



Relation between Parental Education and Children's Healthful Lifestyle

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Abstract

Because of the important role of parents' socioeconomic condition in their children's health, the present paper aimed to evaluate the relationship between the parents' education and children's healthful lifestyle, including breastfeeding, nutrition, supplement intake, smoking, and personal hygiene. Parents' behavior is an important factor that affects children's health status. Accordingly, a cross-sectional descriptive analysis was conducted using a self-administrated anonymous questionnaire. A total of 600 anonymous questionnaires were distributed among the children's parents in primary schools in Tehran, Iran, of which 62% were returned. Responses showed that 89.2% of mothers intended to breastfeed and 69% of children had suitable nutrition. Additionally, the study result indicated a significant correlation between parents' education and children's personal hygiene. There was a significant relation between parents' education and parents' smoking as well. Furthermore, there was a significant relation between mothers' education and supplement intake in their children. Therefore, parents' education and health literacy are the main factors in children's health that should be addressed by policymakers.

Keywords: Parents' Education, Children's Lifestyle, Children's Health, Socioeconomic condition, Healthful Lifestyle, Iran

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1. Introduction

In recent decades, there has been ever-increasing concentration on pediatric health in countries [1]. It is obvious that parents' social condition considerably affects their children's health. In other words, the situation in which children live is associated with their health [2]. Pieces of research showed that breastfeeding decreases involving some diseases [3]; for instance, a significant association was reported

between breastfeeding and gastrointestinal infection, as well as breastfeeding and allergy [4]. Concerning nutrition, fruit, and vegetable consumption is an important factor affecting health. Health behavior in nutrition reduces the risk of developing many diseases such as cancer [5]. It is clear that children's eating habits are formed in the initial period of their life [6]. Therefore, some intervention programs can help to make these habits healthy. Parents play a crucial role in influencing their children to have a healthy behavior by encouraging them and controlling their food consumption [6].

Passive smoking also affects children's respiratory health. A survey conducted in children with respiratory disease history in the United States shows that parents' smoking, especially mothers' smoking was related to respiratory diseases and allergy in their children. This study indicated that the rates of respiratory diseases in children with smoker mothers were 25 to 30% more than others. As it is mentioned that fathers' smoking was also associated with children's diseases with a lower rate [7].

Personal hygiene such as hand-washing also plays a significant role in increasing infectious diseases [8]. Hand-washing includes washing hands with and without detergent [9]. It should be noted that 62% of death-causing diseases is related to infectious one [10]. One study indicated that children washing their hand properly suffered less from gastrointestinal and respiratory diseases [11]. Inadequate and awareness of observing personal hygiene leads to bad health behaviors in children and

infectious diseases [12]. Therefore, lifestyle habits such as breastfeeding, nutrition, supplement intake, parents' smoking, and personal hygiene are various in the different social status of parents [13].

According to WHO report, the adult literacy rate of Iran has been growing at an average annual rate of 6.09 % and increased from 52.3 % in 1986 to 87.2 % in 2015. In parallel, the health indicators of Iran show a consistent improvement[2]. In this study, we established the association between education and health in the context of Iran especially assess the effect of parents' literary on children which can show the impact of adults' literacy on the next Iranian generation.

2. Materials and Methods

This descriptive-analytical study was conducted in 2014 as a cross-sectional study. The sufficient sample size was calculated to be 380 using the Cochran equation. Then, the data were collected through 600 self-administrated questionnaires randomly delivered to the students' parents in primary schools by multi-cluster sampling. For this purpose, Tehran, the capital city of Iran, was classified into five clusters according to its geographical and socioeconomic characteristics. Subsequently, two primary schools (seven to twelve-year students), were randomly selected in each cluster, and sixty questionnaires were filled in each of them. The content and face validity of the questionnaire were designed according to the literature and evaluated by considering its clarity and comprehension. The questionnaire contained

two sections, including demographics questions about parents' education, children's heights and weight, and the family size, as well as 10 questions on breastfeeding history, nutrition status, and hygiene habits. For example, they were asked about the length of breastfeeding, their favorite food, food supplement utilization, as well as personal hygiene observation such as hand-washing.

The face and content validity of questionnaire were evaluated by five academic specialists and its reliability was calculated using Cronbach's alpha coefficient. Participants were informed about the purpose of the study and verbal consent was given. Statistical data analysis was performed using SPSS v.16 software. The descriptive analysis was applied to demographic, health, and lifestyle items. Then, the impact of lifestyle on health was evaluated using Kruskal-Wallis statistical test. Values less than 0.05 Alpha level were considered significant for all tests.

3. Result and Discussion

In the present research, 372 questionnaires out of 600 distributed questionnaires were completed by 62% response with no response bias. Table 1 shows the respondents' demographic and background characteristics. In this study, approximately 89% of children were breastfed. Table 2 shows the length of breastfeeding.

In addition, Table 2 shows that in approximately 59% of students, the most favorite food was meat.

Approximately 56.5 % of students washed their hands completely before eating a meal. Also, parents claimed that 45.95% of students observed their personal hygiene completely. The correlation of participants' characteristics and their family's lifestyle is shown in Table 3.

In parallel with other similar studies, in this study, the Chi-square test indicated a significant relationship between parents' education and observing personal hygiene. In 2014, Nourijelyani showed that higher education

Table1. Participants' demographic and background characteristics

Characteristics	Categories	N (%)
Child's gender	Female	171(46)
	Male	201(54)
Mothers' education level	Diploma	152(40.9)
	Bachelor/Master	193(51.8)
	Ph.D.	27(7.3)
Fathers' education level	Diploma	160(43)
	Bachelor/ Master	200(53.7)
	Ph.D.	12(3.3)
Family size	One child	149(40.1)
	More	223(59.9)

Table 2. Descriptive analysis of the questionnaire.

Questions	Response options	N(%)
Breastfeeding	Yes	332(89.2%)
	No	40(10.8%)
Breastfeeding duration	Less than 6 months	43(13%)
	6 to 12 months	40(12%)
	12 to 18 months	47(14.2%)
	More than 18 months	202(60.8%)
Nutritional habits (according to first priority of use)	Fast food	36(9.7%)
	Fruit and vegetables	46(12.4%)
	Meat	221(59.4%)
	Confectionery	69(18.5%)
Supplement utilization	Yes	241(64.8%)
	No	131(35.2%)
Hand-washing	Yes	210(56.5)
	No	162(43.5)
Personal hygiene	A little	46(12.39%)
	Somehow	155(41.66%)
	Completely	171(45.95%)

Table 3. Participants' characteristics and response correlation

Grouping variables	Breastfeeding duration	Personal hygiene	Nutritional habits	Supplement utilization	Smoking	Weight	Height
	Sig. (2-tailed)						
Mothers' Education	0.423	0.023*	0.356	0.039*	0.000*	0.044*	0.011
Fathers' Education	0.462	0.015	0.907	0.413	0.000*	0.035*	0.041

level of mothers was associated with their children's higher hygiene [14].

In one study conducted in Tehran, uneducated mothers did not have enough knowledge about educating correct hygiene

habits; consequently, it led to the increasing rate of inflectional diseases [16].

As mentioned, approximately 56.5 % of students washed their hands completely before eating a meal. Although in Ethiopia, 99% of students stated that they washed their hands

before eating meals, only 36.2% used soap with water [8].

There was also a significant association between parents' education and both mother and father smoking. Similarly, a literature indicated that poorly educated parents had a higher rate of smoking and had a higher incidence of hospitalization due to respiratory diseases [15].

There was not any significant relationship between breastfeeding and mothers' education. However, as this study shows, most mothers (89.9%) breastfed their children due to the effect of the media on promoting breastfeeding [16]. Some studies indicated that low attention to media was one of the major problems to decrease breastfeeding in societies [17]

As well as another Iranian study which was conducted in 2014, this study shows according to the parents' statements, approximately 69% of children had suitable nutrition [14].

In contrast with the result of a present study which showed no significant difference between parents with low education and high education in their children's nutrition priorities, there was a significant association between mothers' education and receiving supplements. In one similar study, children with high-educated parents had a higher level of nutrition and supplements [18].

In addition, mothers' education had a positive effect on children's weight and height. This relationship is also confirmed by Javaheri's studies (2010) indicating the significant relationship between parents' education and children's weight and height [19].

Although there was no difference between paying attention to nutrition in highly and poorly educated mothers, using higher dose of supplementary in children with higher education mothers could lead to an increase in their weight and height. In this regard, educated mothers had more information about healthy food, but they had not enough time to consider their children nutrition. Thus, they used supplementary to compensate their negligence. According to the literature, parents' education influenced their children's growth rate; for instance, their children's height was 30% more than others [20].

Finally, this study indicated mothers' education affected the children's health. Higher educated mothers annually took their children to physicians less than lower educated mothers. It could mean educated parents had a better lifestyle; therefore, they effectively influenced their children's health habits.

4. Conclusion

The result of this cross-sectional study shows the importance of parents' behavior in children's lifestyle, and consequently their health education. Since lifestyle habits such as breastfeeding, parents' smoking, nutrition, supplement intake, and personal hygiene are associated with mothers' educational attainment, mothers' education and health literacy are the main factors in children's healthy behavior that should be seriously considered by policy-makers in public health programs.

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