

Exploring the Underlying Factors for Fast Food Consumption Behavior among Adolescents: A Qualitative Study

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ABSTRACT

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Background: Overweight and obesity cause different disorders such as high blood pressure, inflammation, and cardiovascular diseases. So it becomes a major factor for enhancing different mortal diseases.

Due to the high tendency to consume fast food among adolescents, this study aims to identify the causes of adolescent's desire for and fast food consumption.

Methods: An interview was carried out with some adolescents to explore the reasons and their consumption rate.

Results: The main factors promoting fast food consumption in students can be divided into 4 categories. Also, the students' motivation in fast food ingestion can be explained in personal, social, and educational reasons.

Conclusion: Increasing number of fast food restaurants, peer pressure, parents' role in choosing proper nutrition, and lack of knowledge about the risks of fast food are the main reasons for increased fast food consumption in adolescents.

Introduction

Overweight and obesity are a growing concern among children and adolescence. Its prevalence has almost tripled since 1980 and has risen sharply over the past ten years [1]. Obesity in childhood, like adolescence, causes high blood pressure, lipids disorder, chronic inflammation, and increased risk of thromboembolism, endothelial dysfunction, and increased insulin serum levels [2-3]. Hence, this becomes a major concern among health professionals, as obesity is brought to adulthood and become a strong predictor for increasing all causes of mortality and morbidity in adult life [4].

In a study conducted in Iran, Mirmiran et al. reported that the prevalence of abnormal weight such as underweight, overweight, and obesity was high among adolescence in Tehran, so that about 12.6% of adolescents in Tehran were overweight, of which 11.8% were boys and

13.2% were girls [5]. In general, epidemiological research has shown that the rate of psychological damage in overweight and obese children has been higher [6]. The psychological consequences of obesity, including reduced levels of self-esteem, poor self-imaging, reduced level of quality of life, and increasing the likelihood of mental disorders are significant.

A change in lifestyle is one of the achievements of modernity which the community has suffered in particular from the urban community. One of the reasons that have implying lifestyle change is changing in nutrition. An example is the overwhelming consumption of fast food among households and individuals. Many experts believe that fast food in most countries is a favorite of adolescents and young people and has replaced many of their daily main meals. As a result, overconsumption of high-calorie and fatty foods and an imbalance between energy intake and consumption has

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resulted in an increased risk of obesity, diabetes, and other metabolic disorders. Unfortunately, today the standard of human food consumption is not being based on the actual needs of the body, and since fast foods have a better flavor because of their richness of additives and salt, people are keener on consumption then. Different studies have identified the cause of prevalence and a significant increase in the consumption of fast foods in altering the age structure of the family, etc. [7]. Iran has faced increasing consumption of fast food in recent years, which can be considered for many reasons, including taste, price, availability, etc. However, the causes of the different sectors of society towards fast food consumption depend on a variety of factors, including indigenous culture, social pressures, economic status. Adolescents are among the most important age groups to be considered in this regard.

Considering the high tendency of adolescents and young people to consume fast food, this study explores adolescents' tendencies and attitudes towards fast food consumption. Researchers believe gender differences can be a factor in the difference in their tendency to fast food consumption [8]. Therefore, it was decided that this study be conducted separately on adolescent boys, being complemented by another study on girls.

Materials and Methods

Participants

This qualitative study was carried out in collaboration with male students of one of the high schools in Tehran, which were 15 people. Students were interviewed to determine the causes of eating fast food and their consumption rate. The individuals in this study were randomly selected in such a way that a number of students were introduced after we asked the school consultant as randomly.

The approval of this study was taken from the Ehsan high school board of trustees. Many factors, including age, gender, level of education, and the economic and social status of individuals can affect fast food consumption. For this purpose, the combination of these situations was used for interviewing. Interview sessions were held in one of the empty rooms of the school and individually. Participants were invited to the interview. In order to observe ethical considerations, written informed consent was obtained from participants, and they were assured that their names and specifications

would remain confidential and the conversations recorded would be postponed after the paper was taken. The meeting was begun using a researcher-made questionnaire. First, questions about the frequency of fast food consumption per month were requested.

An example of the interview questions is as follows:

- Frequency of fast food consumption per month
- Which type of fast food do you use?
- What is your idea about the advantages and disadvantages of fast food?
- Which type of fast food are you more interested in?
- In your opinion, what is the reason that you and your friends do not like home food?
- Do you eat fast food with your family or with friends?
- What is the best way to stop eating fast food?
- What are the reasons for eating fast food? Family, mother, food variety, fun, and going out and being?

The questions were open-ended and based on the purpose of determining the causes of fast food consumption among students. To elicit more detailed responses and increase the validity and reliability of the data, probe questions were used such as "why?" "Please explain more," and "please, give some examples." The guide researcher guided the discussion on how to respond to the participants so that subject has an active role in the interview and managed to keep the conversation in the framework of the prepared questions based on pre-determined questions. The session took about 30 minutes. The participants were interviewed using a digital voice recorder, and the interviewer took note of the conversation.

Data coding and analysis

After the interview, we shared the collected data with the interviewees to make sure that the notes were the same as the experiences of the interviewees. At the end of each session, the main titles that were written were summed up for participants, and the participants were asked to express their opinions if they were contradictory or to add other items. The recorded conversations were transcribed completely. After collecting data, the grounded theory proposed by Glaser and Strauss was used to determine the main concepts of the method.

In order to prevent the intellectual bias of the researcher, open coding, axial coding, selective coding was done by two coders. During the open coding process, the texts were studied several

times by the researchers, and the main concepts were written in code form. Then the codes were categorized and merged into categories and subclasses. The final codification was determined after the discussion of both coders about extraction codes. All process of the study was fully documented to allow the step-by-step follow-up and research methods by other researchers.

Results

In this study, 15 male students, aged 15 to 18 years, from one of Tehran's high schools participated. Student interviews were conducted to investigate the causes of fast food eating and their consumption. Several factors such as age, gender, level of family education, and the economic and social status of individuals can affect fast food

consumption. For this purpose, a combination of these conditions was used to participate in the interview. Student feedback was conducted in response to pre-designed questions aimed at achieving their motivation to consume fast food. The interview was initiated by the interviewing and guiding the discussion. The results of interviews with adolescents have been summarized in (Table 1). Student opinions are presented in two main categories: (1) study of the situation of fast food consumption among students; (2) study of the motivation of students to fast food consumption. The first group has 4 main classes, and the second group has two main classes and 7 subclasses. These classes and subclasses include the adolescents' perceptions of fast food.

Table 1. Summary results of the interviews

Study of the status of fast food consumption in students	Study of the frequency of fast food consumption in a month
	Study of the effects of the increasing number of fast food restaurants compared to the traditional ones
	Study of fast food consumption alternatives from the studied viewpoint
	Study of suggestions in response to the growing trend of fast food consumption in the community
Study of the students' motivation in fast food consumption	Personal reasons: Role of fast food taste in fast food consumption The importance of the "Diversity" reason for justifying the fast food consumption The importance of the reason for the "reasonable price of fast food" in justifying the fast food consumption
	Social reasons: The role of "modeling" from friendship and the effect of being together in fast food consumption Family role in frequency of fast food consumption
	Educational reasons: Student awareness (knowledge) of risks and disadvantages of fast food consumption School and education role in frequency of fast food consumption

Study of the situation of fast food consumption in students

The current situation perceived by the studied students about fast food consumption is classified into four classes as study the frequency of fast food consumption per month, Study of the effects of the increasing number of fast food restaurants compared to the traditional ones, Study of fast food consumption alternatives from the studied viewpoint, Study of suggestions in response to the growing trend of fast food consumption in the community.

Study the frequency of fast food consumption per month: based on the results of the current studies, a large number of studied students have consumed fast food at least twice in the past

month.

Study of the effects of the increasing number of fast food restaurants compared to the traditional ones: According to interviews, all interviewed people had the idea that the lack of access to traditional restaurants and different fast food densities, with a variety of flavors, prices and quality in their place of residence and in general in the city, is one of the most important reasons for the increasing fast food consumption. Some student talks are presented below:

"There is no good grilled chicken restaurant around here, instead a lot of fast food restaurants! Since most of the kids live in this neighborhood so there is only fast food restaurants nearby!"

"Fast food was not so accessible. Now, see

around the school, there were lots of pizzerias, to them there is not a fast food restaurant in our place, so that people would not have access at all if I did not want to, but now there are so many different conditions".

Study of fast food consumption alternatives from the participant's viewpoint: According to students' viewpoints, the fast food alternative to the favorite ones was grilled chicken, strudel, egg sandwich, ice cream, milk and cake. The interesting point is that some interviewees announced recreational and non-food alternatives as a fast-food alternative, such as volleyball and swimming pool with family members.

For example:

- "Let's go to the Sadaf Park to talk to each other and take ice cream".

- "I'd like that a lot when my father say that let's go to the pool for swimming"

- "Would you go to pool, but not going to a fast-food restaurant?"

- "With my dad, yes"

Study of suggestions in response to the growing trend of fast food consumption in the community: According to the interviewees, cultural capacity building, family education and increasing knowledge, reminding of fast food disadvantages and their role in diseases such as obesity and diabetes, are good ways to cope with increased consumption of fast food.

"Cultural capacity building will have to do. Just as fast food becomes prevalent it will be removed".

Study of the students' motivation in fast food consumption

By studying the views of students, it seems that the reasons and incentives derived from fast food consumption can be classified into three categories such as personal, social, and educational reasons:

Personal reasons: The concepts raised in this study about adolescence experiences as personal motivators of fast food consumption were classified into three sub-classes:

The role of "fast food taste" in fast food consumption: it seems that the tastes of the adolescents are highly inclined towards fast food, and this is the most important reason given by interviewees in the category of personal reasons regarding fast food consumption. Below are some examples of the original text of the interview:

"Sausages, pizza cheeses, and so on, all are reasons for making delicious food, they all get together."

"Because it is delicious. Even though I know it's a danger, but it is delicious and I'm going to get fast-food."

The importance of the "Diversity" reason for justifying the fast food consumption: Following the favor taste of adolescents, the main factor mentioned by the interviewees is to create a variety in the use of home-made foods.

"Mamma makes a delicious food, but we will go out for diversity and it seems very settled"

The importance of the reason for the "reasonable price of fast food" in justifying the fast food consumption: Admittedly, the right price for fast food is very important in the personal selection of adolescents. It seems that the tendency of adolescents is high in fast food due to the variety in the price of fast food and limited access to money for them.

For example: "the price for two hot dogs is equal to one serve of white rice with kebab, the kids say we'll get hot dogs, the more expensive they are".

Social reasons: These reasons are divided into family-related reasons and friendship group-related reasons. In the general study of the reasons for fast food consumption, the biggest and most frequent cause of fast food consumption in all groups and subgroups is the need to adapt to peer groups to the extent that it affects one's desire and therefore matters a lot.

The role of peer pressure and the effect of being together in fast food consumption: The interviewees repeatedly mentioned that they choose fast food to accompany their friends and not to go against the family's decisions. But with a closer look at what the students suggested through the interviews it was understood that due to lack of proper places to hang out, friends choose fast food restaurants; meaning that their choice was not necessarily for the food, but a place to spend time together outside the school. The dialogues below are Part of the interview that have identified this issue:

"If everyone among the friends says that no fast food lets go to eat stew, they're calling him "stop, jerk", your style is healthy"

"The most effect is in this friendship, because they go to fast food restaurants most often"

"Does your aim is gathering? Is fast-food margin? Or not, the fast food is the main. The kids are gathering for eating lunch".

"No. It is only a matter of gathering. And this is not for fast food consumption".

"Totally, we would like to have supper with friends on the weekend"

Family's role in the frequency of fast food consumption

According to this study, family monitoring and the expression of standards and regulations on their part and the application of these rules in fast food consumption is also one of the main reasons for the desire and tendency to fast food. According to the interviewees, management of nutrition and especially the mother's sensitivity to fast food consumption are important.

"Families are also very impressive when they say that they are not at home and some are not at all in trouble, but there are some who say that if you want to go to the restaurant, please go to these four restaurants, do not go to any other restaurant".

Educational reasons: This class itself is divided into two categories of student awareness (knowledge) of the risks and disadvantages of fast food consumption and the role of school and education in the frequency of fast food consumption. In this class, interviewees express the effect of education on the desire and tendency to fast food.

Student awareness (knowledge) of the risks and disadvantages of fast food consumption: The majorities of interviewees were aware of the various risks and disadvantages of fast food consumption and their details, and expressed their physical and mental effects. Some interviewees justify themselves for fast food consumption despite the fact that they are aware of the risks, by pointing to the cognitive error of their risk perception, in such a way that in such cases they perceive the danger to others and not see endanger themselves.

"The material in fast foods is bad, or, when much oil is to be added for fast made, it is dangerous because the oil should always be hot".

"Do you think cancer is for others, do you think they're talking to others?"

School and education role in the frequency of fast food consumption: The opinions of the interviewees on the role of the school in reducing the fast food consumption among students are in a range that, on the one hand, begins with the ineffectiveness of public education and school actions, and on the other hand, implies to the importance of cultural capacity building as relative form.

"School can't do something, the family should take care"

"Education and advertisement to not consumption have become so formality and it is not working"

"School should be working on this. Now, what do you think school role is? If school opens up a fast food market, the guys would be consumed fast food once every month, I sure it isn't damaged"

Discussion

The rising trend of fast food consumption among children and adolescents in various communities can be alarming. Although, in some countries, this trend has been declining through adoptions of appropriate policies; but in our country, the consumption of fast foods is increasing [9-10]. The results of the interviews and conservation with adolescents in this study were largely in line with the results of studies previously mentioned in other studies. An increase in the number of fast food restaurants is one of the most important factors for these foods [11]. Studies have shown that the highest availability of students to fast food, restaurants, and access to public and school stores is in the lower rank [12]. Close et al., showed that the high availability of fast food restaurants has an important role in increasing the consumption of these foods, and the multiplicity of fast food restaurants has a direct relationship with the emergence of non-healthy nutritional behaviors [13].

On the other hand, in other studies, the taste and flavor of fast food have been introduced as one of the most important drivers of fast food consumption [14]. Fast foods with a high content of salt and spices appear to have a serious plan to enhance their taste and flavors in a competitive atmosphere that can ultimately lead to a high prevalence of fast food consumption in the community [15].

Powell et al. in their study have shown that the economical and affordable prices of fast foods compared to other foods are another factor for their consumption in society [16]. As the examples mentioned in this study have also pointed out, for adolescents, the affordable fast food price is an important factor in choosing these foods for adolescents gathering and the congregation.

The studied adolescents in this study, along with other studies in this area, believe that peer pressure and the desire of adolescents to attend friendship and concern about peer rejection are a factor in adopting fast food consumption behavior. Fortin et al. acknowledged that the impact of peer groups in adopting nutritional behaviors and fast food consumption is very clear and important [17].

In various studies, the role of parents as a model for choosing food and nutritional behaviors is a well-known role [18-19]. In families that parents who have healthy choices in nutrition, children also have the same behaviors and, therefore, can play an effective role as a pattern of behavior for their children. In this regard, families who take fast food consumption as a nutritional behavior and take promises of the week will somehow accompany their children in adopting this policy.

One of the most important areas for adopting high-risk nutritional behaviors, including high fast food consumption among adolescents which is also mentioned by the participants, is the risk perception by adolescents. Amongst the important cognitive domains in acquiring a behavior is the understanding that one may have from acquiring or not acquiring a certain behavior [20-21]. For an adolescent who does not feel the risk of excessive consumption of food or the physical and other potential illnesses for the future, the likelihood of adopting and maintaining fast food consumption behavior is higher for him.

Among the environments in which adolescents are present, the school may have the most important role to play in helping to raise awareness of normal nourishment behaviors. But the important points are the education and empowerment of adolescents in schools in the field of health and nutrition behaviors in this regard [22]. Schools that do not use effective and experienced strategies for behavioral interventions are likely to face serious problems in institutionalizing health behaviors in their students.

Researchers have faced some restrictions on the implementation of this study, including access to students in the school environment to face such challenges. It is also difficult to find examples of the economic and social level matched for such studies.

According to the results of this study, researchers propose strategies to reduce the behavior of adolescents fast food consumption, which include setting limits on open-up fast food restaurants around schools, implementing policies for managing fast food pricing, creating spaces for peer groups as alternatives to fast food restaurants, empowering families to prepare home-made foods tailored to the taste of adolescents, educating their families and empowering them to play a role model for their children, empowering schools to adopt methods

and planning of innovative programs to institutionalize normal health behaviors.

Future researches on the factors affecting the adoption of fast food behaviors in girl adolescents and the effectiveness of intervention strategies in this area will be for both genders.

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Conflict of interest

None of authors have conflict of interests.

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