Effectiveness of Structured Teaching Programme on Knowledge Regarding Health Hazards of Junk Food Among Adolescents in Selected School of Punjab: Pre-Experimental Study

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ABSTRACT

**Background:** Good health is the necessity of living a healthy existence for every person which needs to maintain a healthy diet and healthy habits throughout the life. Everyone having intake of junk food because it is tasty, attractive, delicious, easily available and costs less than fruits and vegetables. The foods contain various harmful ingredients, food additives and preservatives that cause physical, psychological and problems. Consumption of junk foods are increasing particularly in school adolescents. The aim of the study was to improve the knowledge of Health Hazards of Junk Food among adolescents.

**Objectives:** To assess and compare pre-test and post-test level knowledge regarding health hazards of junk foods among adolescents. To determine the association between post-test knowledge with selected demographic variables regarding health hazards of junk foods among adolescents.

**Methodology:** A pre-experimental design was used. Total 80 adolescents were selected for sampling by using non probability purposive sampling techniques tool. Socio-demographic variables and self-structured knowledge questionnaire were used to collect the data from the adolescents. After conducting pretest, structured teaching programme on health hazards of junk food was administrated to adolescents. Post test was conducted after gap of seven days.

**Result:** The result showed that in pre-test knowledge revealed that majority 87% had good knowledge, 12.5% had very good knowledge whereas in the post-test level revealed that majority 52.5% had very good knowledge, 47.5% had good knowledge regarding health hazards of junk food among adolescent. Mean and Standard Deviation of post-test knowledge Score 20.53±3.14 was significantly higher than pre-test knowledge score 16.46±2.85 as evident from “t-test” value 13.09(p=<0.001) and there was no significance association between the knowledge with the selective demographic variables at 0.05 level of significance. The study concluded that the structure teaching programme was effective in improving the knowledge about health hazards of junk food among adolescents.

**KEYWORDS:** Health hazards, Junk food, structured teaching programme, knowledge, adolescents.

1. **INTRODUCTION:**

Good nutritious foods play a key and vital role in maintaining good health of the individuals. The
Healthy foods are those which provide you all the nutrients which one need to sustain for well-being and also for retain energy as it includes carbohydrates, fats, proteins, vitamin, minerals and water that makes up a balanced diet. Its main function is to provide nutrients, energy to do activity, growth and functioning of body organs, helps in growth and repair of the body.

Nowadays nutritious food is replaced by junk food. As everyone is tasting junk food well because it is tasty, attractive, delicious, easily available and costs less than fruits and vegetables. Junk is very oily and lack of dietary fibres, so they are harder to digest and require more energy from body to digest. Fast foods is getting popular as it is appealing, easy to prepare, cheap and fast food companies are fooling the public for their sales.

Centre of Science said that most junk food falls into the categories of the either “snack food” or “fast food”. Earlier 2011 Centre of Science has tested the 16 major brands of the junk food and found most of them loaded with high levels of the trans fats, salts and sugar. While excess salts and sugar are cause for concern, the real terror in the trans fats.

Consumption of junk foods are increasing particularly among primary and secondary school adolescents. Modification of food consumption pattern during few decades caused replacement of worthless food with nutritious foods. Increasing trend of urban life, extensive TV, advertising, attractive packaging and lack of nutritional knowledge are some of the major causes of junk food consumption.

Continuous eating of junk food exposes the body to long term bad effects. Poor nutrition in adolescents leads to lack of energy and fatigue, obesity, constipation, headaches, loss of digestion and appetite, dental problems, abdominal bloating, skin problems like itching, puffy and irritated skin, adult onset diabetes, cognitive, polycystic ovarian syndrome disorder, stomachache, constipation, emotional and self-esteem problems, psychological problems, learning problems, delayed growth and development, iron deficiencies, non-communicable diseases occupational disabilities leading to the increasing risk of getting prone to infections and also cause systemic changes in respiratory system, central nervous system, Reproductive system, Cardiovascular system and skeletal system.

The National health and Nutrition examination survey in the United States finds during 2015-2018, over one third of children and adolescents consumed fast food. Adolescents aged 12-19 consumed a higher percentage of calories from fast food.

Prolonged consumption of junk food makes prone to varied life-threatening diseases and other physical complications. Junk food is high in oils, fats while low in nutrition and health elements. Adolescent facing health related nutritional problems and biological process issues, when they enter the school environment there will be changes in their habits, lifestyle and particularly in their food habits. Adulthood obesity starts from childhood and effective prevention depends upon the way you coping with and control of obesity. Prevalence of obesity in 12 to 16 year old children estimated 10 to 30 percent and is considered as one of the basic issues in this age group of obesity.

In India 93% children eat packaged food more than once a week, 56% children eat sweet food items such as ice cream and chocolates more than once a week, 59% children aged between 14 years and 17 years eat packaged beverages or food at least once a day, 83% children drink milk food drinks and 69% eat breakfast cereals such as cornflakes as their first meal of the day before heading to school, 91% carry lunch box from their homes but 40% children consume packaged food to school almost daily.

The present scenario shows that many of the adult diseases have their origin in their childhood; this is due to lack of proper knowledge and awareness about the consequences of changes in their food habits due to high consumption of junk food rather than nutritive foods.
2. METHODOLOGY:
This research study adopted quantitative pre-experimental one group pre- test post- test design in order to accomplish its objectives. Study was conducted in the selected school of Punjab. Written Permission was taken from Principal of selected school, Punjab.
The study sample’s written informed permission regarding their readiness to taking part in the investigation was obtained and confidentiality was maintained. The sample size was calculated by Yamane Formula and 80 adolescents were enrolled by using Non probability purposive sampling technique. The Self–Structured knowledge questionnaire was used to gather data from the adolescents. The questionnaire, which had two sections, dealt with demographic profile, and structured knowledge questionnaire regarding health hazards of junk food. The knowledge questionnaire had a r value calculated by using Test-retest method i.e. 0.82, so the tool was deemed reliable to continue with the study.
The data was collected from selected school of Punjab. “Structured knowledge questionnaire” was administered to the gather the data. The researcher assessed the pre-existing knowledge regarding health hazards of junk food by using Pre-test. After that Structured teaching programme was administered to study sample for 45 minutes. Then Post-test was conducted by the after one week of training. The collected data was then organised for analysis. Data was analyzed through both descriptive and inferential statistics.

3. RESULT:
Frequency and percentage distribution of demographic variables revealed that the major findings that out of 80 adolescents, the majority of adolescent of age (61.3%) belongs to the age group 14 years, 57.5% were male, 65% lives in semi-urban area, father’s occupation 65% belongs to private sector, mother’s occupation 67.5% belongs to other, type of family 78.8% belongs to nuclear family, monthly income 45% belongs to Rs 10,000, frequency of eating junk food 63.8% belongs to once a day, pocket money per day 47.5% belongs to no pocket money and place of consume junk food 70% belongs to at home.

Table 1.1: Frequency and percentage distribution of Pre-test and Post-test Knowledge score among adolescents.

<table>
<thead>
<tr>
<th>KNOWLEDGE SCORE LEVEL</th>
<th>N = 80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE - TEST</td>
</tr>
<tr>
<td></td>
<td>f (%)</td>
</tr>
<tr>
<td>AVERAGE (1-10)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>GOOD (11-20)</td>
<td>70(87.5%)</td>
</tr>
<tr>
<td>VERY GOOD (21-30)</td>
<td>10(12.5%)</td>
</tr>
</tbody>
</table>

Table 1.1: Showed in pre-test 87.5% adolescent had good knowledge and 12.5% had very good knowledge. After post-test it revealed that 52.5% had good knowledge and 47.5% had very good knowledge regarding health hazards of junk food among adolescent.
Figure 1.1: Bar diagram of percentage distribution regarding health hazards of junk food among adolescent in pre-test and post-test knowledge score

Table 1.2: Descriptive statistics of distribution of Pre-test and Post-test knowledge among adolescents.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Mean</th>
<th>S.D.</th>
<th>Median Score</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Range</th>
<th>Mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test Knowledge</td>
<td>16.46</td>
<td>2.850</td>
<td>16</td>
<td>26</td>
<td>12</td>
<td>14</td>
<td>54.90</td>
</tr>
<tr>
<td>Post-test Knowledge</td>
<td>20.53</td>
<td>3.146</td>
<td>20</td>
<td>28</td>
<td>14</td>
<td>14</td>
<td>68.40</td>
</tr>
</tbody>
</table>

Maximum Score=30  Minimum Score=0

Table 1.2: Showed in pre-test Mean was 16.46, Standard deviation was 2.850, Median was 16, Maximum Score was 26, Minimum Score was 12, Range was 14, Mean Percentage was 54.90 whereas in post-test knowledge Mean was 20.53, Standard Deviation was 3.146, Median was 20, Maximum Score was 28, Minimum was 13, Range was 14, Mean Percentage was 68.40.
Figure 1.2: Bar diagram of Descriptive statistics of distribution of Pre-test and Post-test knowledge among adolescents.

Table 1.3: Comparison of pre-test and post-test of knowledge score among adolescents.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Mean ± S.D.</th>
<th>Mean %</th>
<th>Range</th>
<th>Mean Difference</th>
<th>Paired t-test</th>
<th>P value</th>
<th>Table value at 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test Knowledge</td>
<td>16.46±2.85</td>
<td>54.90</td>
<td>12-26</td>
<td>4.070</td>
<td>13.09**</td>
<td>&lt;0.001</td>
<td>1.99</td>
</tr>
<tr>
<td>Post-Test Knowledge</td>
<td>20.53±3.14</td>
<td>68.40</td>
<td>14-28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant *Non-significant **Significance Level 0.05

Maximum Score=30          Minimum Score=0

Table 1.3: Showed that the Mean and Standard Deviation post-test knowledge Score 20.53±3.14 was significantly higher than Mean and Standard Deviation pre-test knowledge score 16.46±2.85 as evident from “t-test” value 13.09(p=<0.001) at 0.05 level of significance.

It showed that structured teaching program was effective in improving the knowledge of adolescent regarding health hazards of junk food.
There was no significance association between the knowledge with the selective demographic variables. The calculated chi-square values were less than the table value at the 0.05 level of significance.

4. DISCUSSION

The present study intended to assess the effectiveness of structured teaching programme on knowledge regarding health hazards of junk food among adolescents of selected School, Punjab showed there will be significant difference between pre-test and post-test level of knowledge regarding health hazards of junk food among adolescents. It showed that structured teaching program was effective in improving the knowledge of adolescents supported by S. Shalin, et al. 2020, revealed that 3.3% had inadequate knowledge, 66.6% had moderate knowledge and 30% had adequate knowledge whereas in post-test 36.6% had moderate knowledge and 63.3% had adequate knowledge. ‘t test’ was found to evaluate the effectiveness of structured teaching programme 3.779 and P <0.05 was highly significant. Whereas, there was a significant association between post-test knowledge with selected demographic variables regarding health hazards of junk food among adolescents was rejected supported by Ramchandra Ujwal More, et al. (2015) the findings showed that the majority of adolescents had 69.59% had average knowledge, 24.35% had good knowledge, and 6.08% had poor knowledge regarding health hazards of junk food. There was significant association between knowledge with selective demographic variable at 0.05 level of significance.

5. CONCLUSION:

The following conclusion was drawn on the basis of present study “A pre-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding health hazards of junk food among adolescents of selected school, Banur, Punjab. Therefore, the outcome of the study was in pre-
test knowledge revealed that majority 87% had good knowledge, 12.5% had very good knowledge whereas in the post-test level revealed that majority 52.5% had very good knowledge, 47.5% had good knowledge regarding health hazards of junk food among adolescent. Hence, Structured Teaching Programme was found effective in enhancement of knowledge among adolescents.

**NURSING IMPLICATIONS:**
Although in nursing education nurses can educate adolescents with facts of junk food usage. Nurses as an educator spread the knowledge about health hazards of junk food. Awareness programs can be arranged at schools, and community level for the enhancement of knowledge of students regarding junk food. In nursing research the extensive research can be conducted to create awareness in school regarding health hazards of junk food among adolescents. Research should be conducted to assess the nutritional needs and changing food consumption patterns of adolescents. In nursing practices the nurses should have future planning for health education regarding health hazards of junk food in the community and hospital. Nurses should conduct training programmes for school teachers and parents to promote the nutritional status of adolescents. In nursing administrators can average conferences, continuing educational programs and seminars related to the health hazard of junk food with modern technologies and can also organize an awareness talk on health hazards of junk food.

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