// Evidence Based Care Journal

http://ebcj.mums.ac.ir/

Parental Care Challenges in Childhood Obesity Management: A Qualitative Study

Mahdiye Razi, Ahmad Nasiri

The online version of this article can be found at
https://ebcj.mums.ac.ir/article_19311.html

Evidence Based Care Journal 2021 11: 07 originally published online 18 December 2021
DOI: 10.22038/EBCJ.2021.61924.2608

Online ISSN: 2008-370X

Address: Mashhad Nursing and Midwifery School, Ebn-e-Sina St., Mashhad, Iran
P.O.Box: 9137913199
Tel.: (098 51) 38591511-294
Fax: (098 51) 38539775
Email: EBCJ@mums.ac.ir

Evidence Based Care Journal

Original Article

OPEN ACCESS JOURNALS

Parental Care Challenges in Childhood Obesity Management: A Qualitative Study

Mahdiye Razi[1], Ahmad Nasiri[2*]

Received: 29/11/2021
Accepted: 18/12/2021

Evidence Based Care Journal, 11 (4): 7-15

Abstract

Background: Childhood obesity is one of the most serious public health challenges in the 21st century. Since children's healthy habits are developed in the family, parents involvement in pediatric weight care strategies is among the most effective measures which can be implemented for the management of childhood obesity. In this regard, parents face many challenges that awareness of which is very important for managing and caring of childhood obesity.

Aim: The present study aimed to explore the challenges experienced by parents in the care and management of childhood obesity. It merely focused on reporting the findings from interviews with participating parents regarding these experiences.

Method: This qualitative study was conducted through semi-structured interviews with 18 parents of obese children aged 6-12 years. A purposive sampling approach was used. The interviews were digitally recorded, transcribed verbatim, and analyzed through conventional content analysis based on Graneheim and Lundman method.

Results: Five categories emerged from the obtained data: Parental conflict, parents' indecisiveness and compassion, interference of others, child's stubbornness, and child's secretiveness.

Implications for Practice: Given that the nurses are often charged with the responsibility of family counseling and helping them facing problems; therefore, an awareness of the difficulties presented to families can be of great help in planning and effective interventions.

Keywords: Challenges, Obesity management, Parents, Pediatric obesity, Qualitative research

1. Ph.D candidate in nursing, Student Research Committee, School of Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran
2. Professor of Nursing, Department of Nursing, School of Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran

* Corresponding author, Email: Nasiri2006@bums.ac.ir

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

Introduction

Childhood obesity is one of the most daunting public health challenges in the 21st century (1). According to the World Health Organization, the obesity epidemic is considered a global threat to public health (2). Based on statistics, in recent years, obesity has demonstrated a tenfold increase, especially among children and adolescents. Obesity affects over 337 million children globally with 213 million youth classified as overweight and 124 million with obesity and severe obesity (3). Childhood obesity reached epidemic levels In the United States (4). It is predicted that obesity will be the world's number one health problem by 2025 (5).

Childhood obesity is a multifactorial disease (6-8) that leads to immediate and long-term health consequences. Obese children are more likely to develop non-communicable diseases, such as high blood pressure, type 2 diabetes, respiratory problems, precocious puberty, multiple musculoskeletal disorders, as well as psychopathologies, including depression, anxiety, low self-esteem, and social isolation (9-11). In their meta-analysis, Miller and Downey reported a 40% decrease in self-esteem in obese individuals, especially obese girls (12). Despite the critical importance of obesity and its associated medical conditions, this crisis is largely preventable; therefore, the highest priority should be given to preventive programs (13), but it has remained a considerable challenge for families, physicians, and nurses in management of childhood obesity (14).

In their study, Brown et al. pointed to inadequate resources, limited time, knowledge gaps, and challenging social contexts as the major barriers faced by different families in the management of childhood obesity. These obstacles seriously challenge the efforts made to control and manage pediatric weight. For instance, family financial problems and the cost of physical activity programs discouraged parents from enrolling their children in structural activities (15). In the same context, Young stated that family motivation has a key role to play in the successful treatment and management of childhood obesity (16). About other problems of child obesity management, Gerards et al. indicated that parents' denial of child obesity and their reluctance to discuss this issue were formidable barriers encountered by primary care nurses to parental involvement in the prevention of childhood obesity (17). According to the guidelines, parent involvement in pediatric weight care strategies is among the most effective measures which can be implemented for the management of childhood obesity (18, 19). The related studies have demonstrated that family-based interventions are appropriate for childhood obesity treatment (13, 20) since children's healthy habits are developed in the family, and the home environment can exert lasting effects on children's weight gain (21).

The important point here is that families should be supported in this regard (16). In fact, when a child suffers from illnesses, the family also face anxiety and stress, which if not supported will lead to their failure to control the problem. Training programs in this field will help families effectively (22). In the meantime, the key role of families in child obesity management highlights the critical importance of a thorough assessment of their problems and difficulties in this regard. The negligence of the challenges posed to parents in controlling child obesity can aggravate this critical problem.

A review of the literature demonstrated that the majority of studies have focused on the general barriers to the management of childhood obesity, and little is known about the underlying problems encountered by families. Nurses are often charged with the responsibility of family counseling and helping them facing problems; therefore, an awareness of the difficulties presented to families can be of great help in planning and effective interventions. Qualitative studies can provide an accurate and comprehensive view of the phenomenon being studied by conducting intensive individual interviews.

The present study aimed to consider this subject matter from a new perspective by a thorough assessment of the challenges experienced by parents in the care of their child's obesity. Therefore, the researchers decided to conduct a study to describe the experiences of parents about the challenges of childhood obesity management in Iran.

Methods

Study design

The present descriptive qualitative study was conducted using conventional content analysis based on Graneheim and Lundman method (23).

Sample and setting

The present study was performed on 18 parents of obese or overweight children in Mashhad, Iran.

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

Participants were selected via the maximum variation sampling method to obtain appropriate data (Table 1). The inclusion criteria included 1) the parents who had experience living with and managing an obese child and 2) willingness to participate in the study.
The study was conducted in three urban areas where the majority of families had above-average income.

Procedures and data collection
Participants were selected in collaboration with schools so that the health instructor or physical education teacher extracted the information of students who had a body mass index (BMI) greater than the 85th percentile for age and gender; thereafter, their parents were contacted. At this stage, the researcher introduced herself and explained the goals of the study to the participants. If they were willing to participate in the study, they were asked for their convenient time and place for the interview. Therefore, the unstructured face-to-face in-depth interviews were conducted based on the participants' opinions in such places as parents' workplaces and homes, parks, and children's schools. The sampling continued until data saturation.

Unstructured interviews
At the beginning of the interview, the following general question was asked: "Please talk about the problems you faced in the management of your child's obesity. Thereafter, in line with the research objectives, more specific questions, such as "Can you explain more" and "What do you mean" were asked in order to obtain in-depth information about the parents' experiences. In three cases, participants were re-interviewed to complete the information. The interviews lasted between 30 and 60 min (an average of 40 min). Data collection lasted from June 2020 to September 2021.

Data Analysis
Data collection and analysis occur simultaneously so that all interviews were audio-recorded and immediately transcribed; subsequently, they were transferred to MAXQDA 2020 for data management and analysis. The transcripts were read by the authors several times to get insight into the participants' experiences. Following that, the semantic units (primary codes) in the texts were identified, and similar codes were merged several times. In so doing, subcategories were formed and the most similar codes existed in each category. Thereafter, integrated and main categories were formed.

Table 1. Demographic characteristics of the participants (P=18).

ID code	Parents' age	Child's age(year)	Child's gender	Parents' occupation	Parents' education
P1	42	11 9	Girl Boy	Teacher	Bachelor
P2	43	12 8	Girl Boy	Employed	MSc/Phd student
P3	41	12	Girl	teacher	Bachelor
P4	41	10	Girl	Employed	PHD
P5	40	12	Boy	Employed	Bachelor
P6	37	8 10	Boy Boy	Nurse	Bachelor/ MSc student
P7	38	12	Boy	Employed	Master
P8	41	8	Boy	Employed	MSc/Phd student
P9	42	12 9	Boy Girl	Housekeeper	Bachelor
P10	35	12	Girl	Employed	Bachelor
P11	37	12	Girl	Nurse	Bachelor
P12	36	8	Girl	Employed	Master
P13	31	10	Boy	Housekeeper	Diploma
P14	42	11	Boy	Housekeeper	Bachelor
P15	27	10	Boy	Housekeeper	Middle School Diploma
P16	35	10	Boy	Housekeeper	Diploma
P17	45	11	Boy	Housekeeper	Diploma
P18	37	9	Girl	Employed	Bachelor

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

Trustworthiness

Since the findings of qualitative research should be valid, Lincoln and Guba's Evaluative Criteria were used to check the accuracy of the study (24). Sufficient time allocation and prolonged engagement, as well as peer check, expert check, and member check, were used to maintain the credibility of the data. Moreover, the external check was employed to meet the criterion of dependability; moreover, bracketing and a panel of experts were utilized to promote confirmability of data. Finally, for transferability, the maximum variation sampling method was considered.

Ethical Considerations

The present study was approved by the Institutional Review Board at Birjand University of Medical Sciences, Birjand, Iran. At the commencement of the study, all participants provided written informed consent and were informed that they could withdraw from the study at any time without any negative consequences. No identifiable information was collected from the study, and responses remained anonymous**,** for example, each person in quotations was assigned a code.

Results

In total, 21 interviews were conducted with 18 parents. The mean age of the parents was reported as 39 years, and most of them were employed. Data analysis led to the emergence of primary codes, which were eventually divided into 5 categories and 12 subcategories. The main categories included parental Conflict, parents' indecisiveness and compassion, interference of others, child's stubbornness, and Child's secretiveness, which will be described in detail below (Table 2).

Parental Conflict

This concept denotes a conflict between parents in the management of childhood obesity so that mothers were mostly concerned about controlling their child's obesity and put more effort in this regard. In fact, mothers carry the greatest burden of childhood obesity management, while the father seemed more carefree and did not believe in the need to control the child's obesity and overweight.

"I see that my child is now overweight, compared to her peers, and it is quite obvious in my opinion. But my husband does not believe in this at all. He says no, there is no problem, it will be fine! She is not fat! These justifications are not acceptable in my opinion, and we should stop them from now on". (P16)

In some cases, parents disagreed on both the importance of managing their child's obesity and the measures they take to control their child's nutrition. For example, the father not only did not support the mother's intervention in controlling the child's weight but also prevented her from taking effective measures in this regard. All of these issues resulted in the unsuccessful management of child's obesity.

"Well, my child is very interested in fast food, of course, I do not give them to her, but my husband sometimes buys them and I really cannot stop him". (P5)

Table 2. Categories and Subcategories

Categories	Subcategories
Parental conflict	Disagreement over the need to manage child obesity Contradictions in the nutritional management of the child
Parents' indecisiveness and compassion	Surrendering to child's cravings for unhealthy food Compromising on child overeating
Interference of others	Insisting on the removal of food restrictions imposed by parents Supporting the child in breaking the parental rules
Child's stubbornness	Extreme hunger and greed for food after being prohibited Following unhealthy eating habits Disregard for parental recommendations and restrictions
Child's secretiveness	Sneaking food Secret purchase of snack and fast food Withholding school recommendations about their obesity

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

Parents' indecisiveness and compassion

Parents often felt compassion for the obese child despite their awareness of the dangers of obesity and desire to manage it. Therefore, they are caught in a real dilemma so that they bought unhealthy foods due to their child's insistence and demands.

"I usually do not buy them snacks, but ice cream is different. I sometimes buy them ice cream because they insist, well… I don't like, but I have to, I always feel pity for them so I can't be strict". (P8)

Apart from surrendering to the child's demands for unhealthy food, compassion made parents show leniency toward their child's overeating. In other words, parents sometimes ignored their management plans in dealing with the child's overeating out of compassion.

"We try to ignore our sympathy in 80% of cases, but we surrender in other situations. For example, when his father asks him to stop eating, I see that he gets upset…so I feel pity and ask his father to let him eat ". (P9)

Interference of others

The interference of others was another problem faced by parents in the management of their child's obesity, making it a difficult endeavor. For instance, sometimes the elders in the family, such as grandparents, uncles, and aunts, opposed the food restrictions imposed by parents on children. Moreover, parents did not disagree with these suggestions out of respect for them.

"Some time ago we were guests at my brother's house, my child was overeating and I asked him to stop. But then his uncle and aunt complained that why you are treating the child like that ?! ... what can we do in this situation…? You tell yourself that they are older and you should respect them". (P10)

The surrounding people sometimes gave the child what the parents had forbidden, thereby disrupting the planning and rules set by the parents to manage the child's obesity.

"My child did not drink soda until he was 5; that is to say, until then I had not given him soda at all. Then we went on a trip to the north, the first thing his uncle did was giving him a glass of soda. By the time I arrived, it was over and he had drunk it and nothing could be done". (P15)

Child's stubbornness

Another problem encountered by parents in the management of childhood obesity was the child's stubbornness and disobedience of the rules and restrictions imposed by parents. In fact, the child behaved in the opposite way following the repeated parental recommendations about eating less, avoiding junk foods and snacks, and taking healthy foods, such as fruits and vegetables. Therefore, parents pointed out that their child obsessed over the restricted foods.

"One of the problems I faced was his excessive greed for food since I deprived him so he became more obese". (P9)

Despite the efforts of parents and their management measures to control child obesity, they followed inappropriate eating habits, such as eating snacks and junk foods, skipping breakfast, as well as not eating fruits, vegetables, dairy, and other healthy foods.

"He does not like fruits and vegetables at all. Unfortunately, the fruit I buy get rotten in the fridge… and even when I peel them, she doesn't eat". (P8)

Furthermore, sometimes the children ignored their parents' advice, complicating the process of parental management of child obesity.

"She no longer obeys everything I tell her, for example, I talk to her about the harms of soda .... But I see she drinks one or two glasses of soda every day". (P11)

Child's secretiveness

This concept refers to the child's behaviors which are done in secret. In other words, the parents faced some secret behaviors from their child following the management of the child's obesity and food restriction practices. One of these behaviors was sneak eating in the absence of parents.

"Because his mother and I were very opposed to eating sausage, he ate sausage or ham when we were not at home. Then he threw the rubbish in the bin outside to hide it from us, but my younger son gave him away". (P10)

Another behavior which was done in secret was buying junk foods and snacks at or on the way to school. Since children spend half their time at school, the parents were not able to fully control them and prevent their secret behaviors; therefore, the desperate parents referred to this behavior as one of

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

the major challenges they faced in managing their child's obesity.
"Now, for example, we don't have any snacks at home and we do not really buy them. But after a while, I realized that every day at school, she stealthily spent his pocket money to buy chocolate ". (P1)
Furthermore, sometimes the child withheld the school recommendations regarding obesity; therefore, the control measures taken by parents were not sufficiently effective.
"In fact, she did not tell me anything that happened at school. For example, the school had recommended her to attend sports classes and had given her a letter to enroll in sports activities for losing weight, but she tore the letter and did not show it to me". (P1)

Discussion
The present study aimed to explore the experiences of parents regarding care challenges of childhood obesity management. Five categories emerged from the obtained data: parental conflict, parents' indecisiveness and compassion, interference of others, child's stubbornness, and child's secretiveness. Despite the key role of parents in the care of childhood obesity, the findings of the present study demonstrated that parents are faced with daunting challenges which can affect and disrupt the process of childhood obesity management. One of these problems was parental conflict about child obesity; that is to say, the parents were not on the same page regarding the need to care their child's obesity. Mothers were mostly concerned about controlling their child's obesity and put more effort in this regard, rather fathers did not acknowledge such a need. In their study, Brown et al. referred to denial as a barrier to child obesity management. They reported that some families did not worry about their child's overweight, and some even were satisfied with their child's current lifestyle and general health (15). In the present study, one of the parents denied their child's obesity which caused disagreement between the parents. In fact, when a parent ignores the need for child obesity management, it could be due to his/her denial of the child's obesity or his/her critical condition. In the present study, this denial was often made by the father, leading to parental conflict in this regard.
In their study, Nepper et al. reported that parents of overweight/obese children felt a lack of support from their spouses/partners for healthy eating at home (25). In the same vein, in the present study, parents sometimes did not arrive at a consensus about the implementation of necessary measures in this regard and did not support each other despite their perception of the health risks of childhood obesity. This parental disagreement disturbed the process of child obesity management. Kohansal et al. also stated in their study that there is a significant relationship between parents' awareness and performance about food security and anthropometric indices in school-age children. In fact, in cases where the child's nutrition was inadequate (such as insufficient consumption of vegetables or overconsumption of dairy) and this led to obesity, the parents did not have the proper knowledge and performance (26). In the present study, parents also differed in their performance towards child nutrition management, which may be due to their different awareness about food security in children.
Another challenge posed to parents in the care of childhood obesity was the serious dilemma they faced between the implementation of decisive food restriction practices and compassion toward the child; as a result, child obesity management was seriously challenged. In the same context, Kaveh et al. denoted temptation as one of the main barriers faced to obese women in the process of self-management which caused them to postpone or even stop following their diet (27). Unlike the study by Kaveh, in the present research, the participants included parents who were responsible for child obesity management. Consequently, weight control programs were thrown into doubt by parents' compassion toward the child.
Moreover, another parental concern about controlling their child's obesity was the interference of others which instilled despair in the parents and hindered the management of child obesity. This interference often included blaming parents, preventing them from food restriction practices, and breaking the rules set to control the child's obesity. Since the surrounding people or elders in the family usually meddle with these weight control measures due to cultural beliefs, the present research was in agreement with the results of the study by Kaveh. The majority of the Iranian elderly believe that child's obesity is a sign of health and there is nothing unhealthy about their size. In their study, Kaveh et al. pointed to cultural beliefs as one of the barriers faced by Iranian women in self-management and stated that some old beliefs still present serious challenges to obesity management. They also pointed to the pressure of being in the group as another obstacle which discouraged people

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

from following their diet (27). In the present study, the parents surrendered to the pressure of others regarding the implementation of weight management programs.
Child's stubborn behavior was another serious problem that interferes with parents following through child's obesity. Furthermore, despite the strict supervision of parents and their frequent recommendations about avoiding snacks, the child still insisted on unhealthy eating habits, such as skipping breakfast, overeating snacks, and not eating healthy foods, such as fruit, vegetables, and dairy products. In their study, Nepper et al. referred to children's regular demand for junk food as a barrier to the promotion of healthy eating habits in children (25). Sometimes the forbidden foods become more tempting to the child and fuel their greed. Moreover, the child's disregard for parents' recommendations was sometimes at play and made them desperate in managing their child's obesity. Brown et al. pointed to some negative emotional states, such as lack of self-confidence, as barriers to child weight control among different families. In the mentioned study, parents lost their confidence in managing their child's weight following their previous failed attempts in this regard (15). The effect of child's stubborn behavior on childhood obesity management was referred to in the present research and the study by Brown. The importance of this behavior lies in the fact that it made the parents desperate for the management of their child's obesity.
Furthermore, child's secretive behavior was another serious challenge the parents faced in child obesity control. These behaviors included the secret purchase of snacks at school, sneaking forbidden foods in the absence of parents, and withholding school follow-ups and recommendations about child's obesity. Therefore, the parents were not able to thoroughly control the child's nutrition; consequently, this behavior posed another considerable challenge to the parents in the care of their child's weight. According to Brown et al., interpersonal dynamics is an aspect of the social context that can be a barrier to weight management. They stated that some parents felt defeated to control their children's nutrition at school during the day. Parents acknowledged that they could do nothing when their child was at school. In fact, since the children are at school, it is not possible to monitor and care for them at all hours of the day (15). The above concept in the study by brown was somewhat similar to the child's secret purchase of snacks at school in the present study. Nevertheless, in the study by Brown, the effect of this factor was examined from the perspective of child-parent interaction.

Implications for Practice
The present study which provided an in-depth assessment of parents' experiences pointed out that parents with obese children face daunting challenges in the care of their child's obesity and overweight. Therefore, an awareness of these difficulties can be of great help in an improved understanding of the complicated nature of childhood obesity management. Consequently, the results of the present study can be used in the development of effective strategies and implementation of appropriate interventions by primary care providers to strengthen obesity care in families.

Acknowledgments
This study is a part of a PhD dissertation that approved in Birjand University of Medical Sciences (IR.BUMS.REC.1399.159). The authors wish to express their gratitude to Birjand University and all the participants and the executive agents of the schools and the education department who helped them find the research samples.

Conflict of interest
The authors declare that they have no conflict of interest.

References
1. Nittari G, Scuri S, Petrelli F, Pirillo I, di Luca NM, Grappasonni I, et al. Fighting obesity in children from European World Health Organization member states. Epidemiological data, medical-social aspects, and prevention programs. Clin Ter. 2019;170(3):e223-30.
2. Lobstein T, Baur L, Uauy R. Obesity in children and young people: a crisis in public health. Obes Rev. 2004;5 Suppl 1:4-104.
3. NCD Risk Factor Collaboration N-R. Worldwide trends in body-mass index, underweight,

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128·9 million children, adolescents, and adults. Lancet. 2017; 390(10113):2627-42.

4. Skinner AC, Ravanbakht SN, Skelton JA, Perrin EM, Armstrong SC. Prevalence of obesity and severe obesity in US children, 1999–2016. Pediatrics. 2018;141(3):1-18.
5. Vaidya V. Psychosocial aspects of obesity. Adv Psychosom Med. 2006;27:73-85.
6. Davison KK, Birch LL. Childhood overweight: a contextual model and recommendations for future research. Obes Rev. 2001;2(3):159-71.
7. Feeg VD, Candelaria LM, Krenitsky-Korn S, Vessey JA. The relationship of obesity and weight gain to childhood teasing. J Pediatr Nurs. 2014;29(6):511-20.
8. Ohri-Vachaspati P, DeLia D, DeWeese RS, Crespo NC, Todd M, Yedidia MJ, et al. The relative contribution of layers of the Social Ecological Model to childhood obesity. Public Health Nutr. 2015;18(11):2055-66.
9. Flynn J. The changing face of pediatric hypertension in the era of the childhood obesity epidemic. Pediatr Nephrol. 2013;28(7):1059-66.
10. Pulgaron ER, Delamater AM. Obesity and type 2 diabetes in children: epidemiology and treatment. Curr Diab Rep. 2014;14(8):508.
11. Tasca GA, Szadkowski L, Illing V, Trinneer A, Grenon R, Demidenko N, et al. Adult attachment, depression, and eating disorder symptoms: The mediating role of affect regulation strategies. Pers Individ. 2009;47(6):662-7.
12. Miller CT, Downey KT. A meta-analysis of heavyweight and self-esteem. Pers Soc Psychol Rev. 1999;3(1):68-84.
13. Vos RC, Wit JM, Pijl H, Kruyff CC, Houdijk EC. The effect of family-based multidisciplinary cognitive behavioral treatment in children with obesity: study protocol for a randomized controlled trial. Trials. 2011;12(1):1-12.
14. Huang TT, Drewnowski A, Kumanyika SK, Glass TA. A systems-oriented multilevel framework for addressing obesity in the 21st century. Prev Chronic Dis. 2009;6(3):1-10.
15. Brown L, Dolisca S-B, Cheng JK. Barriers and facilitators of pediatric weight management among diverse families. Clin Pediatr (Phila). 2015;54(7):643-51.
16. Young L. 5 obstacles parents commonly face in child obesity treatment and how to overcome them 2018, August 23 [Available from: www.ualberta.ca/folio/2018/08/5-obstacles-parents-commonly-face-in-child-obesity-treatment-and-how-to-overcome-them.html.
17. Gerards SM, Dagnelie PC, Jansen MW, De Vries NK, Kremers SP. Barriers to successful recruitment of parents of overweight children for an obesity prevention intervention: a qualitative study among youth health care professionals. BMC Fam Pract. 2012;13(1):1-10.
18. Barlow SE. Expert committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: summary report. Pediatrics. 2007;120(Supplement 4):S164-S92.
19. Lau DC, Douketis JD, Morrison KM, Hramiak IM, Sharma AM, Ur, et al. 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children [summary]. CMAJ. 2007;176(8):S1-S13.
20. Kitzman-Ulrich H, Wilson DK, George SMS, Lawman H, Segal M, Fairchild A, et al. The integration of a family systems approach for understanding youth obesity, physical activity, and dietary programs. Clin Child Fam Psychol Rev. 2010;13(3):231-53.
21. Arredondo EM, Elder JP, Ayala GX, Campbell N, Baquero B, Duerksen S, et al. Is parenting style related to children's healthy eating and physical activity in Latino families? Health Educ Res. 2006;21(6):862-71.
22. Mahdizadeh M, Mohammad N, Behnam Vashani H, Reyhani T. Effects of Supportive Educational Program on Anxiety of Mothers of Children Undergoing the Lumbar Puncture (LP). Evid Based *Care* J. 2016;6(2):29-38.
23. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today. 2004;24(2):105-12.
24. Lincoln YS, Guba EG. Naturalistic inquiry. New Dehli, India: SAGE; 1985. 416 p.
25. Nepper MJ, Chai W. Parents' barriers and strategies to promote healthy eating among school-age children. Appetite. 2016;103:1-28.

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021

26. Kohansal Z, Motamed N, Najafpour Boushehri S, Ravanipour M. The Relationship between the Awareness and Performance of Parents Regarding Food Security with Anthropometric Indices among School-age Children in Bushehr, Iran, during 2017. Evid Based Care J. 2019;8(4):75-80.
27. Kaveh O, Peyrovi H. Exploring Iranian obese women's perceptions of barriers to and facilitators of self-management of obesity: A qualitative study. J Family Med Prim Care. 2019;8(11):3538-43.

Downloaded from http://ebcj.mums.ac.ir/ at Mashhad University of Medical Sciences on December 18, 2021