

# The Impact of Sanitation on Hygienic Conditions of Community in City Jampur

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## ABSTRACT

The present study has been conducted to understand the effects of poor conditions of sanitation and hygiene on the health of individuals and on their mobility within the society. This study was conducted in December, 2010 to analyze the Impact of Sanitation on Hygienic Conditions of Community in City Jampur. Sanitation is the hygienic means tending to promote or preserve health. Poor sanitation is the major reason of epidemic disease specially for third world countries. In this paper, the researcher discusses hygiene which means healthy living. The objectives of the study were to explain the importance of sanitation and hygiene in the smooth functioning of community, to identify what role was played by sanitation and hygiene in schools, to find out how the poor conditions of sanitation and hygiene affect the working environment of hospitals. The result of the study showed that a large number of people knew what was meant by sanitation and hygiene, types of waste, waste management and waste recycling and pollution. A great number of respondents were aware of the effects of poor sanitation for instance people getting sick and were being migrated, catching diseases and were bearing economic loss because of poor sanitation. From over all study of the research, it was concluded that the sanitation and hygiene has a great importance in the society.

**Keywords:** Hygienic Condition, Community, Sanitation, Mobility, Diseases.

## INTRODUCTION

The problem of sanitation and hygiene is not the problem of a city or country; it is problem of the whole world, instead. Definitely, this is why the efforts are being made by the United Nations to avoid or resolve the problems of poor sanitation and hygiene. For this purpose, UNICEF and WHO are putting their best efforts to tackle these threats to the whole world, to adult male and females but also to the children around the world. Unfortunately, every year, millions of children die due to poor conditions of sanitation and because of not having desirable hygienic conditions inside, outside and in wider environment surrounding their homes. "Sanitation generally refers to the provision of facilities and services for the safe disposal of human urine and feces. Inadequate or poor sanitation is a major cause of disease worldwide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. The word 'sanitation' also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal" (WHO, 2008). Solid wastes, domestic wastes, industrial wastes, agriculture wastes are also harmful for public health. In developed countries, typically people have use preventive measures of safety and strategy e.g., sewerage and wastewater treatment, simple technologies, hand washing with soap to overcome the issue of poor sanitation system but in developing countries this problem impact on communities and people. (George Tchobanoglous and Frank Kreith, 2002).

### Hygiene

Hygiene is a branch of science that focuses on promoting health it practices widely in the world.

### Types of Hygiene practices

**There are some types of Hygiene practices:-**

#### 1. Medical Hygiene

Medical hygiene practices focuses on medical care and overcome the disease and how it spread in community

#### 2. Hand hygiene

Hand hygiene is focuses as hand washing or washing hands with soap and water.

(Bloomfield, 2007). In the most developing countries where water is not available; there are suitable solutions, such as mud and ash are alternative source of soap. It is also recommended innovation at grass-root level in this situation. The Orangi Pilot Project in Karachi and community-led total sanitation in rural areas are two examples of such innovation (Welle, 2008).

### Social Significance of the Topic

The Social sciences have been studied and developed for the betterment of the humanity. The betterment is truly achieved, when there is a solution to an existing problem. Sociology is one of those social sciences, which study the human societies scientifically, and the human being and then gives the solution to the problems. As it is understood that, poor conditions of sanitation and poor hygiene are quite significant problems, that had been

faced by the world in the past and the present day. Hypothetically, if an individual person becomes ill or weak because of poor sanitation and poor conditions of hygiene, then that person will not be able to work effectively in the institution ; and the result will be there that the institution will not work smoothly. Thus, without a clean toilet and poor sanitation people are forced to live in unpleasant environment. Every year thousands of children die because of this unhygienic and unclean water by facing fatal ailments such as cholera, typhoid and other epidemic diseases. Predominantly, if the children have suffered some disease, it is usually agonizing as well as unsafe for health of other people around. Sickness takes children away from schools and adults, away from earning an income. Consequently, medical expenses make massive demands on the limited incomes of the poor.

The researcher chose this topic because it is generally believed that the conditions of sanitation and hygiene in the country are not good. The country Pakistan is one of the developing countries and the conditions of sanitation and hygiene are not good enough for everyone, especially considering the massive load of population of the country that produces further pollution as a result. The people are poor here and the living standard is not too high. The life expectancy is low. Most of the people here live in rural areas and suburbs and the conditions of the areas is not good in terms of cleanliness. They have less clean or pure drinking water for them. They face the problem of solid waste and problem of wastewater that is always on the road and streets. It not only affects their mobility of life but also the people bear millions of economic loss every year. The conditions of sanitation and hygiene are poor in the country in big cities like Islamabad, Lahore, and Karachi and in other cities. Specifically, the researcher chose this topic because the conditions of sanitation and hygiene are not good in the city Jampur, District Rajanpur. Among the many problems that the city faces, there exists a worrying problem of solid waste management. There are no adequate arrangements by the management to place the garbage or solid waste out of the city off to the refuse depot. This solid waste is thrown in the streets or on the roads and this solid waste gets stuck in the drains that leads to halt of wastewater. Additionally, the drains start to over flow, and the wastewater starts to spread on the roads, streets and everywhere. It not only affects the mobility of people but also causes economics loss. This situation also forces a great number of people to migrate too.

The conditions of sanitation have been poor in city Jampur but especially after the flood in 2010, the conditions became even worst. The floodwater remained on roads and in streets for days, and it caused the spread of diseases, and also affected the mobility of people. There have been many protests in different cities against poor conditions of sanitation but the problem still continues. The government and community and non-government organizations are contributing to improve the conditions of sanitation and hygiene. There is a need to spend funds to tackle this problem because the good conditions of sanitation and hygiene are very important for the smooth functioning of society and its institutions. Hence, these were the reasons for the researcher to select this topic.

### **Objective of the Study**

The purpose of the research is to find out the effects of poor sanitation. Particular objective of the research is:

1. To explain the importance of sanitation and hygiene in the smooth functioning of community

### **LITERATURE REVIEW**

Bartlett (2003) talked about a paper that concluded that poor sanitation is harmful for children and causes if illness in them. Different researchers also researched that child mortality and morbidity rates in poor urban settlements could equal or exceed those in rural areas.

Qadri et al. (2005) concluded that ETEC (a disease) is an under recognized the reason of diarrhea in poor countries where there was insufficient clean drinking water and also poor sanitation existed. Epidemic diseases were most frequently occurring in developing countries because of different kind of bacteria that exist in children and adults living in unhygienic condition and poor sanitation.

Eisenberg et al. (2007) conducted a study that diarrheal disease is because of poor quality water, unhygienic conditions and also integration of these environmental control strategies. When sanitation conditions were poor, water quality improvements might have minimal impact regardless of amount of water contamination. If each transmission pathway alone was sufficient to maintain diarrheal disease, single-pathway interventions would have minimal benefit, and ultimately an intervention would be successful only if all sufficient pathways were eliminated. However, when one pathway was critical to maintaining the disease, public health efforts should focus on this critical pathway. The findings provided guidance in understanding how to best reduce and eliminate diarrheal disease through integrated control strategies.

### **THEORETICAL FRAMEWORK**

The theory can be related with the present study considering the sanitation and hygiene of an institution. The sanitation and hygiene plays a very important role in maintaining people's health. The individuals run the institutions and if the health of individuals is sound they can smoothly run other institutions of the society. When these institutions are being run smoothly, it leads to the institutional stability of society. If the individuals' health

is affected by poor sanitation, their biological needs or their biological fitness will not be sound and they will not be able to perform their role or function in institutions and the malfunctioning will disrupt the stability of other institutions in society.

## METHODOLOGY

The aim of this chapter is to explain the tools, techniques, and methods that are used in this research for data collection and analysis of the data. The key concepts are also explained in the chapter that is used in questionnaire.

### Hypothesis

The present research, hypothesis is;

“Poor conditions of sanitation and hygiene lead to institutional or societal instability”

This hypothesis has been tested by making its sub-hypothesis:

1. Poor conditions of sanitation and hygiene force people to migrate
2. Poor conditions of sanitation and hygiene are responsible for diseases

### Universe/Population

The entire population, from which a sample is taken, is called population or universe. It may be defined as “any set of individuals or objects having some common observable characteristics under a study.” The universe or population of the present study consisted of the students of matric. Level in High School, patients and doctors in Tehsil Headquarter Hospital and the people of an area in Jampur city.

### Sample

For the present study, the stratified random sampling has been applied. The population is divided into 3 strata, THQ Hospital, Govt. High School and a specific area in Jampur, and 30 respondents were chosen from each stratum.

## RESULTS AND DISCUSSION

**Table No.01:** Percentage distribution of respondents regarding definition of sanitation

Defining Sanitation	Frequency	Percent
Cleanliness of roads, footpaths & streets	1	1.1
Collect waste, garbage from roads	1	1.1
Pure food and water	29	32.2
All of the above	59	65.6
<b>Total</b>	<b>90</b>	<b>100</b>

The table describes that according to 65.6 percent respondents said that all the options were correct, 32.2 percent respondents said pure food and water, 1.1 percent respondent the meaning of sanitation were cleanliness of roads, footpaths and streets, and 1.1 percent said to collect waste, garbage from roads. This table shows that majority of people are aware of what sanitation is.

**Table No. 02:** Percentage distribution of respondents in regard with defining waste management

Defining waste management	Frequency	Percent
Collect & shift waste out of the city	35	38.9
To re-cycle the waste	1	1.1
All of these	54	60.0
<b>Total</b>	<b>90</b>	<b>100</b>

The table describes that 60.00 percent said that all the options were correct, 38.9 percent respondents meant the waste management to collect and shift waste out of the city and 1.1 percent said that to recycle the waste.

**Table No. 03:** Percentage distribution of respondents in regard with defining waste recycling

Defining waste recycling	Frequency	Percent
To shift the waste	1	1.1
To re-use the waste	66	73.3
All of these	23	25.6
<b>Total</b>	<b>90</b>	<b>100</b>

The table reveals that 73.3 percent said to reuse the waste, according to 25.6 percent said that all the options were correct and 1.1 percent respondents said that waste recycling means to shift the waste. This shows that majority of respondents had information about waste recycling.

**Table No. 04:** Percentage distribution of respondents in regard with defining organic waste

Organic waste	Frequency	Percent
Peels of vegetables & fruit	9	10.0
Human waste	3	3.3
All of these	78	86.7
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table describes that 86.7 percent people said that all of the options were correct meaning that a majority of respondents had idea of organic waste, 10.00 percent respondents said that organic waste means peels of fruit and vegetables and 3.3 percent meant human waste.

**Table No. 05:** Percentage distribution of respondents in regard with their awareness of the effects of poor sanitation

Effects of poor sanitation	Frequency	Percent
To great extent	62	68.9
To some extent	26	28.9
Don't know	2	2.2
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table reveals that 68.9 percent respondents were aware of the effects of poor sanitation to great extent and 28.9 percent respondents were aware to some extent while 2.2 percent respondents did not know the effects of poor sanitation. It means that a majority of people was aware of effects of poor sanitation. The awareness of effects of poor sanitation is good for people because they can avoid these affects.

**Table No. 06:** Percentage distribution of respondents regarding their submission of complaints against poor sanitation

Complaints against poor sanitation	Frequency	Percent
Daily	3	3.3
Twice in a week	1	1.1
Once in a month	18	20.0
Several time in a month	11	12.2
On special occasions	57	63.3
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table explains about the complaints against poor sanitation by respondents which describes that 63.3 percent respondents submit complaints on special occasion. It means that the people were not interested in making complaints that showed their negligence regarding sanitation. 20.00 percent submit complaints once in a month, 12.2 percent do several times in a month, 3.3 percent submit complaints daily and 1.1 percent submits twice in a week. This negligence leads to no attention of administration and will cause poor sanitation in the area.

**Table No. 07:** Percentage distribution of respondents in regard with shifting the waste outside the city

Placement of garbage	Frequency	Percent
Yes	60	66.7
No	30	33.3
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table shows the responses of individuals to workers in which 66.7 percent workers placed the waste outside the city and 33.3 percent respondents said that the waste was not being shifted outside the city.

**Table No. 08:** Percentage distribution of respondents explaining the cleaning of public toilets

Cleaning of public toilets	Frequency	Percent
Daily	8	8.9
Twice in a week	9	10.0
Once in a week	7	7.8
Once in a month	5	5.6
On special occasions	61	67.8
<b>Total</b>	<b>90</b>	<b>100.0</b>

In this table, according to 67.8 percent respondents the sanitary workers cleaned the toilets on special occasions, according to 10.00 percent, toilets were cleaned twice in a week, 8.9 percent respondents said that sanitary workers clean the public toilets daily., according to 7.8 percent respondents toilets were cleaned once in a week, according to 5.6 percent toilets were cleaned once in a month. Proper cleaning will be helpful in preventing diseases.

**Table No. 09:** Percentage distribution of respondents explaining the need fulfillment of drinking water provided by administration

Fulfillment of need	Frequency	Percent
Yes	69	76.7
No	21	23.3
<b>Total</b>	<b>90</b>	<b>100.0</b>

In this table, the respondents told about the fulfillment of their need of drinking water provided by administration. According to 76.7 percent respondents told that the supplied water fulfilled their need while 23.3 percent respondents said that the water did not fulfill their need of drinking water.

**Table No. 10:** Percentage distribution of respondents in regard with having a kind of sewerage and drainage system

Sewerage and drainage system	Frequency	Percent
Better	5	5.6
Good	37	41.1
Not Bad	16	17.8
Poor	32	35.6
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table describes the situation of sewerage and drainage system in the area in which 41.1 percent respondents had good, 35.6 percent respondents had poor drainage and sewerage system, 17.8 percent respondents said that their sewerage and drainage system was not bad and 5.6 percent respondents said that they had a better sewerage system. If system is good then there will be no wastewater on the roads and less chances of spread of disease.

**Table No. 11:** Percentage distribution of respondents explaining the duration of remaining the wastewater on the roads, streets, or footpaths

Wastewater on roads	Frequency	Percent
Two day	11	12.2
Five Days	5	5.6
The Whole Week	1	1.1
More than a Week	35	38.9
No	38	42.2
<b>Total</b>	<b>90</b>	<b>100.0</b>

In this table the duration of remaining the wastewater on the roads or streets in the areas where there are poor conditions of sanitation. The 42.2 percent respondents said that no wastewater was being spread on the roads or streets in their area, 38.9 percent respondents said that the wastewater remained on the roads more than a week, 12.2 percents respondents said that the wastewater remained on the roads or streets in their area for two days. 5.6 percent respondents said that the wastewater remained on roads for five days and 1.1 percent respondents said that it remained for one week.

**Table No. 12:** Percentage distribution of respondents regarding their response if the poor sanitation was responsible for diseases

Poor sanitation responsible for diseases	Frequency	Percent
Yes	88	97.8
No	2	2.2
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table reveals the responses from different respondents about the cause of spread of the diseases because of the poor sanitation in which 97.8 percent respondents said that the poor sanitation was responsible for diseases and bad health. This relates to our hypothesis. 2.2 percent respondents said that poor sanitation was not responsible for diseases.

**Table No. 13:** Percentage distribution of respondents regarding their response if the poor sanitation was responsible for migration

Poor sanitation responsible for migration	Frequency	Percent
Yes	82	91.1
No	8	8.9
<b>Total</b>	<b>90</b>	<b>100.0</b>

The table is also related to hypothesis that describes the responses from different respondents about the effects of poor sanitation, which could be responsible of migration from one place to another in which 91.1 percent

respondents said that the poor sanitation was responsible for migration while 8.9 percent respondents said that poor sanitation was not responsible for migration of people from one place to another.

**Hypothesis No. 01**

Alternate Hypothesis = Better the conditions of sanitation, less the chances of spread of disease.

Null Hypothesis = Better the conditions of sanitation, greater the chances of spread of disease.

You have sewerage and drainage system?	Is poor sanitation responsible for diseases?		Total
	Yes	No	
Better	3	2	5
Good	37		37
Not Bad	16		16
Poor	32		32
<b>Total</b>	<b>88</b>	<b>2</b>	<b>90</b>

Chi-square value = 34.773  
 Level of significance = 0.05  
 Gamma Value = -1.000

Degree of freedom = 3  
 Significant

**Conclusion**

The above table's results show that there is relationship between conditions of sanitation and the spread of diseases. The gamma value is negative which shows that as the conditions of sanitation start being better, there are less chances of spread of disease. This shows that alternate hypothesis is accepted and null hypothesis is rejected.

**Hypothesis No. 02**

Alternate Hypothesis = Better the conditions of sanitation, less chances of migration.

Null Hypothesis = Better the conditions of sanitation, greater chances of migration.

You have sewerage and drainage system?	Is poor sanitation responsible for migration or transfer?		Total
	Yes	No	
Better	4	1	5
Good	33	4	37
Not Bad	15	1	16
Poor	30	2	32
<b>Total</b>	<b>82</b>	<b>8</b>	<b>90</b>

Chi-square value = 1.344  
 Level of significance = 0.05  
 Gamma Value = -.294

Degree of freedom = 3  
 Significant

**Conclusion**

Results of the tables presented above, depict that there is a relationship between conditions of sanitation and the cause of migration. The gamma value is negative which shows that as the conditions of sanitation start to get better, there exist less causes of migration. This shows that alternate hypothesis is accepted and null hypothesis is rejected.

**SUMMARY AND CONCLUSION**

Drinking quality water remains an important issue not only in poor countries but also for the developed countries; even at European Countries it is estimated that 120 million people do not have access to safe drinking water because water quality is poor. (Clasen and Haller, 2008). Similarly, poor sanitation is the major reason of epidemic disease specially for third world countries.. The objectives of the study were to explain the importance of sanitation and hygiene in the smooth functioning of community, to identify what role was played by sanitation and hygiene in schools and to find out how the poor conditions of sanitation and hygiene affect the working environment of institutions. The result of the study showed that a large number of people were aware of the phenomenon sanitation and hygiene, types of waste, waste management and waste recycling and pollution. A great number of respondents were aware of the effects of poor sanitation for instance people getting sick and

were being migrated, catching diseases and were bearing economic loss because of poor sanitation. From over all study of the research, it was concluded that the sanitation and hygiene has a great importance in the society. The findings concluded that a relationship exist between conditions of sanitation and the cause of migration. Moreover, when conditions of sanitation start to get better then causes of ,migration reduce.

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