

Qualitative Research

FOOD LITERACY AND DIETARY BEHAVIOR: YOUTH PERSPECTIVE

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ABSTRACT

Background: Advancement in technology and globalization has changed the framework and meaning of food. Varied social, economic, environmental conditions and globalized practices reflected the skills and practices that how people understand food nutritional knowledge, perceptions, practices, and decision-making for healthy food choices to maintain health and well-being.

Material and Methods: By using qualitative research design, the study explored the concept of food literacy about the overall health understanding and practice. By using stratified random sampling, the sample was selected from the Institute of Social and Cultural Studies, University of the Punjab, Lahore. In-depth interviews were conducted.

Results: The study shows that students have healthy eating behaviour. It was difficult, especially living in hostels to acquire the nutritious foods and their use. Findings indicate that students have poor knowledge about nutrition. Due to time constraints, purchase available low-price food.

Conclusion: Poor cooking skills tend towards readymade food which affects food choices, selection and consumption. With the availability of spicy and fried foods at comparatively low prices students overlooked health and hygiene.

Key Words: Food, Knowledge, Dietary behaviours, Health

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INTRODUCTION

Advancement in technology and globalization has changed the framework and meaning of food. Human behaviour about food and its consumption is multidimensional. Social, cultural, economic, and environmental factors influence dietary behaviours.¹ The availability of a wide variety of ready-to-eat food and advertisements promote consumers' preferences. A variety of ready and processed food products are available causing obesity (a major health challenge such as coronary heart disease, stroke, cancer and type 2 diabetes) resulting in increased mortality.²

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To deal with the challenge, the WHO prioritised and emphasized food and nutrition plan to improve dietary behaviours through the "European Food and Nutrition Plan 2015-2020".³

Varied food systems around the globe reflect the skills and practices that how people understand and value it and develop a relationship with health and well-being. Those who intend to maintain health throughout life, engage themselves with the food systems.⁴ Multiple factors (internal: nutrition knowledge, skill, self-efficacy, food decision; external: income, security, food system) influence/shape the individual's capabilities of decision making regarding food.⁵ Preference and choices for fruits, vegetables, fast food or snakes determine dietary behaviour patterns and food literacy.⁶ Participation enables people and provides support to achieve

sustainability of health following their social, cultural, economic, political and environmental conditions. Healthy food preferences and choices indicate high food literacy and dietary behaviours,⁴ whereas the selection and consumption of fast food, snacks and confectionaries indicate low food literacy.⁷ Understanding of food nutritional values and the competence to use the knowledge and information to enhance physical health and mental well-being.⁷ Maarje P et al., (2018)⁸ conducted a study on measurement of food literacy and healthy eating and concluded that “higher levels of food literacy were associated with more self-control, less impulsiveness and healthier food consumption”.

Due to the participation of women in the workforce, dramatic changes occurred in the skills and practices of food preparation. Due to this reason, fast food outlets serve delivery at the doorstep. Prepared foods and pre-packed food at supermarkets are becoming more trendy than eating food prepared at home.¹³ Studies indicate that poor skills in the preparation of food are considered a barrier to healthy diet behaviour.⁹ The environment around individuals built perceptions where the cognitive and sensory experiences along with the appearance, flavor, taste and texture of food including price, quality, convenience, and availability. Food literacy, nutrition knowledge, and homemade food are becoming a challenge for health and well-being.⁵ Studies indicate that “higher food literacy is related to better nutritional quality, health and well-being”.^{10,7} The developed countries focused their attention on public health programs on food literacy to create competencies for the selection, management, and preparation of food to enable them to shape the dietary behaviours to make healthful decisions for well-being in a way to adopt a potential strategy to facilitate healthy dietary behaviors.¹¹

For food literacy, the explicit emphasis was on food proficiency and food skills to support individuals in preparing themselves to deal with multiple aspects of cooking,

presentations/serving, nutritious value, and other social-psychological factors.⁵

Food and Nutrition Knowledge

Healthy food and nutrition knowledge protect and reduce the risk of diseases like diabetes, high blood pressure, strokes, and osteoporosis etc., A balanced diet increase energy level and maintain balance for the functioning of the body. Knowledge about fruits, vegetables, milk, eggs, meat, and grains promotes healthy eating. Barzegari, *et al* (2011)¹² study shows a significant positive correlation existed between nutrition knowledge and attitude; and food habits among male and female students.⁵ Another study by Labban (2015)¹³ indicated that students who enrolled in the health related programs scored higher (41.23 ± 0.05) as compared with those who were enrolled in non-health-related programs (36.86 ± 0.28). The results support the notion of nutrition knowledge for health education campaigns launched to promote healthy eating. Colatruglio's (2015)¹⁰ study indicated a relationship between food literacy with health outcomes. Results indicate that there is a lack of food literacy among students; and insufficient awareness of nutritious values and skills. Due to the lack of these; dietary habits are affected which ultimately becomes a cause of the growth of weight and obesity.

Perceptions about Food and Well-being

Poudel, B. P., & Sapkota (2016)¹⁴ studies in Nepal indicated a direct relationship between the quality of food with eating behaviour and better health. On the other hand, some studies indicate that “inadequate consumption of vegetables and fruits, increased incidence of home dinners, powerless meal preparation abilities, and increased portion size”.^{15, 16} These studies highlighted that it is also possible that education in food literacy may be an effective strategy to improve students' awareness for safe dietary behaviour skills to help them in making better food choices.

Gender and Food Preparation/Cooking

Food preparation and cooking skills are very much connected with the food experiences. Learning at an early age seems to have a positive impact on cooking skills. Colatruglio's (2015)¹⁰ study inferred that children learn food preparation and skills attitude all from 1st in home and with family after education and courses help to give food preparation knowledge. In literature, there are arguments on food literacy as it works as a protective shield for health and well-being.¹⁷ Lucan (2012)¹⁵ concluded that generally participants exhibited a good understanding of nutritional values for a healthful diet, but disagreed about the health values of some specific foods. Participants suggested increasing the education and modifications in the social environment that may lead to improvement in the meals and health improvement in the community. Therefore, an effort was made to explore the understanding of the concept: food literacy covers the aspects of nutritional knowledge, cooking skills, food perceptions, and nourishing food value for well-being.

MATERIAL AND METHODS

Qualitative design was used to explore the understanding of the concepts and behaviours by using a semi-structured interview guide. By using systematic simple random sampling, data was collected from the Punjab University, Lahore. Among the Behavioural and Social Sciences Departments, the Institute of Social and Cultural Studies (ISCS) was selected where 1235(571-M & 664-F) undergraduate students were studying the subject of Sociology. Fourteen in-depth interviews were conducted (eight- females and six males) to explore:

- Students understand “food literacy” and “healthy diet”;
- Nutrition knowledge;
- Perceptions about food and well-being;
- Food preparation/cooking skills; and
- Healthy eating practices in daily life.

RESULTS

UNDERSTANDING OF “FOOD LITERACY”

Students expressed that it is all about the standards of dietary guidelines provided by health professionals. The students expressed little about food literacy. They have said:

“Never studied about the details”

“Just know what electronic and print media are shown for the advertisement”

“Most of the time we were impressed by the face value of the products”

“Instead of nutritional value, prefer price/affordability, availability, convenience, colour, packing, choice, mood, etc”

“Never try to get information on the ecological factors”

“Just purchase according to hunger”

HEALTHY DIET/EATING:

Due to young age and lack of time, students do not bother much about healthy eating, expressed as follows:

“I tried to take a healthy diet according to my hunger; tried to include fruits and vegetables as they have plenty of minerals and vitamins”.

“Healthy food strengthens our immune system and is a source of energy”.

“I am careless about food whether it is balanced or not. I eat whatever ready food is available at the time of hunger”.

“Due to multiple constraints such as lack of time, I ate whatever food was available. It is very rare to think about a healthy diet or eating”.

“Always very busy, my eating habits are different from my peer group. I ate according to my affordability or purchasing power (family's socio-economic status)”.

“Sometimes I missed the norms of balanced food I guess. I will make efforts to eat healthy meals. I ate food according to the hostel mess so never think about food - healthy or not”.

“I am conscious about nourishments such as vegetables and fruits but find them expensive so prefer economical food like potato chips”.

"It's very costly to buy organic food so buy chips".

FOOD AND NUTRITION KNOWLEDGE

It was generally an understanding among interviewees that "boxed foods" and "fast food" are "not beneficial" for health. Traditional and fresh food is much better than fast food as it has nourishing ingredients. Fast food especially fried food increases cholesterol levels. Fat, salt and sugar contents are no longer considered as sustenance nourishing contents.

"We have nutrition knowledge because of reading/studying such books about nutrition to gain some knowledge".

"My friend is a nutritionist who always discusses food and nutrition".

Most of the students do not know about the nutritional value of food. They were interested to know about it.

"For health, I realised its importance so thinking about joining a nutrition course. I thought this course would boost my knowledge".

"I read many books on health and balanced diet, therefore, try to follow it".

Some students (especially males) expressed about the portion sizes. They ate according to their appetite or hunger. One of them added, *"Just eat pretty much until you get whole".*

Students expressed the importance of food safety, hygiene practises and healthy/unhealthy food. They realized that such information is always helpful to maintain health.

PERCEPTIONS ABOUT FOOD AND WELL-BEING

Students' perceptions about food and well-being were more or less the same. Having primary knowledge that a nutritious diet/food is vital for health. Daily use of vegetables and fruits is helpful to maintain health. They expressed views:

"Yes, food has a direct relation with the health. Spicy food disturbs my stomach. Acidity disrupts my whole routine".

"My companions who never cooked, they always ready to eat the prepared meals. They never bothered about the quality of food. Ready meals attract them".

For the "quality and standards of hygiene during cooking" the students expressed views:

"I understand that food is directly linked with our health. No one denies the value of Healthy and hygienic food. Unhygienic food destroys the digestive system and causes ill health".

For dietary practices, most of the students ate three times a day. Few students do not take breakfast because wake up late; few are in a habit of improper lunch. Just take easily available eatables: pizza, burger, and sandwich. They had proper dinners with family or friends. In Pakistan, joint breakfast, lunch, and dinner are a common practice. Use of "paratha/Roti/ Nan/bread" with egg, and butter at breakfast; with chicken/mutton/fish curry and vegetables at lunch or dinner along with pickles, yoghurt and sweet dish.

GENDER AND FOOD PREPARATION/COOKING SKILLS

Food proficiency was considered to build confidence and encourage improved food arrangement practices that may have reliable effects. Data revealed different points of view of males/females regarding food literacy. Boys and young ones rarely engaged while cooking. These are the girls who mostly engage in such activities. Girls learn cooking skills and eating manners from their mothers.²⁴ Respondents expressed views as follows:

FEMALE STUDENTS

"I took part in cooking with my mother as I am the eldest one out of four children".

"I am living in a hostel; due to lack of interest, mostly rely on my companions for food".

"I don't know much about cooking food. So prefer prepared food".

"I am conscious about nutrition; therefore prefer to cook meals according to my desire and convenience".

"I prefer the availability of ready healthy food".

MALE STUDENTS

Due to a lack of interest in cooking, boys were found to be least interested in learning cooking skills. These skills generally, like other important life skills, are taught at home. These are mothers who transfer these skills to their children. Males prefer to learn from their wives or friends.

"I have learned cooking from my mother. I use the same recipes to get the same taste as my mother while cooking rice, some green vegetables and beans".

"There is a comparative nature of food arranged daily at home. It is very rare when I participate in such activities".

A boy stated, "I have never attempted to make food". Also, said he is exceptionally poor in it. Most of the time my sister cooks alone. I spend time outside the home with my friends playing cricket.

A male respondent said, "I like to prepare/cook food. I enjoyed it. I prepare food for my friend. Males also cook delicious food".

Another student said, "I help out my sister. Can make shakes for family and sometimes prepare breakfast like a boiled egg with a cup of tea".

One of the respondents said, "My parents are working so I prepare food for my younger ones".

HEALTHY EATING PRACTICE

Most of the students have learnt smart dieting, food, hygiene, and its importance from institutions, books and instructors. Less importance is given towards healthy food choices. Most respondents informed that *"A great need is required to create awareness about food literacy"* by using social media. For children, cartoons and videos may work to instigate interest in

good food, bad food, healthy food, hygienic food, energy food etc.

DISCUSSION

The study described that females have a better understanding of food as they are substantially more associated with such activities as buying, cooking and planning a menu and its nourishment. While purchasing food products, they are in a habit of looking at the content/ingredients and are conscious regarding price/cost whereas males are observed least bothered about it. It is very rare to look at food ingredients while selecting during purchase whereas young girls are conscious about wellbeing and fitness whereas young men appear to be not aware and careless about their wellbeing.¹⁷ They usually observe the outlook/packing that fascinates them.¹⁸ It might be due to craving, taste, and likelihood.¹⁸ It is observed that there is a significant gender difference in the selection of food such as choices, food nutrition, selection, and cooking skills because of awareness, information/knowledge, and capabilities enhanced due to kitchen work.¹⁹ Poudel, B. P., & Sapkota, M. (2016)¹⁴ found out that healthy food is quite expensive for students. They prefer to buy low price prepared food like chips defiantly not good for their health. Another study conducted in Nepal indicated students rarely prefer healthy eating. They thought that homemade food/vegetables and fresh fruits were better and healthy.

It was reported that the respondents had few opportunities to improve food proficiency. Studies (Veer *et al* 2011; Vartanian *et al* 2008)^{18,19} indicate that extrinsic environmental factors affect people's food intake without understanding/acceptance becomes a challenge for them to maintain a healthy diet plan given their health and well-being. To maintain health, the selection of food is central. It is based on an individual's cognitive effort and the level of proficiency keeping because of well-being. Literature identified three domains of health literacy that is functional (critical reading and

composing ability to understand data relevant to well-being), collaborative (understanding and communicating with medical care professionals), and vital (psychological skills for individual empowerment). Schulz and Nakamoto (2005)²⁰ conceptualized wellbeing proficiency in three dimensions: Descriptive information, All procedural details including the implementation and Pertinent decision skills having critical thoughts.

Therefore, it is important to practice food literacy in daily routine life for good health and a better society. Students need to learn and use the best knowledge and practices of food skills. Due to lack of time and poor cooking practices, the students prefer fast food which is available in packing or takeaway. Nowadays it is a common trend that people like to dine outside the home or prefer fast food.²¹ Fast food and other unhealthy foods now prevail in society. Food indicates social values and culture however now the availability of fast food McDonald's, Italian pizza etc. transformed it all together - multicultural. The changing trend is alarming not only here in Pakistan but around the globe. Fast food and inexpensive junk food have increased multiple health risks such as obesity, high blood pressure, and diabetes. A study by Higgs and Thomas (2016)²¹ indicates that for healthier eating, social eating norms interventions have to be encouraged.

Study findings indicate that due to poor knowledge about nutrition, students tend towards poor diet. Similar findings of Niazi *et al* (2012)²² study and Colatruglio's (2015)¹⁰ about food education exhibited that a “*significant spotlight on the youthful grown-up populace in demonstrate hatred for realizing that they do have an absence of food information and have unfortunate dietary propensities*”. The unavailability of pure food, low price, spicy, and fried foods products generated multiple issues towards health, hygiene and well-being. Dyg *et al.*, study (2014)²³ indicated that food education is a systematic way of coping with improving individual food competency and

its relation to well-being. Therefore, food education is important as it plays a central role in health and well-being.

CONCLUSION

Among youth, the understanding of food literacy and nutrition knowledge is linked with affordability, lack of knowledge, and time. There is a great need to integrate food education and nutrition knowledge in all programs for awareness and increase food proficiencies. For health education, policies are required, its implementation and promotion. Multi-sectorial initiatives are required to introduce new ways of thinking about food and educating people about nutritional values to achieve the desired results regarding food literacy and healthy dietary behaviours – a step towards sustainability of well-being.

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AUTHOR'S CONTRIBUTION

BY: Conceptualization, Introduction, Review of Literature, Methodology, Data collection, Analysis, Referencing, manuscript writing.

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