Environmental Sanitation in an Urban Field Area

A Report

Introduction

Environmental pollution is an important health hazard which is now a serious problem in our country and various respiratory diseases are caused by environmental pollution. The women exposed to fumes of firewood and dried cow dung and also kerosene are often attacked by pulmonary heart diseases. So many water borne diseases such as cholera, dysentery, typhoid, paratyphoid, infective hepatitis and hookworm are noticed due to non-availability of safe drinking water and improper disposal of human excreta. Unless effective steps are taken to improve the sanitary condition of the country, it will be too difficult to achieve the goal that is "Health for All by 2000 AD".

This programme is based on environmental sanitation which is a part of social preventive medicine in B.Sc. Nsg. (P.C.) curriculum. The observational study was done at the urban field area named Kumbhar Palli at Berhampur in the state of Orissa. It is three kilometers away from College of Nursing and nearer to the Urban Health Centre.

Sample Design

The slum area has 127 families in total but as the number of students were ten, so families were selected and surveyed by the simple random sampling method.

General Objective

After completion of the programme the students will be able to gain knowledge regarding environmental sanitation and sanitary status of the area, Kumbharapalli, which will help them to develop their skill in studying th ecology of the community.

Specific Objective

to assess the ecological status of urban slum area.

to study the behavioural pattern and habits of the people on the environmental sanitation aspect.

to find out the problem arising due to poor sanitary conditions.

Analysis of Data

Demographic Feature

Totally 30 families were taken as the sample and surveyed. There are 153 members living in 30 families, out of that 79 are female and 74 are male members in which children's population, below the age of five is 25.

Table-I

Distribution of Family According to Type

Types of Family	No. of families	Percentage
Nuclear	24	80
Joint	6	20
Total	30	100

Table-II

Distribution of Family According to Social Class Classification

Social Class	No. of families	Percentage
Lower	24	80%
Middle	06	20%
Total	30	100

Table - III

Distribution of Occupational Standard According to their Occupation

Occupation	No. of families	percentage
Government Servant	06	20
Business	04	13.3
Labourer	11	36.6
Washerman	03	10
Potter	06	20
Total	30	100

Table - IV

Distribution of Family Size According to the Members of the Family

Family Size	No. of family	Percentage
1-5 Members	16	55.3
6-10 Members	11	36.6
11-15 Members	03	10.0
16 upwards	-	-
Total	30	100

Table - V

Distribution of Family According to Their Education

Education	No. of families	Percentage
Literate	18	60
Illiterate	12	40
Total	30	100

Table - VI

Number of Eligible Couples Found in the Family

Eligible Couple	No. of family	Percentage
22	30	73.3

Table - VII

Distribution of Houses According to the Nature of Construction

Type of house	No. of families	Percentage
Pucca	03	10
Kuccha	14	46
Semi-pucca	13	43.3
Total	30	100

Table - VIII

Distribution of Houses According to the Nature of the Roof

Roof	No. of families	Percentage
Thatched	26	86.6
Terraced	04	13.3
Total	30	100

Table - IX

Distribution of Houses According to Ownership

House	No. of families	Percentage
Rented	15	50
Own	15	50
Total	30	100

Table-X
Distribution of Sq. Ft. Surface Area of their Living Room

Sq. ft. surface area	No. of families	Percentage
Over-crowded	25	75
Adequate	05	25
Total	30	100

Table-XI
Distribution of Families in Regard to Interference of Light in Living Room

Light	No. of families	Percentage
Adequate	16	53.3
Inadequate	14	46.7
Total	30	100

Table-XII
Condition Related to Hygiene of Kitchen

Kitchen	No. of families	Percentage
Dirty	14	53.4
Clean	16	46.6
Total	30	100

Food Hygiene

Table-XIII

Distribution of Families According to their Habits of Washing Vegetables in Preparing Food

Vegetables	No. of families	Percentage
After cutting	29	90
Before cutting	1	10
Total	30	100

DISCUSSION

1. *Religion*: Most of the people are Hindu. Out of 30 families only one is a Christian family. Other families are Hindus. (96.6%).

2. *Social Class and Occupation*: Most of the families are in lower social group that is 80%, middle class are 20%. There is no one in the higher class group. 36.6% of population are labourers working in the industry nearer to the area. Those 20% people who are working as Government servants, are Class IV workers. 13.3% are doing business like tea stall, pan shop. The rest 30% are doing their traditional occupation like washerman and potter.

3. *Education*: If literate is considered only by reading and writing, the 60% male persons are literate and 40% are illiterate, 90% female population have not got any literacy education. they are unable to read and write.

4. *Living Room*: Major group of people are having only one living room (90%), in which kitchen is attached.

5. *Smoke Outlet*: Almost all families do not have provision for smoke outlet.

6. *Fuel*: People are using mainly firewood and cow dung as fuel. Some people (20%) are using kerosene at their homes for cooking.

7. *Method of Cooking*: According to our survey almost all families cooked their food overboiled and also were throwing away starch and vegetable juice.

8. *Method of Serving Food*: All the members of 30 families usually have cool food.

9. *Method of Taking Food*: 80% of the family members are using common utensils to have their food.

10. *Provision of Drinking Water*: There is provision of water supply by municipality every alternate day which is not sufficient for the people. So they use well water most of the time for drinking and cooking purposes. Though there is a tubewell in the middle of the village now it has been broken and not working at all.

11. *Well*: Wells used by the people are uncovered and everybody used individual bucket to draw water from the well. It is a major source of water pollution.

12. *Drainage*: Most of the families do not have any drainage system. Very few families have drainage systems which are uncovered and become a place of mosquito breeding.

13. *Pond*: There are 2 ponds on both sides of the village. People are using pond water for all purposes

except drinking and cooking, such as bathing, washing after stool, and cleaning of utensil, etc. The catchment area of the pond is full of dirt and human excreta. No protection has been taken against mosquito breeding. It is the main source of water borne diseases.

14. *DDT Spray*: There is no provision of spraying DDT in the house. There are spraying of larvicide oil in the drain through municipality once a month.

15. *Garbage Disposal*: All the perishable matters may be liquid or dry, are thrown outside the house.

16. *Disposal of Night Soil*: All the people are using open field for defecation and it is found that the faeces of small children are thrown indiscriminately.

17. *Hygiene*: All family members are habituated to take bath once a day and giving bath to infants and newborns twice a week as it is their traditional custom.

18. *Washing of Clothes*: Everybody washes his or her wearing clothes daily with plain water and with soap once a week. Beddings are washed less often.

Problem Observed in the Area Due to Poor Sanitatio

Water problem is a major problem in that area. Supply of drinking water is not adequate for them. People are using highly polluted water and incidence of diarrhoea, dysentery, worm, infestation is high. There is no drainage system around the well. The surrounding of the well becomes a mosquito and fly breeding place.

Barefoot open filed defecation is a common habit among the people harbouring hookworms from this source.

Lack of proper ventilation in the living room is seen which is an important part of environmental sanitation. But 90% of families do not have windows in their houses. Those 10% who have windows are not opened always.

Housing condition is very poor with cracked wall, leaking roofs, accumulation of dust and webs are found in rented houses. Dampness of floors are present in rainy seasons. Kuccha floors are cleaned with fresh cow dung and look clean in other times. There are rats seen in each and every house which might transmit the diseases. 75% families are living in overcrowding. No privacy is maintained. It is a major social problem which develops antisocial trends and juvenile deliquency in children. The major group of women's population are illiterate. Due to ignorance and habits they prepare food in an unhygienic way and lose lots of nutrients during cooking.

Last but not least, poverty is also a great problem for them.

Suggestions and Conclusions

Frequent health education to the housewives who are the key members of the families is necessary regarding purification of water, food hygiene, cleanliness and maintenance of personal hygiene by which many water borne diseases and worm infestation can be prevented.

To raise their consciousness regarding harmful results of over crowding and maintenance of privacy, health education is useful means.

Advice to open window for cross ventilation to those having own houses. Those who are living in rented houses have to motivate their house owners to open window and repair the houses.

Those people who have their own houses can build low cost latrines with the help of the Municipality, those living in rented houses with no space for latrine, there should be provision to construct Sulabha Souchalaya by Municipality.

Provision of adequate safe drinking water by Municipality should be there or construction of tubewell on both sides of the village. Otherwise water problem can not be solved.

Proper drainage system should be constructed by the Municipality.

It is difficult to raise their economic standard unless the Government intervenes. Till then it is advisable to build cottage industries like coir materials through a cooperative society, because coir is the local product of Berhampur. Preparation of Khalli Patra (leaves on which food is eaten) Thunga (pockets made with paper) and selling it in local market. The housewives can make these articles in their leisure time. Potters can improve their economic standard by making various types of artistic earthen materials.

Periodical follow-up visits are very essential in that area. Time to time health education to the women's group is indispensable to modify their traditional unhygienic habits.

This study was conducted by a team consisting of:

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