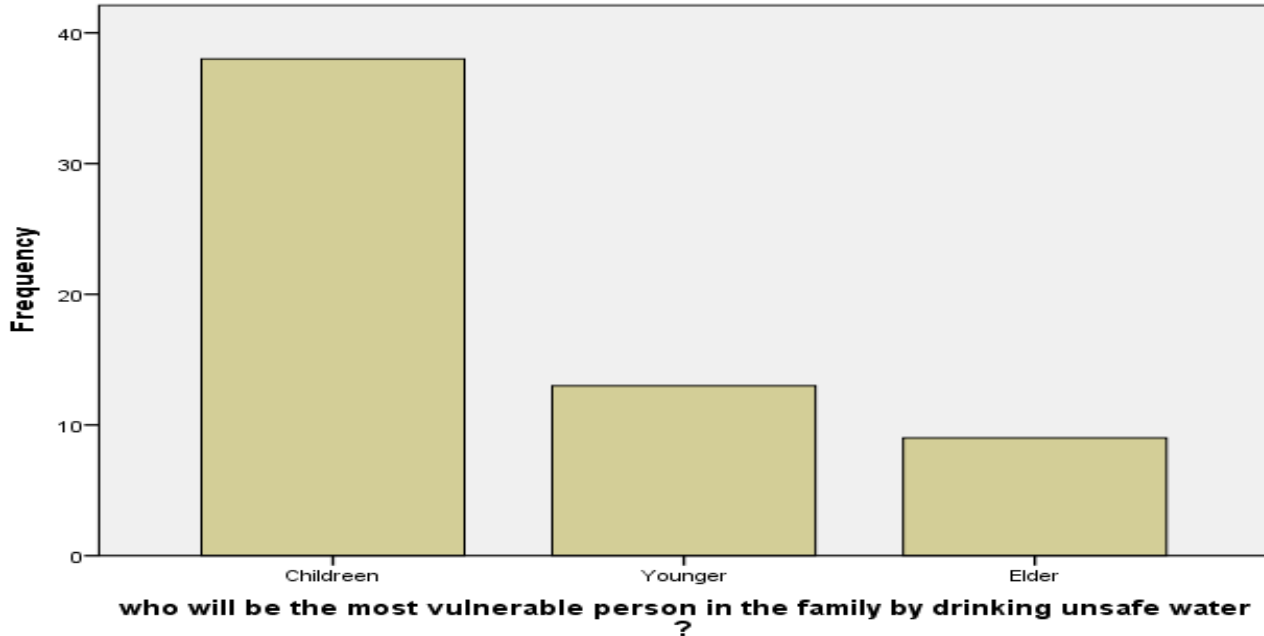


Figure 6 explain who will be the most vulnerable person in the family by drinking unsafe water 38 out of 60 said children are the most vulnerable person in the family by drinking unsafe water 12 out of 60 said younger are the most vulnerable person in the family by drinking unsafe water 10 out of 60 said elder are the most vulnerable person in the family by drinking unsafe water

Did anyone provide you information about unsafe water ?

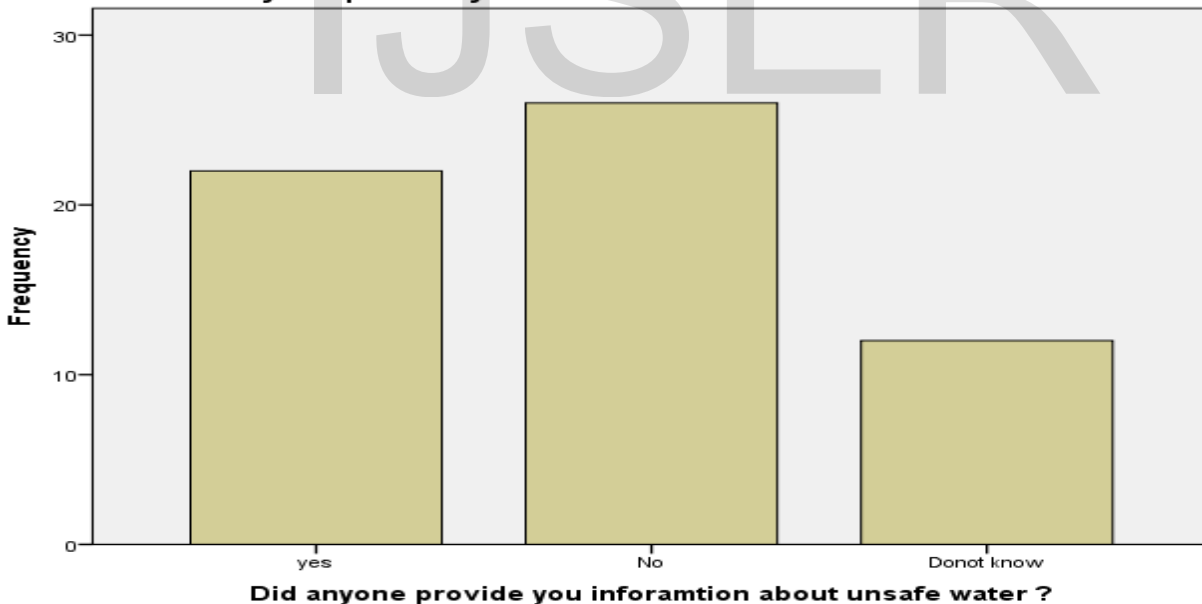


Figure 7 explain that Did anyone provide you information about unsafe water ? 22 out of 60 said yes we have provide information about unsafe water ,28 out of 60 said No we have not provide any information about unsafe water 10 out of 60 said Don't know

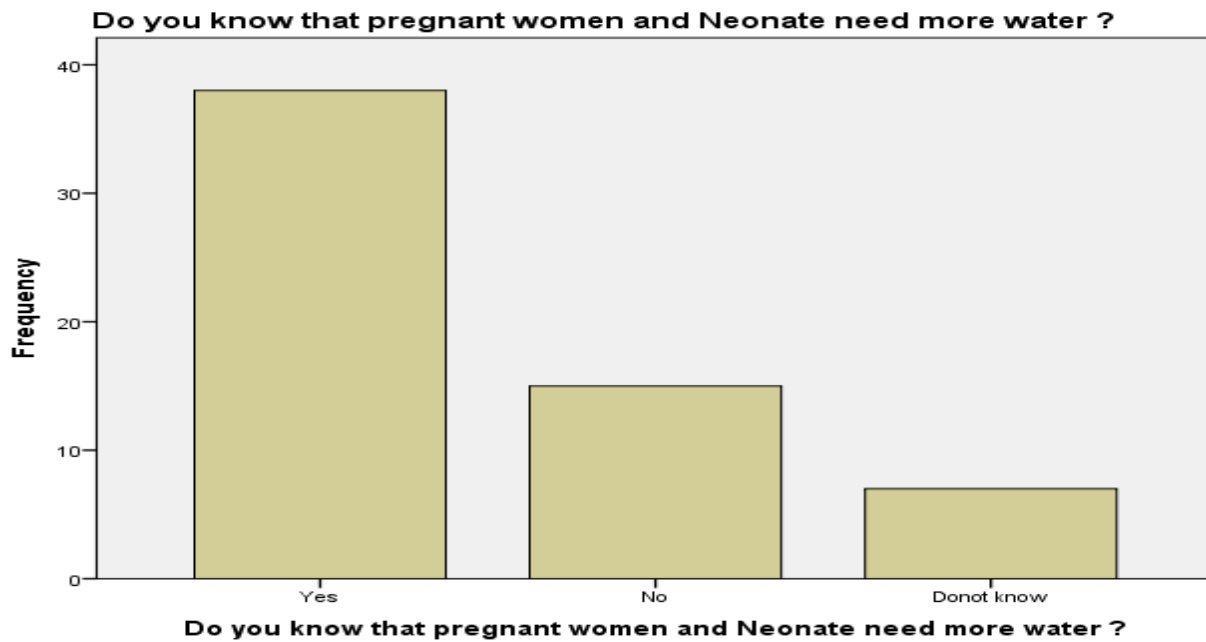
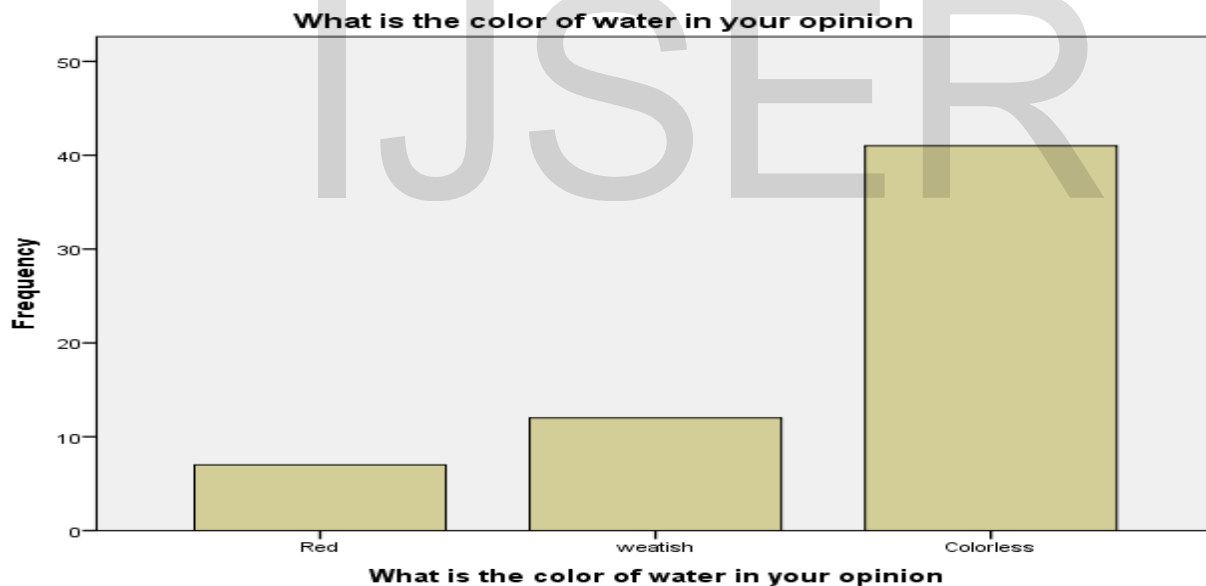


Figure 8 explain that Do you know that pregnant women and neonate need more water?in which 38 out of 60 participant respond Yes they know pregnant women and neonate need more water 14 out of 60 respond No For Pragnant women and neonate need more water and 8 out of 60 said they don't know



in figure 9 expalin that what is the color of water in your opininon 8 out 60 said Red ,12 out of 60 said weatish , 40 out of 60 said Color less

Result :

The study was conducted in local community of Karachi pakistan in which 75% people work as a labour, 50% child goes to government school and mostly people were in the community was not educated, Approximately 60 participant were selected in which 60% participant knew that contaminated water can cause fetal disease and 40% participant were unaware of the consequences of contaminated water similarly 50% participant respond that contaminated water can caause many disease in addition 37% said they

don't use boil water for drinking purpose more over 7% said they don't know 75 % of human body is composed of water as well 26% participant said they use cloth filter for the main source of filter method 28 % participant said No one provide any information about the risk factor of contaminated water in the community

Discussion:

In this we selected the local community of Karachi Pakistan during the study a total 60 participants were included. In this the population were uneducated most of them were females and young adults males. In this most of them are known about that unsafe water can cause disease but few of them are not aware about it. In this regard we make the questionnaire to ask people whether they are know about it or not. In our research many of the respondent aware of the question which we have asked from Did any one provide information about the unsafe drinking water in which 46% said No, 36% said yes and 16% said they don't know when we compare our study with another study which occur in district Abbottabad according to them 70% of people are unaware and 30% aware about the poor consequences of health due to drink unsafe water (Jabeen, 2011)

that what is the main source of filter method in which 48% said they use boil water, 43% said they cloth filter 8% said they use rapid sand water in contrast research conducted in Nigeria in which at least 69% of the population know about the one method of water purification in which Boiling was one of them. (CA, 2015) The another question which we were ask from them is has your family member suffer frequently suffer from vomiting and diarrhea 23% said yes 30% said no and remaining 7% said don't know. In this regard we compare study from different article in which one of said that 27% suffer from diarrhea (Jabeen, 2011).

Conclusion:

Water is a basic source of our life. If the people not aware about the health hazard regarding unsafe water they are moving towards disease which will be harmful to our bodies and our family members also. In this regard we should aware about the clean and hygienic water. Because people don't know about the clean and safe water. Water and sanitation condition is not too much good in the communities. The facilities of the drinking water was also a scare the drinking water is found contaminated in which many disease were found i.e. diarrhea, vomiting and hepatitis. The biggest cause of poor health of people is lack of awareness regarding unsafe water. In this, we should aware the community regarding the health hazard of the unsafe water. Government are unable to give basic needs to the citizens because the rapid increasing population in the urban areas. The water and sanitation condition both in urban and rural communities was found poor but in case of rural communities it was scare. We should aware the community regarding how to purify the water, boiling technique of the water, use clean things in which water are safe like tankers, budgets and etc

Reference:

1. Jabeen, S. (2011, Jan 23). *HEALTH IMPACT CAUSED BY POOR WATER AND SANITATION IN. HEALTH IMPACT CAUSED BY POOR WATER AND SANITATION IN*, p. 4.
2. Nazeer, Z. (2012, April 17). Contaminated water contributes to 40% deaths in Pakistan: UN. *Contaminated water contributes to 40% deaths in Pakistan: UN*, p. 3.
3. TANWIR, F. A. (2003). Water Contamination, Health Hazards and Public Awareness: A.
4. Anderson, B. (2010, April 16). *Water Pollution Awareness and Drinking Water Treatment in Rural South Africa*. Retrieved April 28, 2016, from Water Pollution Awareness and Drinking Water Treatment in Rural South Africa Web Site: <http://www.psc.isr.umich.edu/pubs/pdf/rr10-701.pdf>
5. Coll, J. A. (2011, 01 23). *Health Impact Caused By Poor Water And Sanitation In District Abbottabad*. Retrieved 04 27, 2016, from Health Impact Caused By Poor Water And Sanitation In Web Site: <http://ayubmed.edu.pk/JAMC/23-1/Sadia.pdf>
6. Currie, J. (2013, August 04). *Contaminated Drinking Water and Infant Health*. Retrieved April 28, 2016, from Contaminated Drinking Water and Infant Health Web Site: http://www.princeton.edu/~jcurrie/publications/Water_CJE.pdf
7. Pakistan Millennium Development Goals Report, 2006., Government of Pakistan. Planning Commission., (2006)75. <http://www.undp.org.pk/uploaddocuments/mdg2006.zip>. (December 23, 2008)
8. Global Water Partnership, Draft South Asia -Water Vision 2025, Country Report-Pakistan, (2000).
9. Wiley, J. (1986, August 6). *Water And Public Health*. Retrieved April 28, 2016, from Water And Public Health Web Site: http://www.who.int/water_sanitation_health/dwq/S01.pdf
10. David, K. (2000, July 08). *Unsafe Water Sanitation And Hygiene*. Retrieved April 28, 2016, from Unsafe Water Sanitation And Hygiene Web Site: <http://www.who.int/publications/cra/chapters/volume2/1321-1352.pdf>

CA, M. (2015). House Hold drinking water knowledge and practice of water purification in a community of Ilemu Nigeria. 4.

IJSER