



An observational study on environmental sanitation in NTR Nagar, Nellore

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Abstract

Sanitation is one of the determinants of quality of life and human development index. It is a fundamental health service without which there cannot be any improvement in the state of community health. Improving the sanitation within a community leads to an improvement in health. Thus sanitation is an integral component of environmental protection which ensures a productive life. The Present descriptive observational study conducted among 100 houses in NTR Nagar, Nellore. Houses were selected by using non probability convenience sampling technique. Informed consent for observation of household was obtained from head of the family. Data was collected by using observation check list regarding environmental sanitation. Data was analyzed by using descriptive statistics. The study results show that the levels of hygiene regarding observation of environmental sanitation, 53 (53%) are having poor environmental hygiene and 47 (47%) are having good environmental hygiene. The study emphasized regarding the need for regular education and motivation of community for practicing good sanitation and hygiene.

Keywords: observation, environment, sanitation

Introduction

The term environment means different things from different perspectives. Darling V.F. (1971) views the environment in terms of ecology and defines it as the science of the organism in relation to other organisms of different species, and to those of its own kind. The Oxford Advanced Learners English Dictionary defines the environment as conditions, circumstances etc. affecting people lives. Haggett (1975) on his part defines the environment as the sum total of all conditions that surround man at any point in time on the earth's surface.

Sanitation is "the means of collecting and disposing of excreta and community liquid wastes in a hygienic way so as not to endanger the health of individual and the community as a whole". It consists of both public and private elements, and the individual's hygiene can effect the whole community.

On his part, Canter (1977) categorized the environment into air environment, water environment, noise environment, biological environment, cultural environment, and socio-economic environment. The last definition is all embracing. However, all the definitions are important in their own angles for the environmentalist, the environment is normally viewed in the physical sense which Holderness and Lambert (1982) said is made up of air, water and land. Therefore, environment refers to the natural environment in which man, animals and plants live and interact and it includes basically the land, water and air. It is upon this natural surrounding that all creatures depend for their existence and sustenance. Put more succinctly, this physical environment can be taken to be all the natural creations of God such as the laud bodies, water bodies,

vegetation etc. which harbor a variety of living and non-living things. The interesting thing to observe is that the living components of creation are found in all facets of the physical environment. Under a normal condition, the living things interact symbolically among themselves and with physical environment. The great philosopher Louis Pasteur had noted that before man came to the scene, the physical environment was as pure as the spring water.

Objectives

To observe regarding environmental sanitation in Saraswathi Nagar, Nellore.

Methodology

A descriptive observational study conducted among 100 houses in NTR Nagar, Nellore. Subjects were selected by Non probability Convenience sampling technique.

Description of the tool

The investigator developed checklist to assess the observation regarding environmental sanitation in Saraswathi Nagar, Nellore. It consists of 52 statements. The developed tool was evaluated by experts in nursing department.

Data collection procedure

After obtaining formal ethical consent. The data was collected by doing the observation regarding environmental sanitation in and around the 100 houses in Saraswathi Nagar by using convenience sampling technique. The data was observed for 10 minutes at each area. The observation checklist was used to

analyse the level of practice. It was analyzed and tabulated according to the objectives.

Plan for data analysis

The data was analyzed in the terms of objectives of the study by using descriptive and inferential statistical method.

The descriptive data was assessed by using mean, median, standard deviation.

Results

Table 1: Frequency and percentage distribution regarding observation checklist on environmental sanitation

Sl. No	Content	YES		NO	
		f	%	f	%
1	Following hygienic practices.	83	83%	17	17%
2	Keeping surroundings clean and tidy daily.	74	74%	26	26%
3	Use clean and safe methods of preparing and storing food.	78	78%	22	22%
4	Storage of left –over foods.	14	14%	86	86%
5	Discarding leftover foods.	67	67%	33	33%
6	Regular hand washing before and after taking food.	89	89%	11	11%
7	Regular hand washing before preparing food.	72	72%	28	28%
8	High population density in house.	25	25%	75	75%
9	Little sunlight getting into the houses.	77	77%	23	23%
10	Cleaning water storage tanks periodically.	67	67%	33	33%
12	Rainwater collection from roof and ground surfaces.	17	17%	83	83%
13	Using rainwater for drinking and household purpose.	17	17%	83	83%
14	Amount of water available daily.	74	74%	26	26%
15	Stagnation of water around the house.	31	31%	69	69%
16	Toilets are away from drinking water source.	77	77%	23	23%
17	Facilities present for waste water disposal.	81	81%	19	19%
18	Doing any testing for drinking water.	32	32%	68	68%
19	Wastewater discharged to the drains.	81	81%	19	19%
20	Washing clothes daily.	86	86%	14	14%
21	Washing of utensils immediately.	74	74%	26	26%
22	Presence of mosquito, rat and insect around the house.	72	72%	28	28%
23	Removing of chappals before entering into house.	76	76%	24	24%
24	Planted trees around the houses.	78	78%	22	22%
25	Handling animal waste to make fertilizer.	36	36%	64	64%
26	Animals are away from household.	72	72%	28	28%
27	Drying washed cloths under sunlight.	86	86%	14	14%
28	Utensils are dried under the sunlight.	43	43%	57	57%
29	Using any method of pest control.	47	47%	53	53%
30	Leaks from septic tank.	17	17%	83	83%
31	Significant of cracks in walls or ceilings.	45	45%	55	55%
32	Windows are present in kitchen.	37	37%	63	63%
33	Yard is kept free from garbage and dust.	78	78%	22	22%
34	Bathrooms are kept clean.	82	82%	18	18%
35	House is adequately ventilated.	77	77%	23	23%
36	House is free from bad odors.	71	71%	29	29%
37	Perishable food is refrigerated.	44	44%	56	56%
38	Poor drainage facilities.	41	41%	59	59%
39	Maintaining noise level.	82	82%	18	18%
40	Presence of dirt and stains on walls and doors.	48	48%	52	52%
41	Maintaining clean, safe and pleasant physical environment.	73	73%	27	27%
42	Kitchen garbage cans are cleaned regularly.	69	69%	31	31%
43	Chemical wastes are properly stored and labeled.	58	58%	42	42%
44	Cleaning of nails frequently.	80	80%	20	20%
45	Make fly-traps and cover food.	60	60%	40	40%
46	Immediately clean dirt on the floors.	67	67%	33	33%
47	Use of disposable bins.	57	57%	43	43%
48	Toilet facilities are connected directly to kitchen.	20	20%	80	80%
49	Garbage present around the houses.	42	42%	58	58%
50	Regular hand washing especially after defecation.	73	73%	27	27%
51	Spray and clean down toilets regularly.	40	40%	60	60%
52	Practicing open field defecation.	8	8%	92	92%

53	Changing of drinking water daily.	93	93%	7	7%
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Table 2: Frequency and percentage distribution regarding level of environmental sanitation in NTR Nagar. (n=100)

Level Of Environmental Hygiene	Frequency (F)	Percentage (%)
Poor	53	53%
Good	47	47%
Total	100	100

Table 3: Mean and standard deviation of level of environmental sanitation in NTR Nagar.

S. No	Mean	Standard Deviation
1.	31.05	4.63

Conclusion

The study concluded level of hygiene regarding observation of environmental sanitation, 53 (53%) are having poor hygiene and 47 (47%) are having good hygiene. Hence study emphasized regarding the need for regular education and motivation of community for practicing good sanitation and hygiene.

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