

Knowledge and Practice Regarding Eating Behaviours Among Adolescents

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Abstract: Adolescent eating behaviors are critical determinants of long-term health and nutritional outcomes. The present study aimed to assess the knowledge and practice regarding eating behaviours among adolescents. A non-experimental descriptive research design was adopted and conducted in 100 adolescents (both boys and girls) selected through a stratified random sampling technique. Data were collected using a sociodemographic datasheet, a structured knowledge questionnaire, and a structured rating scale to assess practices related to eating behaviors. Results revealed that 1% of participants had poor knowledge, 8% had average knowledge, 81% had good knowledge, and 10% had excellent knowledge regarding eating behaviours. Regarding practice, 72% of the participants demonstrated good eating behaviour practices. A weak positive correlation ($r = 0.106$) was found between knowledge and practice, suggesting that increased knowledge was slightly associated with improved practice. Chi-square analysis indicated a statistically significant association between the father's educational status and knowledge level ($p < 0.05$). The study concludes that while most adolescents exhibited good knowledge and practice related to eating behaviours, the weak correlation underscores the need for more targeted interventions to translate knowledge into consistent healthy practices.

Keywords: Adolescents, Knowledge, Eating Behaviours, Correlation, Practice.

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I. INTRODUCTION

Nutrition is fundamental to maintaining overall health, supporting growth, and preventing both acute and chronic diseases. A well-balanced diet contributes to physical and mental well-being, enhances immune function, and reduces the risk of lifestyle-related conditions such as obesity, type 2 diabetes, and cardiovascular diseases (World Health Organization, 2020). Adolescents, defined as individuals aged 10 to 19 years, undergo rapid physiological and psychological development, making this a critical period for establishing lifelong nutritional habits (World Health Organization, 2021). However, adolescence is also characterized by the emergence of unhealthy eating behaviours influenced by peer pressure, academic stress, media exposure, and the easy availability of calorie-dense, nutrient-poor foods (Sisodia & Jain, 2024).

Practices such as meal skipping, excessive consumption of junk food, and irregular eating patterns have been widely reported among this age group, increasing their vulnerability to malnutrition and metabolic disorders (Pendergast et al., 2016). Although it is often assumed that increased nutritional knowledge leads to improved dietary choices, recent studies suggest that knowledge alone is insufficient (Rathi et al., 2017). Many adolescents possess a basic understanding of healthy eating but fail to translate this awareness into practice (Scaglioni et al., 2018). Behavioural change is influenced by multiple factors, including personal beliefs, family environment, cultural norms, and external stimuli such as advertising and digital media, which may override individual knowledge (Global Burden of Disease Collaborative Network, 2020). Given these complexities, it becomes essential to evaluate not only what adolescents know about healthy eating but also what they practice and, more importantly, whether a meaningful correlation exists between the two. Identifying this gap is crucial for designing effective,

age-appropriate health promotion interventions that go beyond knowledge dissemination and include strategies for behavioural modification, environmental support, and practical life skills (Ministry of Health and Family Welfare, 2021).

II. METHODOLOGY

A. Research Design and Setting

A non-experimental descriptive research design was adopted to assess the eating behaviours of adolescents. The study was conducted among adolescents aged 13–18 years who were studying in a selected private school. A stratified random sampling technique was used to ensure adequate representation of participants from various classes and age groups.

B. Sample and Sampling Technique

The study comprised a total of 100 adolescents who met the inclusion criteria.

➤ Inclusion Criteria:

- Adolescents within the age group of 13–18 years.
- Adolescents who were willing to participate in the study.
- Both male and female adolescents present at the time of data collection.

➤ Exclusion Criteria:

- Adolescents diagnosed with eating disorders such as anorexia nervosa or bulimia nervosa.
- Adolescents with chronic illnesses affecting dietary patterns, such as diabetes mellitus or gastrointestinal disorders.
- Adolescents currently on special or medically prescribed diets.

C. Data Collection Tool

➤ Sociodemographic Data Sheet:

This section included variables such as age, gender, religion, class, place of residence, parental education and occupation, number of siblings, birth order, living arrangement, and dietary preferences.

➤ Structured Knowledge Questionnaire:

A 20-item multiple-choice questionnaire was used to assess adolescents' knowledge regarding eating behaviours. The items covered topics such as balanced nutrition, meal patterns, healthy food choices, and consequences of poor eating habits.

➤ Structured Practice Rating Scale:

A 20-item structured rating scale assessed eating practices including meal frequency, regularity of breakfast, and consumption patterns of fruits, vegetables, and junk foods.

III. DATA ANALYSIS

- Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the sociodemographic characteristics, knowledge, and practice scores.
- Inferential statistics were applied to examine relationships and associations. The Chi-square test was used to determine the association between knowledge and practice of eating behaviours with selected sociodemographic variables.
- The Karl Pearson correlation coefficient was used to identify the correlation between knowledge and practice scores among adolescents

IV. RESULTS

Among the adolescents, the majority (37%) were 15 years of age. An equal proportion of male and female participants (50% each) took part in the study. Most of the participants (80%) were Hindu, and more than half (51%) were studying in the eleventh grade. A large proportion (46%) resided in urban areas. The majority of mothers (55%) and fathers (50%) were graduates. Most of the mothers (63%) were engaged in other activities, while the majority of fathers (37%) were employed in the private sector. A significant proportion (68%) of participants had a single sibling, and most (63%) were the firstborn child in their family. The majority (73%) belonged to a nuclear family, and nearly all participants (99%) were non-vegetarian. Furthermore, most participants (76%) had prior knowledge regarding the study topic. The results of the study revealed that there is a significant association between father's education and knowledge regarding eating behaviours.

Table 1: Distribution of Adolescents Based on Selected Sociodemographic Variables.

Variable	Category	Frequency (f)	Percentage (%)
Age (Years)	13	5	5.0
	14	20	20.0
	15	37	37.0
	16	35	35.0
	17	3	3.0
Gender	Female	50	50.0
	Male	50	50.0
Religion	Hindu	80	80.0

	Muslim	20	20.0
Class of Study	8th	1	1.0
	9th	21	21.0
	10th	27	27.0
	11th	51	51.0
Living Arrangements	Urban	46	46.0
	Rural	28	28.0
	Suburban	26	26.0
Mother's Education	Primary	2	2.0
	Secondary	9	9.0
	Diploma	11	11.0
	Graduate	55	55.0
	Postgraduate	23	23.0
Father's Education	Primary	2	2.0
	Secondary	11	11.0
	Diploma	10	10.0
	Graduate	50	50.0
	Postgraduate	27	27.0
Father's Occupation	Govt. job	23	23.0
	Pvt. job	37	37.0
	Business	33	33.0
	Others	7	7.0
Father's Occupation	Govt. job	18	18.0
	Pvt. job	22	22.0
	Business	5	5.0
	Others	55	55.0
Number of Siblings	1	68	68.0
	2	10	10.0
	3	4	4.0
	4	18	18.0
Birth Order	First born	63	63.0
	Second born	31	31.0
	Third born	4	4.0
Type of Family	Nuclear	73	73.0
	Joint	27	27.0
Dietary Preference	Vegetarian	1	1.0
	Non-vegetarian	99	99.0
Previous Knowledge	Yes	24	24.0
	No	76	76.0

The Pearson correlation coefficient ($r=0.106$) shows the strength and direction of a linear relationship between knowledge and practice. The value 0.106 indicates a very weak positive linear relationship between knowledge and practice, as knowledge increases, practice tends to increase slightly, but not strongly. The correlation table shows that the

relationship between knowledge and practice is not statistically significant. This scatter diagram shows that there is a very weak relationship between knowledge and practice. The line shows a very slight upward trend, indicating a weak positive correlation between knowledge and practice score.

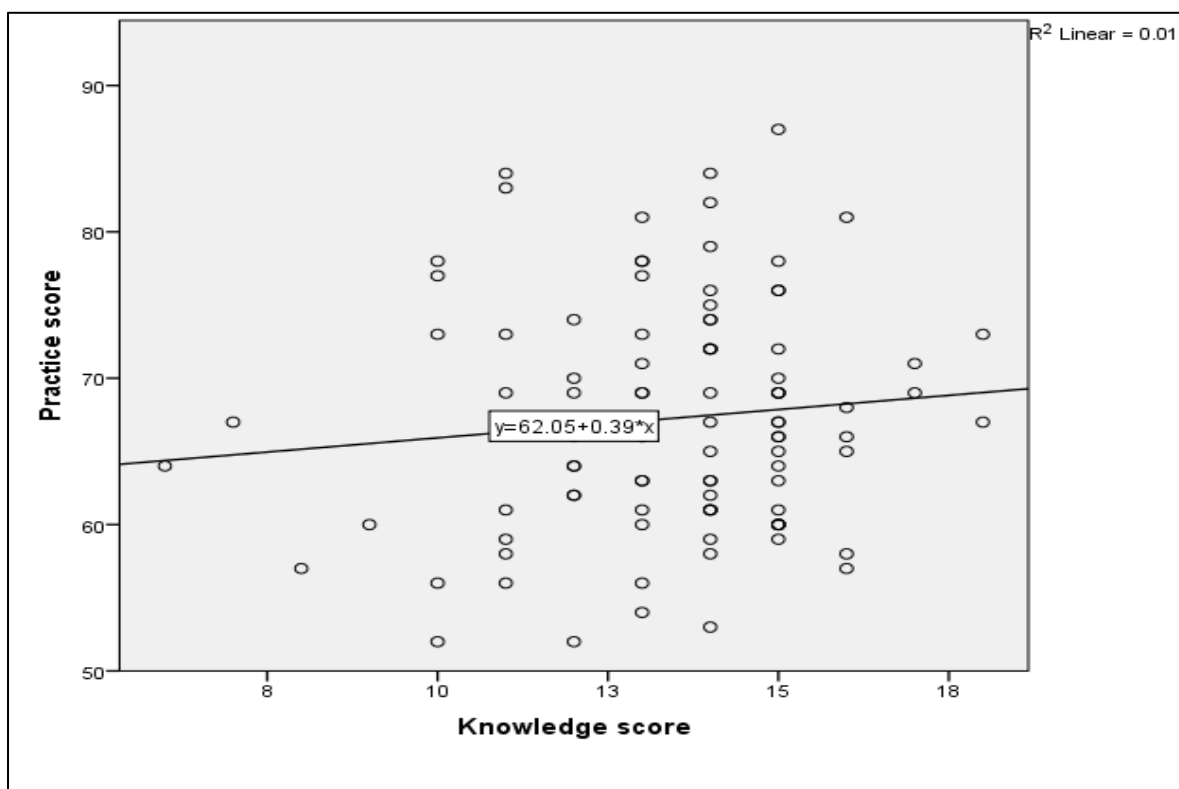


Fig 1 The Diagram Showing Correlation Between the Knowledge and Practice Regarding Eating Behaviours.

V. DISCUSSION

The first objective assessed adolescents' knowledge of eating behaviours, revealing that 81% had good and 10% had excellent knowledge, while only 9% demonstrated poor to average understanding. This indicates adequate awareness among most participants. Similar findings were noted in a study from Belagavi, Karnataka, where 56.67% of adolescent girls had average knowledge, 38.33% poor knowledge, and 5% good knowledge regarding anorexia nervosa, with significant associations between knowledge and demographic variables (Kamat et al., 2017). The second objective evaluated adolescents' eating behaviour practices, showing that 72% had good and 7% excellent practices, suggesting predominantly healthy habits. Correspondingly, a study in Chennai among adolescents aged 12–17 years reported 90% with moderate, 6% with good, and 4% with poor eating behaviours, with age showing a significant association (Suganthi & Chitra, 2021). The third objective examined the relationship between knowledge and practice, revealing a weak positive correlation, indicating that higher knowledge modestly improves dietary practices. A similar study among adolescent girls in Visnagar found moderate knowledge ($M = 25.11$) and positive attitudes ($M = 99.54$), with a moderate positive correlation between knowledge and behaviour ($r = 0.72$) and a strong correlation between attitudes and behaviour ($r = 0.99$) (Sivasubramanian et al., 2024). The fourth objective explored associations between knowledge and selected sociodemographic factors. Except for father's education, no variable showed a significant relationship. Participants whose fathers had higher education levels demonstrated better knowledge, consistent with findings from a Chinese national survey linking parental education

with healthier eating behaviours among children (Hel et al., 2014).

VI. CONCLUSION

This study revealed that most adolescents possessed good knowledge and fairly healthy eating practices; however, a weak positive correlation between knowledge and practice indicated that awareness alone does not necessarily translate into healthy behaviour. This gap highlights the complex interplay of factors such as peer influence, social environment, and personal motivation that affect dietary choices among adolescents. The finding that the father's educational level significantly influenced adolescents' nutritional knowledge underscores the role of parental education and family environment in shaping health behaviours. This suggests that family-centered approaches could be effective in reinforcing positive dietary habits during adolescence. Overall, the study emphasizes the need for holistic, multi-dimensional interventions that go beyond imparting nutritional knowledge. Educational initiatives should incorporate behavioural skill training, peer engagement, and environmental support to foster lasting changes in adolescents' eating behaviours and contribute to the prevention of lifestyle-related health problems in adulthood.

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