To Assess the effect of Fast Food among Adolescent Group

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Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

ABSTRACT

Background: Different types of fast food are becoming more popular in all parts of the world, including both developed and developing nations. Because of changes and transitions in people’s lifestyles and dietary habits, an increasing number of people of all ages, particularly adolescents and young adults, are gravitating toward fast food. For past 10 years, Fast food consumption has increased globally. Hence, the topic of eating fast food can turn specifically very much better for the age group of 13-18. Because of this for controlling the eating habits of fast food first attention might be given to developing some nutritional habit to the adolescents.

Aim: To assess the effect of fast food among adolescent group.

Materials and Methods: A cross-sectional research design was used in the study. The study was conducted among adolescents’ group rural area of Wardha district, Maharashtra. The population of the study was the adolescent group. The sampling technique used was simple random sampling. The sample was consisting of a total number of 85 subjects. A structured knowledge questionnaire were used to assess the knowledge and effect of fast food.

Results: After the detailed analysis of the conducted study leads to the following conclusion that Means score of the adolescent group was 12±2.88 and the mean percentage of score was 60±14.41 It is revealed that the adolescent group is having lot many effects of fast food on their health and having knowledge regarding the effect of fast food, in that 1.18% of the adolescent

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group had a no effect, 30.59% of them had mild, 58.82% of them were moderate and 9.41% of them had a severe. The minimum score was 5 and the maximum score was 17 out of 20.

**Conclusion:** The research concludes that adolescents are having an effect of fast food on their health so because of that they are having average knowledge regarding the effect of fast food.

**Keywords:** The effect; fast food; health and illness; adolescent group.

### 1. INTRODUCTION

Different types of fast food are becoming more popular in all parts of the world, including both developed and developing nations. Because of changes and transitions in people's lifestyles and dietary habits, an increasing number of people of all ages, particularly adolescents and young adults, are gravitating toward fast food. For past 10 years, Fast food consumption has increased globally [1]. India is undergoing rapid nutritional transition. There is an increased inclination to replace traditional meals with energy-dense imbalanced foods. Urban residence has been positively associated with frequency of intake of energy-dense foods in adolescents. As many healthy (or unhealthy) life-long practices begin in adolescence, it is important to study the dietary behaviour and the factors influencing food consumption in this age. Due to this for controlling the eating habits of fast food first attention might be given to developing some nutritional habits for adolescents. Fast food is a food that is speedily available as well as provides, frequently at eating places as well as seasonally related with not so much cost and nutritional things like hamburgers, French fries, and soda [2]. Junk food, fast food, handling food, white flour, sweety, and entirely the junk food they worry pay to overweightness, diabetes, heart attacks, strokes and cancer, countless individuals identify, but all of us do not understand the sturdy reason of unnatural nourishment [3]. Fast food also covers mechanically formed trans fats connected with the risk of mass increase and foodstuffs obtained from minor autonomous fast food cafes in permits, instead of huge fast food shackles, possibly will have an advanced content of energy and usage lesser value body fat [4]. Adolescence is a dynamic stage of lifecycle categorized by affected fluctuations in routine [2]. Fast food tradition is very much popup style in today's age group. The prepared accessibility, flavor, less expensive, master plan as well as leadership build them widespread with teenagers (adolescents). This point of view described the popup fast food technique in India, its impression on teenagers to counter it. Fast foods are at large quantity obtain in educational institutions through various stores. Canteens are available in educational institutions to offer soda water, soft drink, crack, and lots of other foods of less nutritious rate (value). There are many ill impacts of fast food and persons are unaware of its dangerous effects. It can cause many harmful disorders. Prolonged use of fast food is the reason for medical issues, chubbiness means obesity, GI Tract problem, and increased fat. Fast food corporations and eating places are selecting youths and youngsters through greatest boosting master plans, delightful catalog for preparing a selective or particular dish, including a list of the ingredients required, and lovely announcement [5] Fast food eating has been linked to the mass increase, minor nutritional pointers, insulin struggle, and overweightness in adults in cross-sectional and longitudinal studies, with exclusions [6]. Chubbiness (obesity), high cholesterol, nutritional deficiencies, heart disease, loss of strength, sadness (depression), sexual defects, suffocation (asthma), stroke, type 2 diabetes, Tumor (kidney/uterus/colon/ chest/gullet), liver illness, malignancy, and cardiac disease can be produced by the intake of fast food according to a routine schedule. Fast food can contain many fats and sugars which are hurtful or injurious as well as addictive and create a vicious circle that makes it problematic for children to select well(healthy)foods. It influences a high trans-fat content in fast food available on the marketplace.

### 2. MATERIALS AND METHODS

The study design was a descriptive research design, quantitative approach. The study was conducted in rural areas of Wardha. The population of the study was the adolescent group. The sampling frame was adolescents who live in deoli, Wardha. Simple random sampling was done in this study. The sample was consisting of a total number of 85 subjects. In many studies, the sample size varies as of 80 - 100.
85 adolescents were selected from the rural and urban areas of the Wardha district.

Prevalence rate is 55 %

\[ P = 55 \%
\]

\[ Q = 100-55 = 45
\]

\[ L = \text{Allowable error} = 20 \%
\]

\[ = 20 \times 55 \]

\[ 100
\]

\[ = 11
\]

\[ n = \frac{4PQ}{L^2}
\]

\[ = 4 \times 55 \times 45 / (11)^2
\]

\[ = 9900 / 121
\]

\[ n = 81.81
\]

The sample size is extended to 85.

Inclusion criteria of the study are adolescents from rural areas both male and female who are interesting in this study. Adolescents are available at the time of data collection. In exclusion criteria of the study are adolescents who had already attended a program on the same topic.

A structured questionnaire consisting of two sections including demographic data and effect regarding the effect of fast food among the adolescent group was used to collect the data. A structured questionnaire was validated from Dr. Seema Singh, Professor of Medical-surgical nursing department, Ms. Ranjana Sharma, Associate professor of Medical-surgical department, Ms. Ruchira Ankar, Associate Professor of medical surgical nursing department, S.R.M.M.C.O.N, Sawangi(M), Wardha, Dr. Vijay Babar, Statistician, community medicine department, JNMC, Sawangi(M), Wardha

### 2.1 Statistical Analysis

Statistical examination (analyses) should be done with the help of SPSS computer software form 20. A paired t-test (Wilcoxon sign rank) and unpaired t-test (Wilcoxon Rank-sum) should be useful to analyze the facts (data).  

### 3. RESULTS

#### 3.1 Section A

Assessment of level of effect of fast food among adolescent group from selected areas.

#### 3.2 Section B

Association regarding effect of fast food on adolescent groups about demographic variables.

**Table 1. Assessment with the level of effect n=85**

<table>
<thead>
<tr>
<th>Level of effect</th>
<th>Score Range</th>
<th>Level of Effect Score</th>
<th>No of adolescent group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No effect</td>
<td>0-25% (1-5)</td>
<td></td>
<td>1</td>
<td>1.18</td>
</tr>
<tr>
<td>Mild</td>
<td>26-50% (6-10)</td>
<td></td>
<td>26</td>
<td>30.59</td>
</tr>
<tr>
<td>Moderate</td>
<td>51-75% (11-15)</td>
<td></td>
<td>50</td>
<td>58.82</td>
</tr>
<tr>
<td>Severe</td>
<td>76-100% (16-20)</td>
<td></td>
<td>8</td>
<td>9.41</td>
</tr>
<tr>
<td>Minimum score</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Maximum score</td>
<td></td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Mean effect score</td>
<td></td>
<td>12 ± 2.88</td>
<td>12 ± 2.88</td>
<td></td>
</tr>
<tr>
<td>Mean % effect Score</td>
<td></td>
<td>60 ± 14.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2. Association of score regarding effect fast food in adolescent group with age n=85**

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>No. of adolescent group</th>
<th>Mean effect score</th>
<th>F-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14 yrs</td>
<td>27</td>
<td>10.03±2.66</td>
<td>12.36</td>
<td>0.0001</td>
</tr>
<tr>
<td>15-16 yrs</td>
<td>28</td>
<td>12.50±2.20</td>
<td></td>
<td>S, p&lt;0.05</td>
</tr>
<tr>
<td>17-18 yrs</td>
<td>30</td>
<td>13.30±2.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 shows the association of effect score with age in years an adolescent group from the selected area. The tabulated ‘F’ values were 3.10(DF=2, 82) which is much less than the calculated ‘F’ i.e., 12.36 at a 5% level of significance. Also, the calculated ‘p’=0.0001 which was much less than the acceptable level of significance i.e., ‘p’=0.05. Hence it is interpreted that age in years of the adolescent group is statistically associated with their effect score.

Table 3 shows the association of effect score with studying a class of adolescent groups from the selected area. The tabulated ‘F’ values were 3.10(DF=2, 82) which is much less than the calculated ‘F’ i.e., 12.36 at a 5% level of significance. Also, the calculated ‘p’=0.0001 which was much less than the acceptable level of significance i.e., ‘p’=0.05. Hence it is interpreted that studying a class of adolescent groups is statistically associated with their effect score.

Table 4 shows the association of effect score with the duration of eating fast food (years) of the adolescent group from the selected area. The tabulated ‘F’ values were 3.10(DF=2, 82) which is much less than the calculated ‘F’ i.e., 11.66 at a 5% level of significance. Also, the calculated ‘p’=0.0001 which was much less than the acceptable level of significance i.e., ‘p’=0.05. Hence it is interpreted that the duration of illness
of adolescent groups is statistically associated with their effect score.

4. DISCUSSION

A study was administered to assess the effect of fast food on the adolescent group. In this study sample size was 85 adolescents randomly selected from the Wardha district. A cross-sectional research design was used. A descriptive approach was used. According to this study, the result of the study was that some of them were having no effect, some were had a mild effect, some had a moderate effect and some were a severe effect on fast food [7].

According to another study conducted in Babasaheb Bhimrao Ambedkar (Central University), Lucknow district in 2014, the goal of this study is to learn the effect of fast-food consumption on the health of school-aged children (9-13 years). This learning showed that consistent feeding of these components can lead to well-being difficulties or complications such as heart disease, diabetes and malignancy. Fast food is satisfactory and delightful even if it is made through unnatural components. In this study among 10 years, 42.8% of respondents were originated obese level 3. Among 11 years, 8.6% of respondents were originated obese level 3. Among 12 years, 36.3% of respondents were originated to be obese level 2 In 13 years, 8.3% of respondents were originated to be obese level 3 [8]. The readiness of foods rich in body fat, salty and sweetie through Fast Food (FF) or readymade supplies is concerned in the underlying pathway of the obesity widespread [9]. Well intake designs perform a possible character in the stoppage of several long-lasting sicknesses, such as obesity, coronary heart disease, hypertension, type 2 diabetes and certain types of malignancy that characteristically arise in mid-stage or later [10]. Some studies have exposed that adolescents' overall alertness of vigorous drinking or consumption behaviors is moderately standard or good, but the problem is that they don't interpret this familiarity into good eating behaviors [11].

A study showed in Jammu Kashmir, India. 7.4% of schoolchildren favored exclusive fast food which was considerably lesser than our grades. This vast variance could be since this study was directed at well-to-do Mangalore schools. In a study conducted in Australia, 25% of scholars regularly selected soft drinks as a replacement for water or milk compared to 43.8% of scholars described in this study[12]. Most of the study shows that adolescents are having a moderate effect on fast food [13].

5. CONCLUSION

For Indian girls, whether adolescent or young adults, fast food has become an essential part of their nutritional pattern, and their fast-food consumption is likely to continue and increase. Fast food consumption is increasing among adolescents, which is concerning because of the high fat and energy content, which may lead to obesity and, as a result, obesity-related chronic disorders. Also, it is advised to make adolescents and young adults aware of the importance of making healthier food choices composed of nutrient-dense foods such as fruit and vegetables on eating occasions other than those at fast food restaurants. Finally, government legislation is needed to regulate the marketing of fast food and to eliminate fast food from schools and colleges. The study conclude that the adolescents are had more effect on their health of fast food because they know all the effect of fast food on body.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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