

## Water Pollution Effect on Health Risk

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### Abstract:

*The present study is based on discussing the effect of water pollution on health risk with the help of functionalist and rational choice theory that assess the current scenarios. The data was collected from random sampling that included 160 participants with age group of 18 - 25. The college, under - graduate and graduated students of socio - economic background were distributed questionnaire for the purpose of gathering information. The research has followed all the theoretical aspects of the topic that were relevant in gathering the best possible information. The study is accompanied with all the necessary details along with the data analysis and interpretation to reach the final outcome in this regard.*

**Key words:** Water pollution, health risks, sociology

Water pollution is the contamination of the lakes, rivers, oceans, ground waters and much more, Water pollution problem occurs when the particles, chemicals, and other substances are discharged into the water bodies and then create pollution which very harmful for the animals, plants, and human as well. The water pollution rises by the plastic bottles, bags, wrappers and many other things which increase the water pollution. The waste pollution problem is growing day by day, and it is the biggest threat to the people, on earth and many other aspects which can get harms by water pollution (Azizullah, Khattak, Richter & Hader, 2011).

Water pollution problem is very harmful to the survival and it leaves its negative impact on the health as well so the effect of risk on health rises. Water pollution covers more than half of the earth which is a very useful and valuable resource for people and the environment. When water pollution occurs then its effects the drinking habits of the people, animal and also causes plants as well. This water pollution also affects the rivers, lakes, oceans and so on all over the world (Sharma & Sanghi, 2012).

Water pollution highly affects the health of people, animal, and plants all over the world. In most of the leading countries, most of the deaths are caused by water pollution. Water pollution increases the health risk because it changes the drinking habits of the people which increase the health risk and animal or humanly suffers from different types of diseases. Water pollution does not only harm living thing but also the environment of the country and their surrounding from which the country gets polluted, and it also causes the ecosystem which exists in the water as well. Fishes that lives in polluted water suffers from a different type of diseases, same as plants which get contaminated water because of which the life of plants get less. Same as the people suffers from diseases and most of the death occurs from this water pollution problem (Khan, Shahnaz, Jehan, Rehman, Shah & Din, 2013).

Water pollution also occurs from the ultra-violet radiation which directly comes from the sun through the ozone layer, and it occurs from the air and causes the skin disease. There are different types of water pollution which cause and increases the health risks. Sometimes oil spillage causes the wildlife, but it can spread for miles. This oil spillage causes the death of many of the fishes in the water. Moreover, other microbiological, chemical, surface, oxygen, nutrients water pollution leaves the negative impact on the health (Muhammad, Shah & Khan, 2011).

Drinking clean water is the most important aspect of human, animal, and plants as well and being has realized now

that how much fresh water is essential for human's health. Most of the organizations are working for it to reduce this water pollution problem. Water pollution is increasing day by day, and it occurs because of the human as well because they throw a dangerous package which creates the water pollution. There is one example of the food chain which will clearly show that how water pollution is harmful to the people, animal, and plants. Little fishes eat tiny particles which are in the water, and if something pollutes those particles, then it will cause the health of the people and animal because bug fishes eat tiny fishes and human also eats fishes. All of this will effect and increases the health fish of individuals. The ecosystem also gets damaged from the water pollution because the interaction of living things depends on each other lives. Many of water pollution are increasing because of a human act. Drinking contaminated water gives immediate diseases such as typhoid, nausea, fever, hepatitis and much more (Khan, Lu, Khan, Zakir, Khan & Wang, 2013).

## **PURPOSE**

The present research is based on water pollution effect on health risk, and it is an objective of Sociology. The study discusses the water pollution and its impact on health and how to overcome this problem. Water pollution is increasing day by day, and it left its negative impact on the health of people, animal, plants and environment of the country also. Many of the people died because of this water pollution problem because people drinks contaminated water which causes them a different type of diseases, many of the animals or mammals perished in the water which increases the water pollution. Water pollution is also increasing because of the person who throws trash in the water which contains particles which increase the water pollution (Lu, Song, Wang, Liu, Meng, Sweetman & Wang, 2015).

The research is also for the academic purpose, but basically, it is the objective of sociology. In which students, governments, councils and other institution will find the solution that how to reduce this water pollution problem which affects and increases the health risk. The problem can be solved by educating and waking people that do not throw trash in the water; people should use the water wisely; people should not throw any chemicals, paints, oils and any other similar thing in the water. Individuals should buy cleaning liquids or detergents, so that will kill the bacteria as well; people should plant the trees and more flowers (Waseem, Arshad, Iqbal, Sajjad Mehmood & Murtaza, 2014)

Government and councils can also make some efforts to reduce the water pollution problem. Government and local councils should look up to the sewage and manage it more wisely. Authorities should stay vigilant for the water issues and make the environment clean and green, so it will be helpful for the country to that the surrounding will become more attractive and people, animal, and plants can survive with the safety (Azizullah, Khattak, Richter & Hader, 2011).

The research will also conduct some ideas that can be used for reducing the water pollution problem. Researchers must have to make their efforts in the laboratory to come up with the best treatment to get rid of this water pollution problem. When the quality of drinking becomes better than the lives of the living thing and as well as the environment will also become better. The research will also suggest scientist to found out that how many numbers of particles are present in water and how much contaminated it is (Butt & Ghaffar, 2012).

The research will also propose the idea to ban the plastic materials that is bottles, bags, wrappers and much more because these little things create some particles that increase the water pollution problem. The primary purpose of this report is to find the better solutions and to motivate, aware and educate people that together they can achieve the goals and can get rid of water pollution problem. Spreading awareness to the

people, government, and other councils will help the society and country to get a better quality of water for drinking and other purposes as well because the life of living thing more important and human safety is also the central aspect. By reducing this water pollution problem the effects and risk of health will get lesser, and people will get better quality or drinking water (Bhatti & Latif, 2011).

## **BACKGROUND LITERATURE**

### ***Importance of Water for the Survival***

The basic necessity of life is water. The numerous things fulfil the functional and survival needs of a single human being, but the importance of water cannot be neglected. It is, therefore, important that water must be sufficient to make the life survive. The human beings, animals plants all are equally the users of water which is the most vital role played by it. For the purpose of drinking the water has to be pure and clean so that it cannot harm the health. The cleanliness in this regard has to be maintained which makes it more important and necessary (Skirycz, Vandenbroucke, Clauw, Maleux, De Meyer, Dhondt & Galbiati, 2011).

The scientific theories are most likely to explain the importance of water by describing the contribution of it to the human body which is 75% whereas the body is made of 25% solid matter entirely. On the other hand, 71% of the Earth comprises of water. Therefore, the living creatures are made to live on water mostly. The value of water is known to be found when the people of deserts are depriving of it. Water for the human beings and animals is required to be clean and healthy as it causes the human body to grow. The functionality and health are dependent upon the usage of water. If not properly consumed, this can make the living thing to become weak and unhealthy (de Luis, Novak, Raventos, Gricar, Prislán & Cufar, 2011).

Water has also been known as the purifier of the body. Due to its importance, the negligence in drinking water makes the bones to shrink and cause them to become dehydrated. It helps in purifying the bodies as the waste material cannot retain for a longer period within the body. In this manner, the functionalist theory of Herbert Spencer, Emile Durkheim and Talcott Parsons is related to the interconnection of the society and function of the water. The relevance of the theory is with the use of the water that has to be made according to the needs of the society (Claeys & Inze, 2013).

### ***Toxicology and Chemicals***

It has been noticed that water is made up of 4000 chemicals in all. The chemicals are though not harmful but beneficial for making the water healthy. The research says the around 18 million pollutants have been harming the water from the atmosphere. It is important for the water to be chlorinated due to the reason that purification in the water can be enhanced. Although, many of the agencies have been adopting the safety measures to increase the credibility of the drinking water indeed it is a difficult task to be done. The living things are being associated with the drinking water with a fact that it is impossible for them to live without it (Escher, Baumgartner, Koller, Treyer, Lienert & McArdell, 2011).

The number of affected people from the polluted water has been increased to 120 million, and this range has been continuously rising. The water supplies and the standards must match the needs of the people with a reason that no one can ignore the essentiality of this thing. It is important to maintain the level of cleanliness level for the reason that it can be a matter of life and death for anyone. The leniency in handling this issue can cause the toxic materials and chemicals to enter the body, and consequently, most dangerous results can be seen for it (Thayer, Heindel, Bucher & Gallo, 2012).

The theory that implies, in this case, is the rational choice theory. The basis of this argument has to focus on the

individual needs. The initial requirements of the humanity cannot be ignored due to the reason that the choice, in this case, is not available. Water is as important as a basic necessity for living in this era as the people can require anything to make them better. The federal health standards have to make it clear for the nation that water is all pure and tested for drinking purposes (Kroneberg & Kalter, 2012).

### ***Health Assessment***

For the purpose of protection, it is important for the people to set regular checkups for the better health. If the water is not tested, it is important for the health to be tested. A separate department for the assessment of health must be made for long term protection and accessibility. The measures in this regard must be adopted by the heads to move towards the permanent solution for this problem. The former scholars have been noticed that no importance to the water has been as such, but as the time has passed, it has become as the vital part of the society. In the context of pollution, wastewater controls and sewerage systems are required to be checked and balanced (Yearley, 2014).

The benefits of water cannot be ignored similarly for a better situation the assessments are to be taken. The seminars and the training sessions are made to increase the information for the people for the purpose of developing a professional atmosphere in this manner. It is, therefore, necessary for the department to remain in contact with the people so that they can be provided the most suitable place for living. In this case, no negligence has to be taken as it becomes a severe problem without noticing that it approaches towards death (Freeman III, Herriges & Kling, 2014).

Health assessments measures must object the people's health and life to give them the better living style. The matter of health is not made to be handled lightly that is why most proper and most proper steps are to be taken for making the environment safest and secured. On the importance and usage

of water, it is an essential duty for the caretakers to make it suitable in all the ways, creating an appropriate style of providing water and giving the people a healthy atmosphere to spend their life (Shonkoff, Hays & Finkel, 2014).

### ***Monitoring and Treating Water***

The purpose of the creating the separate health departments and checking must be made forward for the development and seeking benefits it this case. It is an important part of the sociological nature that the problem must be solved for the advantage of people in the society. The numbers of measures are made, and solutions are found out in the context of making the people comfortable and contented. This is an important task for the agencies and authorities o make the defined vision for creating advancements in the particular case (Dunlap & Jorgenson, 2012).

Water has to be tested as to be of the best quality which requires consistent and continuous monitoring of the body. The sufficient supply has to be created to avoid the shortage and making the availability of the fresh water to be guaranteed. This has to be acknowledged that people living in the country do not find in any difficulty in fulfilling their basic needs. The water treatment is to be made essential by using disinfecting tablets and purification filters, but these strategies have to be adopted as a permanent base to avoid all the future problems (Givens & Jorgenson, 2011).

## **METHOD**

### ***Participants***

The largest group of people which is associated with the research work for the purpose of providing the relevant data is known as the population. The results are generalized to the population as it is impossible for the researcher to collect data from the whole population. Moreover, the people in this research work is of socio - economic background including the



college students, graduated and under - graduated people of a private institute. These people will help in providing the most recent information regarding the research issue. The number of individuals that have selected for gathering the data is 200 so that the maximum views can be recorded efficiently (Gainsbury & Blaszczyński, 2011).

The subset of the population is a sample. Out of the population, the sample is chosen. This example is supposed to provide the data to the whole community. The sample that has been selected in the case is based on random sampling that included the age which ranges in 18 - 25 years. Therefore, out of 200 participants, 160 have been chosen for collecting the data related to research issue. It is a standard method of gathering the data that is not supposed to be biased in any case so that an inconvenience can be avoided. The participants will be made to provide the most appropriate details regarding what is to be asked (Hammond & Cooper, 2011).

The selection of age youth 18 - 25 participants for this research work is known to be the sample, and a definite number 160 is called as the sample size. This will help the researcher to complete the studies in an efficient manner, thus catering all the participants to gather the appropriate amount of information. The members will be made to give the information as directed and informed so that the chances of collecting raw and fake data can be made less. The selection of participants in this particular research work is proved to unbiased due to the reason that in this age group all of the people will be able to provide the different data perspectives (Nordentoft & Kappel, 2011).

It is an appropriate method for the data collection that the data collected from them is in the same manner. The participants are supposed to be given the equal data sources so that the information for this purpose can be extracted out efficiently. The most important scenario, in this case, is the selection of participants which must prove to be in line with the nature of the research. This study is based on the most common

type of issue, therefore; the participants in this criterion will have an experience regarding the topic that will make the data to be recent and appropriate (Fraser, Christiansen, Adsit, Baker & Fiore, 2013).

### ***Materials***

Data collection method includes the sources of data also that is why; the explanation is based on discussing the types of data sources. The data can be collected from the two sources; primary and secondary. Primary data collection is concerned with the collection of data when the research is directly involved in it. The researcher collects the data for the first time which has not been recorded by someone else earlier. In the secondary source of data, the data has already been collected earlier and can be used for any research purpose. In this present study, the data will be gathered through the primary means where research is aim to gather the information relevant to the research issue (Scott, 2014).

The primary source of data collection includes questionnaires, interviews, panels, observations and case studies whereas, the secondary source in associated with the online means and websites. This particular research is based on collecting the data through questionnaires. The data from the survey will be qualitative that will be assessed with the help of Likert Scale. The participants will be provided the studies by the researcher, and many of them will be contacted through an E-mail. The questionnaire will be given for the pilot testing so that any error can be removed for the ease of the respondents (Cheng, Kao, Lin, Lee, & Lai, 2011).

The purpose of selecting the questionnaire in this research work is based on the less consumption of time. The researcher finds it convenient to gather the data through this strategy so that it can be convenient in the limited time frame. The data that will be collected through the questionnaires will prove to be the most recent and up to date. The irrelevant amount of information will be easy to be extracted out, and the

required material can be easily compiled for the better research results. The analysis through questionnaire is the matter of consideration as the qualitative information will be quantified to get the desired outcomes (Ary, Jacobs, Sorensen & Walker, 2013).

Questionnaire in this present research work will assess the researcher to get the most proper knowledge about the research topic so that the sound data analysis can be performed. The effectiveness is ensured for making this study fruitful and up to the requirements. The respondents will find it easy to provide ranking based answers that will be justified by the numbers assigned to them. This will give an idea about the most demanded thing by the participants. The questions are based on the present scenario that relies on the effect of water pollution on health risks so that the evaluations can be made accordingly (Zikmund, Babin, Carr & Griffin, 2013).

### ***Procedures***

The distribution of the questionnaires will take place within the institute. The college students will be provided the surveys within the free period and will be guided throughout. Any ambiguity will be examined, and challenging situations in this criterion will be assessed effectively. It will be convenient for the students of the college to provide the data on that particular moment. If any difficulty in giving the answers will be seen, the research will find the best solution for it. The questionnaire is supposed to be general due to the reason the language, the concepts, and the understanding is easy. The respondents will be assessed through the activity to avoid any inconvenience in this regard (Harcourt & Conroy, 2011).

The graduate students are masters and upper level, therefore, the questionnaires to the graduate and under - graduated ones will be given through emails, social media and personally. The researcher, in this case, will not cater any ambiguity due to the reason the maturity level. The respondents will answer the questions personally to avoid any

biasness. This will make the researcher generalize the results to the whole population. The questionnaires will be collected backhand to hand; no respondent will be allowed to take it. The data collection procedure will follow the standard rules and regulations for all the participants (MacKenzie, Podsakoff & Podsakoff, 2011).

The process will be accompanied to access the primary ethical considerations of conducting the research. The names and other identification details of the participants will not be revealed. The members will be treated as anonymous. Moreover, the data provided by the participants will be hidden and secured. The principle of confidentiality will be adopted by the researcher to avoid any unexpected situation. Furthermore, the data, in this case, will be gathered with the consent of participants. The members will be free from any force in providing the data (Kendall & Hollon, 2013).

In this research, the questionnaire is based on collecting the information regarding the problem that every individual has been facing. This issue cannot be ignored while by some improvement for the time being. This enables the researcher to find put the best possible solution for it making it understandable for the rest of the period. This research will prove out to be the best option for overcoming such type of issues within the regions (Creswell, 2013).

## **RESEARCH DESIGN**

The research design is implemented for the planning of investigation study that what method will be appropriate for the research. The study design is comprised of different methods. Descriptive, explanatory and exploratory these are the research designs. Research can become more practical and useful by using one of these designs. These designs help to make the report more understandable and beneficial. Descriptive research design includes the observations, surveys, case studies and much more similar ways. Observation helps to

record and view the study more deeply, a case study is a deep study of a particular object and surveys help to define a brief interview of any objective (Creswell, 2012).

Furthermore, exploratory research design provides authentic information about the study to make the research easier to understand. Researchers explore to get some unique and innovative ideas to make the study beneficial. Moreover, explanatory research design is listed to collect the data from the particular study to find out the relevant information about the study. In this study design researchers look up to the causes and effects of a topic. The research designs are used by the researcher to make the research moiré useful and which gives awareness to the people as well (Christensen, Johnson & Turner, 2011).

The present study is based on the exploratory design. In which the researchers have explored the subject to get awareness about the water pollution and what causes it gives and how to find the solution to get rid of this problem more effectively and efficiently. The research is based on the water pollution and about its causes and its effects on health. In this study, the researcher used this deign to find out the reasons that why water pollution is increasing day by day and to aware people about the water contamination problem. Researchers are trying to find out the causes which are creating because of water pollution and effects that leave it impacts on the health of the people, animal, mammals, plants, and environment (Beavers, Lounsbury, Richards, Huck, Skolits, & Esquivel, 2013).

As the water pollution is increasing day by day because of which people and animals are dying and also the environment of the country is getting dreadful. In this research, researchers are also finding the solutions to get rid of this water pollution problem and finding out the best strategies to get the perfect solution to this issue. Researchers have faced a lot of challenges to solve these challenges and investigators are furthermore trying to figure out these aspects to get the better

environment of the country and to save the lives of people, animals, mammals and other plants as well (Covello & Merkhoher, 2013).

Discussions have made to analyze the data of the water pollution problem that with percent it is increasing and with what amount of particles it is growing. Researchers adapt this design to find out the main reasons for the water pollution problem, and about its solutions to the causes and effects, it is generated on the health of living thing as well as the environment. By using this exploratory design, the researcher has made this research more useful and constructive so that it will get easier to understand and to implement the ideas to get rid of this water pollution problem (Su, Zhang, Xiao, Huang, & Wu, 2011).

## **MEASURES**

In the present research, researchers have collected relevant information about the topic to make the study more constructive and productive. Researchers have chosen the questionnaire method to measure the relevancy of the water pollution. The questionnaire is one of the best methods to collect relevant and authentic information about the water contamination because it provides the researchers the ideas, advice and thoughts about the people that what they think and what they advice to solve this problem. Researchers select this questionnaire method because it is less time-consuming method and get a lot of information in fewer efforts and in short time as well. The survey was geared up by researchers and sends the participants and people through e-mailing and personally as well (Khallaf, 2012).

The questionnaire also helps researchers to collect that data qualitatively and then convert it into quantitative data which becomes easier to be aware of and read between the lines. Survey method is also beneficial to get information and thoughts about people because it has most probably limited

questions which attract and add interest of the respondent to answer them all, these questionnaires provide information about the people also. The biggest advantage of the questionnaire is that is less expensive, qualitative, quick and easy to analyze the information (Manenschijn, Koper, Lamberts, & van Rossum, 2011).

The results which researchers get from the questionnaires was quite useful, and it helps a lot to get some new ideas to get rid of this water pollution problem. The questionnaire was filled with the questions which were related to the water contamination problem and about its causes and effects which leave its negative influence on the health of people, animals, and plants and also on the environment of the country. The information which researchers received in the form of qualitative form, then it was converted into the quantitative form to analyze it more professionally. The answers were very appropriate and unconditional, the respondents provide the information that water pollution is dangerous and it is greater than ever which is because of the human's mistake as well, and that is very wrong that it is ever-increasing rather than diminishing (Ingersoll-Dayton, 2011).

The water pollution is affecting human health very badly because people drink contaminated water which causes them a different diseased and lead them towards the death. This water pollution is also destroying the environment of the country and because of this everything is affected. This water pollution problem should get solved, and it can get solve by some efforts of people, government, and other councils. These were the thoughts, ideas, and views of people which researchers collected from the questionnaire and then convert it into the quantitative data (Romero Diaz, Isenberg & Ramsey Goldman, 2011).

## ANALYSIS

Researchers have collected information from the questionnaire to get relevant and accurate responses from the respondents on the water pollution and its effects on the health to make the research more useful. Through survey, researcher has collected qualitative information but then converted into the quantitative. In this, a researcher goes through the quantitative analysis to analyze the view and ideas of the people. By converting data and information into the quantitative researcher quickly interpret the data and the research becomes more understandable (Bendat & Piersol, 2011).

The statistic which is used to analyze the data is SPSS, Excel, ethnographic content, and other analysis. These are the reports which are used to analyze the data more efficiently. In this research, researchers have used the SPSS analysis to analyze the data more beneficially which will help to develop the report more in point of fact. Basically, SPSS is an abbreviation of Statistical Package for Social Sciences, and it is used for batched and non-batched data analysis. The software helps a lot to analyze the complex data more quickly, and interpretation of data become understandable (Liang, 2015).

In this case, 160 questionnaires were distributed out of which 150 were answered, and ten were found to be rejected. So table 1 is reliability statistics which shows the value 0.8 which means the Cronbach Alpha is suitable for the data analysis. The items are tested in this coefficient which clarifies the usage of data for the analysis. The reliability statistics shows the consistency of the data that has been recorded by the research.

Cronbach's Alpha	N of Items
.872	2

**Table 1: Reliability Statistics**



Table 2 and 3 shows the quantitative technique which is a correlation. This determines the relationship among the variables of water pollution which are being used in the questionnaire. The data is correlated for getting the desired results. In the tables, water pollution is significantly related to factors which make the research study to be for the topic.

		P	Negligence	Disastrous	Responsibility
P	Pearson Correlation	1	-.006	-.112	-.024
	Sig. (2-tailed)		.942	.172	.769
	N	160	150	149	150
Negligence	Pearson Correlation	-.006	1	.147	.081
	Sig. (2-tailed)		.942	.074	.325
	N	150	150	149	150
Disastrous	Pearson Correlation	-.112	.147	1	-.040
	Sig. (2-tailed)		.172	.074	.632
	N	149	149	149	149
Responsibility	Pearson Correlation	-.024	.081	-.040	1
	Sig. (2-tailed)		.769	.632	
	N	150	150	149	150
Department	Pearson Correlation	.128	-.060	.054	.283**
	Sig. (2-tailed)		.118	.463	.511
	N	150	150	149	150
Excessiveness	Pearson Correlation	-.064	-.022	-.107	-.126
	Sig. (2-tailed)		.438	.792	.193
	N	150	150	149	150

**Table 2: Correlation of Water Pollution (i)**

		Department	Excessiveness
P	Pearson Correlation	.128	-.064
	Sig. (2-tailed)	.118	.438
	N	150	150
Negligence	Pearson Correlation	-.060	-.022
	Sig. (2-tailed)	.463	.792
	N	150	150
Disastrous	Pearson Correlation	.054	.107
	Sig. (2-tailed)	.511	.193
	N	149	149
Responsibility	Pearson Correlation	.283	-.126
	Sig. (2-tailed)	.000	.123
	N	150	150
Department	Pearson Correlation	1	.067
	Sig. (2-tailed)		.414
	N	150	150
Excessiveness	Pearson Correlation	.067	1
	Sig. (2-tailed)	.414	
	N	150	150

**Table 3: Correlation of Water Pollution (ii)**

Table 4 and five are showing the relationship among the variables of health risks. This determines that health hazard is significantly related to the factors which are the part of the questionnaire. This makes the understanding that water pollution affects health risk.

		P	Diseases	Filtration	Avoid
P	Pearson Correlation	1	.285**	.067	-.023
	Sig. (2-tailed)		.000	.419	.785
	N	160	157	148	148
Diseases	Pearson Correlation	.285**	1	.074	-.080
	Sig. (2-tailed)	.000		.336	.299
	N	157	181	171	171
Filtration	Pearson Correlation	.067	.074	1	-.137
	Sig. (2-tailed)	.419	.336		.073
	N	148	171	171	171
Avoid	Pearson Correlation	-.023	-.080	-.137	1
	Sig. (2-tailed)	.785	.299	.073	
	N	148	171	171	171
Infections	Pearson Correlation	.007	.067	-.021	-.156*
	Sig. (2-tailed)	.934	.385	.783	.041
	N	148	171	171	171
Health risk assessment	Pearson Correlation	-.078	-.095	-.005	.089
	Sig. (2-tailed)	.346	.218	.953	.245
	N	148	171	171	171

**Table 4: Correlation of Health Risk (i)**

		Infections	Health risk assessment
P	Pearson Correlation	.007	-.078**
	Sig. (2-tailed)	.934	.346
	N	148	148
Diseases	Pearson Correlation	.067**	-.095
	Sig. (2-tailed)	.385	.218
	N	171	171
Filtration	Pearson Correlation	-.021	-.005
	Sig. (2-tailed)	.783	.953
	N	171	171
Avoid	Pearson Correlation	-.156	.089
	Sig. (2-tailed)	.041	.245
	N	171	171
Infections	Pearson Correlation	1	-.107
	Sig. (2-tailed)		.162
	N	171	171
Health risk assessment	Pearson Correlation	-.107	1
	Sig. (2-tailed)	.162	
	N	171	171

**Table 5: Correlation of Health Risks (ii)**

The significant correlation shows that the proposed hypotheses for this research have been rejected. The variables are positively related to each other which make the significance of association to be examined. The table below shows that rejection of the research hypotheses which means the health risks is affected by water pollution and therefore when there is water pollution; it relates to the health issues.

S. No.	Hypotheses Statements	Status
H1	Water pollution has no effect on health risks.	<i>Rejected</i>
H2	Water pollution has no relationship with health risks.	<i>Rejected</i>

**Table 6: Hypotheses Summary Table**

## DISCUSSION

After the data analysis, the studies has made by analysis of the topic. From the analysis, the researchers find out the results that there is a relationship between water pollution and health. The data analysis shows the effect that water pollution is increasing day by day and it is very dangerous for the country as well as for the health of the people, animals, and plants. Water pollution has become very standard nowadays, and it is very harmful to the health of living things as they drink contaminated water which leads them towards the different types of diseases and because of rising of this issue most of the deaths occurs because the contaminated water is killing people, animals, and plants. Data analysis also gives the main idea about the particles and substance which create water pollution (Greenstone & Hanna, 2014).

Data analysis highlights the points of increasing water pollution because many of the people throw crashes in the water which creates some types of particles and substance which are harmful and enlarge many types of diseases which effect very badly on the peoples, animal and plants health. The analysis also shows that water pollution also makes and leaves it negative influence on the ecosystem as well. After analysis, it is also clear that government and other councils should also

look up to this matter and make a better implementation of sewage system (Parris, 2011).

As water is critical for the survival of every living thing and while people are drinking contaminated water which is dangerous for them but to overcome from this problem people should be aware of throwing trashes whereas government and other councils should also do some efforts to get rid of this water pollution problem. The analysis also gives an idea about the health assessment that health assessment should be held to check conditions of living things so that the number of diseases and death will get lesser. The results only tell that water pollution is very dangerous and it has a strong relationship with the peoples, animal, and plants health because this pollution leaves its negative influence and effect on the health which increases the risk of the health also (Vasudevan & Oturan, 2014).

The data analysis also gives an idea about that researcher have used the exploratory research design through which new ideas are established, and researchers explore and collect authentic information about the water pollution. All of these aspects gave us the information and resulted that this water pollution problem should be demolished because it affects the health of living things as well as the environment of the country (Hoekstra & Mekonnen, 2012).

## **CONCLUSION**

The present research is based on a topic which is a big problem of nowadays and that is Water Pollution. Water pollution now becomes a tremendous problem and increasing day by day. Water pollution has a lot of disadvantages. The research conducts the introduction of water pollution and its causes and effects on health on living things as well as on the environment. The purpose is also mentioned in the research that what is the aim of this topic and how to overcome this problem. The research will also conduct the background literature which is

based on the subject of sociology, and it conducts some theories as well. The water pollution topic is related to the sociological nature which is discussed briefly in the form of argument.

The information was conducted in the form of questionnaire so that researcher gets authentic and broad views of respondents and can without difficulty interpret the observations and makes some efforts to solve this problem of water pollution. After the analyzing and results, researchers find that there is a positive relation between water contamination and health because of people, animal and plants drink contaminated water which effects severely and raise the risk of their health as well. Many of the deaths occur because of water pollution problem. To overcome and to get rid of this problem of water pollution people, government and other councils should make some efforts against this issue so that people will remain healthy as lives are more important than anything else.

## APPENDIX

### *Questionnaire*

**Respondents: Students 18 - 25 age group**

### **Socio-Economic Background**

#### *Water pollution effect on health risk*

	<i>Water Pollution</i>	STRONGLY AGREE (5)	AGREE (4)	NEUTRAL (3)	DISAGREE (2)	STRONGLY DISAGREE (1)
1	The cause of infection is due to the negligence of citizens.					
2	Chemical pollutants, industrial waste materials and toxic wastes are being most disastrous.					
3	Law and order conditions are equally responsible for making the water pollution as the most important issue.					
4	A separate department must be created for the solution of this problem.					
5	Excessiveness in industrialization and using of natural resources in a harmful way must be controlled.					

	<i>Health Risk</i>	STRONGLY AGREE (5)	AGREE (4)	NEUTRAL (3)	DISAGREE (2)	STRONGLY DISAGREE (1)
1	From the diseases like malaria, diarrhea and stomach disorders this cause even death to the majority of people.					
2	Filtration plants must be installed for preventing to the best level.					
3	Avoid out watering plants and gardens so that no water can be retained.					
4	Skin diseases and infections also make the health risk to be increased.					
5	Proper health risk assessment setups are to be introduced.					

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