INTRODUCTION

Environmental health covers those aspects of human health, including quality of life, that are determined by physical, biological, psychosocial, social and chemical factors within the environment. It also refers to the theory and practice of assessing, correcting, controlling and preventing those factors within the environment which will possibly affect harmfully the health of each generations.\[1\]

Exposures to environmental pollution remain a serious source of health hazard throughout the planet, though risks are generally higher in developing countries like India, where poverty, lack of infrastructure, and weak environmental legislation combine to cause high pollution levels. According to the World Health Organization, 23% of worldwide deaths and 26% of deaths among children under five are due to modifiable environmental factors. A significant part of the environmental disease burden is due to risks including poor indoor air quality, unsafe water, poor sanitation and hygiene, exposure to toxic chemicals, and climate change. According to the 2013 Global Burden of Disease India Report, high blood pressure, indoor pollution, tobacco smoking, poor nutrition, and outdoor pollution are the five biggest killers in India.\[2\]

India’s environmental performance is one of the worst in the world. On environmental health, it’s the worst.\[3\] India's post-independence quick economic growth has raised millions out of poverty but is putting heavy pressure on ecosystems. Increasing patterns of unsustainable consumption have impacted air pollution, water scarcity and waste generation, posing dangers to human and environmental health. While unsafe sanitation, disposal of untreated wastewater and surfeit of agrochemicals are blamable for an increase in water-borne diseases, vehicular pollution, industrial emissions and burning of fossil fuels which are majorly contributing to respiratory and lung diseases.\[4\]

Healthier environments could prevent almost one quarter of the global burden of disease. Clean air, stable climate, adequate water, sanitation and hygiene, safe use of chemicals, protection from radiation, healthy and safe workplaces, sound agricultural practices, health-supportive cities and built environments, and a preserved nature are all prerequisites for sound health.\[5\] Environmental health education and sustainability practices in schools are an vital educational component in the 21st century.\[6\]

\[1\] Assistant Lecture, Integral College of Nursing, Lucknow (U.P), India
\[2\] Ph.D Scholar, SHRI J J T University, Jhunjhunu, Rajasthan, India

"IMPACT OF SCHOOL-BASED TEACHING PROGRAMME ON KNOWLEDGE REGARDING ENVIRONMENTAL HEALTH AMONG UPPER PRIMARY SCHOOL STUDENTS"

Divya\(^1\) and Bince Varghese\(^2\)

\(^1\) Assistant Lecture, Integral College of Nursing, Lucknow (U.P), India
\(^2\) Ph.D Scholar, SHRI J J T University, Jhunjhunu, Rajasthan, India

DOI: http://dx.doi.org/10.24327/ijrsr.2020.1107.5443

Copyright © Divya and Bince Varghese, 2020, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.
With the current condition of the planet today, environmental education is to an vast extent essential due to declining resources and fading environmental quality.\cite{7} Whereas environmental health education is quickly becoming a global priority. The classroom looks like a natural place to teach about the environment and human health. Unluckily, environmental health receives little attention in schools.\cite{8} Very limited experimental studies have been conducted to improve knowledge of upper primary school students about environmental health and its importance in particular areas. This is the main motive researchers conduct the present study. The purpose of the research is to assess the effectiveness of school-based teaching programme on knowledge regarding environmental health among upper primary school students in selected schools at Barabanki, Uttar Pradesh, India and to find out the association between demographic variables with it.

**MATERIAL AND METHOD**

A evaluative research approach with Pre-Experimental, One group pretest posttest Design with non-probability purposive sampling method was used for the selection of 80 upper primary school students in selected schools at Barabanki, Uttar Pradesh. The study settings were Upper Primary Schools from Rasauli and Satrikh areas in Barabanki district, Uttar Pradesh, India. The tool used for data collection consisted of 2 parts: Part I: Socio-demographic data and Part II: self-structured knowledge questionnaire which consists of 30 items were used to assess the knowledge of upper primary school students regarding environmental health. Every item was of multiple choice types with one correct answer carrying 1 mark remaining options 0 marks. The maximum score was 30 and minimum score 0. The scores were graded as 21-30 good knowledge, 11-20 average knowledge and 0-10 poor knowledge. Content validity of the tool was determined by experts in the field of Community medicine and Nursing. The reliability of the knowledge questionnaire was tested by using the spearman brown split half method and the score was found to be 0.78. The tool was prepared in English and Hindi to facilitate better understanding. Preparation of a school-based teaching programme about environmental health was developed keeping in mind the objectives, criteria, literature review, as well as expert's opinions. The study was approved by the Institutional Ethical Committee. Informed consent was obtained and the confidentiality and anonymity of the participants were maintained. Pre-test was conducted to know the knowledge regarding environmental health among upper primary school students and school-based teaching programme was administered and the post-test was done after the gap of 10 days. The collected data were analyzed using descriptive and inferential statistics. SPSS version 25 was used for data analysis and 0.05 was the level of significance.

**RESULTS**

The major findings of the study were as follows

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Age (in years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-11</td>
<td>47</td>
<td>58.8</td>
</tr>
<tr>
<td>12-13</td>
<td>31</td>
<td>38.8</td>
</tr>
<tr>
<td>14-15</td>
<td>2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Table 1 displays that frequency and percentage distribution of demographic variables, the majority of the subjects 58.8% were in the age group of 10-11 years, 60% were males, 60% were Hindus, 58.8% were joint family, 96.2% were from rural areas, 51.2% subjects type of house were semi-pucca, 97.5% were using hand pump for their source of drinking water, majority 82.5% were using Indian style latrines and 72.5% had open drainage system in their family.

Figure 1 depicts that percentage distribution of knowledge levels regarding environmental health among upper primary school students, in the pretest majority 78.8% had poor knowledge, remaining 21.2% average knowledge and none of them had good knowledge but in the post-test, the majority 58.8% had good knowledge followed by 32.5% average knowledge and 8.8% had poor knowledge.
The present study results noticed that the school-based teaching programme was effective to improve the knowledge of upper primary school children about environmental health. These results were supported by Montazeri A et al which concluded that health education campaigns were valuable tools for launching sound environmental health.\footnote{9}

The present study revealed that there was no association between upper primary school students’ knowledge score with their demographic variables. In contrast, Msengi IG et al study found that there was a significant association between students’ knowledge score with their school location. School located in the most affluent area had significantly higher knowledge than school located in a moderately affluent area.\footnote{10}

Implication and Recommendations

Nurse educators could use these teaching modules to enrich the knowledge of environmental health among children and thereby reduce the health issues associated with it. This study benefits many organizations to conduct seminars, awareness programs, workshops etc. for preparing community health nurses, ASHA workers, teachers and significant others in order to prevent problems associated with poor environmental health. A similar study can be replicated on a large scale for more reliability and wider generalization. A comparative study can be done on school students who are studying from governmental and non-governmental schools.

CONCLUSION

School-based teaching programme was effective to improve the knowledge of upper primary school students regarding environmental health. This study also detected that there was no association between upper primary school students’ knowledge score with their demographic variables. The study is limited to upper primary school students in selected government schools from Barabanki, Uttar Pradesh, India. There is a firm need to implement any kind of educational and teaching programs to improve the environmental health of children from rural backgrounds.

Financial support and sponsorship:-Nil

Conflicts of interest:-There are no conflicts of interest

Reference

5. WHO. Environmental health [Internet]. [cited 2020 Jul 18]. Available from: https://www.who.int/health-topics/environmental-health#tab=tab_1

How to cite this article:
Divya and Bince Varghese.2020, “Impact of School-Based Teaching Programme on Knowledge Regarding Environmental Health Among Upper Primary School Students”. Int J Recent Sci Res. 11(07), pp. 39111-39114.
DOI: http://dx.doi.org/10.24327/ijrsr.2020.1107.5443

*******