A study to assess the knowledge regarding environmental sanitation among women in selected rural villages at Nellore

B Vanaja Kumari, B Kalpana, Mary Vineela and Banu Jyothi

Abstract

Objectives: To assess the level of knowledge regarding environmental sanitation among women. To associate the knowledge level regarding environmental sanitation with selected socio-demographic variables. To provide an information booklet.

Methodology: A quantitative study by using descriptive design was used, a sample size of 100 women were selected by using simple random Sampling technique, Semi structured questionnaire were used to assess the t level of knowledge among women on environmental sanitation and an information booklet was provided.

Results: The study revealed that among 100 women, 60(60%) had inadequate knowledge, 24(24%) had moderately adequate knowledge and 16(16%) had adequate knowledge.

Keywords: Environmental sanitation, rural, Nellore

Introduction

Environment is one of the determines of health of individual, family and community at large people’s health is affected by the quality of place they live and work and air they breathe, the water they drink and the food they consume. It is the environment which predisposes people to various agents it may have and may cause any disease or health problems. The quality of environment is deteriorating very fast especially because of population explosion, industrialization and urbanization, deforestation, automobiles, nuclear technology and green revolution.

K.K. Gulani

Now a days the word environment is often being used by almost all people around us, on television and in newspapers. Everyone is speaking about the protection of environment. Since then world environmental day is celebrated on 5th of June every year to act as a remainder of the persisting environmental problems, raise environmental related issues and concerns work out action plans to protect and preserve environmental aspects. All this shows the increasing importance of environment. Besides, it is a fact that life is tied with the environment.

Puja Mondal -2015

Environment: The term environment has been derived from a French word “Environnia” means ‘to surround’. It refers to both a biotic (physical or non-living) and biotic (living) environment. The word environment means surroundings, in which organisms live. Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes as well as the treatment and proper disposal of sewage or wastewater.

World Health Organization

Hazards can be either physical, microbiological, biological or chemical agents of disease. Wastes that can cause health problems include human and animal excreta, solid wastes, domestic wastewater (sewage, sullage, grey water), industrial wastes and agricultural wastes.
Background of the study
About 2.4 billion people globally live under highly unsanitary conditions and have such poor hygiene behaviors that their exposure to risks of incidence and spread of infectious diseases, are enormous. Water stored at home is frequently contaminated by inadequate water management in the home. These issues are receiving increasing attention, but considering the huge backlog within the sector there is still a need for greater mobilization of resources and involvement of decision-makers at all levels. Sectoral demands for water are growing rapidly in India owing mainly to urbanization and it is estimated that by 2025, more than 50% of the country's population will live in cities and towns. Population increase, rising incomes, and industrial growth are also responsible for this dramatic shift. National Urban Sanitation Policy 2008 was the recent development in order to rapidly promote sanitation in urban areas of the country. India's Ministry of Urban Development commissioned the survey as part of its National Urban Sanitation Policy in November 2008. In rural areas, local government institutions in charge of operating and maintaining the infrastructure are seen as weak and lack the financial resources to carry out their functions. In addition, no major city in India is known to have a continuous water supply and an estimated 72% of Indians still lack access to improved sanitation facilities.

Water supply and sanitation in India. [2014]
About 1.2 tone’s of waste was collected from Andhra Pradesh by the municipal department 2013. Andhra Pradesh academy of rural development has been providing value added capacity building services to the panchayat raj and rural development department, under the current mandate of Government of Andhra Pradesh with Andhra Pradesh academy of Rural development, the right angle was given the assignment of caring to a situation analysis and developing an appropriate communication strategy.

Science Direct (2013). “Rural Development"
Statement of the problem
A study to assess the knowledge regarding environmental sanitation among women in selected rural villages at Nellore.

Objectives
1. To assess the level of knowledge regarding environmental sanitation among women.
2. To associate the knowledge level regarding environmental sanitation with selected socio-demographic variables.
3. To provide an information booklet.

Assumptions
Women may have inadequate knowledge regarding environmental sanitation.

Projected outcomes
The study would help to know level of knowledge on environmental sanitation among women in selected villages at Nellore

Materials and Methods: A descriptive design was used to conduct the study in selected rural areas Dakkilivaripalem in Nellore District, Andhra pradesh. A sample size of 100 women was selected by using simple random Sampling technique. Permission was obtained from the research committee of Narayana Medical College. The informed consent was taken from the women who willing to participate in the study. Semi structured questionnaire were used to assess the pre test level of knowledge among women on environmental sanitation and an information booklet was provided.

Criteria for selection of the sample
Inclusion criteria
The women age between 25 to 65 years.
The women who are willing to participate in the study

Exclusion criteria
The women who does not know Telugu or English.
The women who are not available at the time of data collection.

Tool for data collection
The tool consists of 3 parts

Part 1: Demographic variables of women like Age, Marital status, Education, Occupation, Family Income per Month, Religion, Number of Children, Type of Diet, Type of Family and Source of Information.

Part 2: Semi structured questionnaire to assess the level of knowledge among women regarding environmental sanitation consist of 3 items.

Part 3: Information booklet on Environmental Sanitation

Data Analysis

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Data Analysis</th>
<th>Method</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Descriptive statistics</td>
<td>Frequency and percentage distribution Mean, Standard Deviation</td>
<td>Distribution based of demographic variables To assess the Level of knowledge on Environmental Sanitation among Women</td>
</tr>
<tr>
<td>2</td>
<td>Inferential statistics</td>
<td>Chi-square test</td>
<td>To associate level of knowledge on Environmental Sanitation among Women with their selected socio demographic variables</td>
</tr>
</tbody>
</table>
Results

Table 2: Frequency and Percentage distribution of women based on Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>31-40 years</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>41-50 years</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Above 51 years</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

With regard to age of women, 31(31%) are between 20-30 years, 50(50%) are between 31-40 years, 16(16%) are between 41-50 years and 3 (3%) are above 51 years.

![Fig 1: Percentage distribution of women based on age.](image1)

Table 3: Frequency and Percentage distribution of women based on education. (N=100)

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Primary education</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Secondary education</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Graduate</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Post graduate</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows that with regard to education, 22(22%) were illiterates, 36(36%) studied Primary education, 22(22%) studied Secondary education, 18(18%) Graduates and 2(2%) were post graduates.

![Fig 2: Percentage distribution of women based on education.](image2)

Table 8: Frequency and Percentage distribution of women based on type of waste disposal. (N=100)

<table>
<thead>
<tr>
<th>Type of waste disposal</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dumping</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Burial</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Public bins</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Burning</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows that with regard to type of waste disposal, 12(12%) follows dumping, 23(23%) by burial, 57(57%) were using public bins and 8 (8%) were following type of burning.

![Fig 3: Percentage distribution of women based on waste disposal.](image3)

Table 2: Frequency and percentage distribution of level of knowledge among Women on Environmental sanitation (N=100)

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate knowledge</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Moderate knowledge</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Adequate knowledge</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows with regard to level of knowledge regarding environmental sanitation among women, 60(60%) had inadequate knowledge, 24(24%) had moderately adequate knowledge and 16(16%) had adequate knowledge.

![Fig 4: percentage distribution of level of knowledge among Women on Environmental sanitation (N=100)](image4)

(ii) Mean and standard deviation of level of knowledge regarding environmental sanitation among women (N=100)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of knowledge</td>
<td>12.94</td>
<td>4.87</td>
</tr>
</tbody>
</table>

The above table shows mean and standard deviation of level of knowledge regarding environmental sanitation mean was 12.94 and standard deviation was 4.87.

There was a statistically significant association between level of knowledge and demographic variables of women such as age, educational status, and, monthly income and type of family and there was no statistically significant association with marital status, Occupation, Type of diet, religion and source of health information at 0.05 level.
Implication of the study

- The findings of the study indicated that more emphasis should be placed in the nursing curriculum about control and Environmental sanitation.
- Health education program can be used to reinforce learning needs of the women on Environmental sanitation.
- Students can be motivated to teach the women about the control and prevention of Environmental sanitation in the wards and community settings.
- Varied type of audio-visual aids regarding Environmental sanitation should be prepared for teaching purpose.
- In-service and continuing education programs may be conducted for the staff to enhance the knowledge on Environmental sanitation.

Recommendations of the study: On the basis of the findings of the study the following recommendations are being made.

A similar study can be replicated on a large sample to generalize the findings.

An experimental study can be conducted to assess the effectiveness of teaching programme on environmental sanitation.

A similar study can be done on different settings.

A comparative study can be undertaken to compare the knowledge regarding environmental sanitation among women between rural and urban areas.

Conclusion

The informational booklet improves women's knowledge on Environmental sanitation.

References