

Overweight in Turkish children: the parent's perception

University of Utrecht

Clinical Health Sciences program Nursing Science; University Medical Centre Utrecht

Name: Inez Schwanen, RN

Student number: 3434532

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Course instructor: Claudia Gamel, RN PhD

Supervisor: Prof. Dr. Barend Middelkoop & Dr. Jeroen de Wilde

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Abstract

Title: Overweight in Turkish children: the parent's perception

Background: The prevalence of overweight and obesity in Turkish children is higher compared with Dutch children and is increasing at an alarming rate. Parental recognition and acknowledgement of their child's weight are critical steps in the success of interventions aimed at preventing overweight.

Aim and research question: The study aims to gain insight into the perception of Turkish parents with an overweight or obese child. Two research questions are formulated: 'How do parents perceive childhood overweight in general' and 'how do parents perceive their child's weight?'

Method: Grounded theory (GT) approach. Data were collected from January till May 2012 at a Youth Health Care Centre in the Netherlands by using a focus group and in-depth interviews. Data were analysed using open, axial and selective coding.

Results: Ten mothers, one father and one informant were interviewed. A pattern of perception among Turkish parents emerged, characterized by two core themes: 'perception of weight' and 'willingness to change' and two contextual themes: 'role of culture' and 'role of family'. Parents misperceived the gravity of their child's weight although they recognized overweight in general. Mothers need to be willing to change the child's lifestyle but they are being influenced by family and culture.

Conclusion: Childhood overweight and obesity among Turkish children could be caused by parental unawareness of their child's weight status, which is strongly influenced by cultural traditions, habits and family.

Recommendations: Nurses should evaluate mothers' perceptions about their children's weight and correct their misperceptions by educating and empowering them. More research is needed to assess the role of culture (social factor) in a broader Turkish population before developing a culturally tailored intervention. To raise social-cultural awareness it is necessary to start a dialog within the Turkish community about health issues associated with overweight.

Keywords: parental perception, Turkish ethnicity, childhood overweight, school nurses, cultural influence

Samenvatting

Titel: 'Overgewicht bij Turkse kinderen: beleving van de ouders.'

Inleiding: De prevalentie van overgewicht en obesitas bij Turkse kinderen woonachtig in Nederland is hoog en neemt in alarmerend tempo toe. Het herkennen en erkennen van het gewicht van hun kind door ouders zijn essentiële stappen in een succesvolle interventie.

Doel en onderzoeksvragen: Inzicht krijgen in de beleving van Turkse ouders met een kind met overgewicht of obesitas. Om dit doel te bereiken zijn twee onderzoeksvragen geformuleerd: Hoe ervaren Turkse ouders overgewicht in het algemeen en hoe ervaren zij het overgewicht van hun eigen kind.

Methode: Middels een grounded theory design zijn gegevens verzameld van Januari tot Mei 2012 bij een jeugdgezondheidszorg afdeling in Nederland door middel van een focusgroep en diepte-interviews. Om data te analyseren is gebruik gemaakt van open, axiaal en selectief coderen.

Resultaten: Tien moeders, een vader en een informant zijn geïnterviewd. De ervaring door Turkse ouders werd gekenmerkt door twee thema's: 'perceptie van gewicht' en 'motivatie tot verandering' en twee contextuele thema's: 'rol van cultuur' en 'rol van familie'.

Conclusie: Het overgewicht bij Turkse kinderen kan worden veroorzaakt doordat ouders de ernst van het gewicht van hun kind niet herkennen. Deze wordt sterk beïnvloed door familie en culturele tradities en gewoonten.

Aanbevelingen: Verpleegkundigen zouden in hun gesprekken met Turkse ouders kunnen overwegen om de beleving van de moeder te evalueren en te onderkennen dat cultuur en familie een grote rol spelen in de leefstijl van een kind. Het is aanbevolen aanvullend kwalitatief onderzoek te verrichten, onder een bredere Turkse populatie, alvorens een cultuur specifieke interventie te ontwikkelen. Het is noodzakelijk om in dialoog te gaan met de Turkse gemeenschap, om het bewustzijn van de gezondheidsrisico's van overgewicht te verhogen, om zo een sociaal-culturele verandering in gang te zetten.

Trefwoorden: ouderlijke beleving, Turkse etniciteit, overgewicht bij kinderen, jeugdverpleegkundigen, cultuur

Background

Childhood overweight and obesity is an epidemic health problem according to the World Health Organization¹. To assess a child's weight status, sex and age dependent, universal Body Mass Index (BMI) cut-off points (kg/m²)² are used.

Worldwide, several studies have shown that the prevalence of obesity is substantially higher among minority groups and people with lower socioeconomic status, both in adults and children³⁻⁴. Non-Western migrants living in Western societies are a high-risk group for the development of overweight and obesity.

The Netherlands is no exception and, thus, the prevalence of overweight and obesity among minority children is higher than among Dutch children⁵. In the fifth Dutch Growth Study data were collected on children of Dutch, Turkish and Moroccan origin of the age 0-21 years in the Netherlands. The study reported the prevalence of overweight, based on universal cut-off points, of 32.5% in Turkish boys and 31.7% in girls, and for obesity 8.4% in boys and 8.0% in girls⁶.

Where Dutch children have reached a plateau⁵, the prevalence of overweight and obesity in minority children is already higher and is still increasing at an alarming rate, especially in children of Turkish ethnicity. This is of great concern because of the serious health problems that are associated with childhood overweight and obesity, such as childhood obesity, type 2 diabetes, hyperlipidemia and hypertension⁷⁻⁹. Overweight and obese Turkish children have a higher prevalence of cardiometabolic risk factors relative to their peers of Dutch and Moroccan ethnicity¹⁰. In addition, childhood overweight and obesity is associated with adult morbidity and mortality¹¹.

Parents play an essential role in preventing childhood obesity¹². Parental recognition and acknowledgement of their child's weight are critical steps in the success of interventions aimed at preventing overweight¹³⁻¹⁵.

School nurses of the Dutch Youth Health Care system motivate parents to initiate lifestyle changes¹⁶. Since 2006, the Youth Health Care Centre in The Hague has provided an intervention for parents with children from 2 to 19 years that are overweight or obese. However, according to an evaluation done by Crone and van Dorst¹⁷, the effects of the intervention on BMI are not significant. Nurses state that they find it difficult to motivate parents to initiate lifestyle changes.

To achieve a successful lifestyle intervention it is recommended that caregivers take the influence of culture on family lifestyle into account¹⁸. Culturally-adapted interventions have shown to be a promising way to reduce overweight and obesity among U.S. minority children¹⁹. In the Netherlands observational studies found that health promotion interventions should be culturally tailored²⁰⁻²¹ but no studies were conducted regarding culturally tailored interventions in overweight and obese Turkish children.

Problem statement

Understanding parental perceptions of their child's weight and the influences of culture on family lifestyle are key factors in initiating lifestyle changes. It is unknown what the perception of Turkish parents in the Netherlands is about their children's weight.

THE STUDY

Aim and Research question

The study aims to gain insight into the perception of Turkish parents with an overweight or obese child between the ages of 2 and 19. With this information it is possible to form a theory that can be helpful in developing a culturally tailored nurse-led intervention to initiate lifestyle changes for Turkish parents with an overweight or obese child.

To address this goal, the following research questions were formulated:

- 1) How do parents perceive childhood overweight in general?
- 2) How do parents perceive their child's weight?

Design

Grounded theory (GT), which is a qualitative design, was followed during this study. GT gives more insight into the perception of Turkish parents. In GT no assumptions or hypotheses are formed a-priori²². In order to find underlying concepts and develop a theory, techniques such as constant comparison are used, as suggested by Strauss and Corbin²³.

Sample

Participants were recruited from one Youth Health Care Centre in the city of The Hague. The centre is located in a district where approximately 20% of the residents (17,000) are of Turkish ethnicity.

Participants were eligible if they were first generation Turkish migrants and had an overweight or obese child. First generation is defined as being born in Turkey and having at least one parent who was also born in Turkey. Universal BMI cut-off points² were used to determine the child's weight status. Participants were excluded if they did not understand or speak the Dutch language or were not able to give informed consent.

To select participants that are the most informative, purposeful sampling was used for the first focus group and the in-depth interviews. After the data analysis, theoretical sampling was used for the selection of two participants and one informant to enrich the data. The informant is used to gain more insight into underlying relations, as it was difficult for the participants to verbalize these relations due to the language barrier. Three nurses and three physicians, not otherwise involved in the study, identified all of the potential participants during their consultation hour and asked their consent for participation in the study.

Data collection

Data were collected from January till May 2012. In the focus group interview participants were invited to share thoughts and experiences in a conversational style. Later, in-depth interviews were conducted to gain more understanding of the underlying concepts. A written topic guide was used in both the focus-group and the in-depth interviews to ensure that all areas were covered while allowing participants to talk freely (table 1). To gather richer data, the topic guide was amended as the study progressed, as suggested by Charmaz²⁴.

An observer made field notes during the focus group to record group processes and interaction. A short questionnaire was used to obtain demographic information from participants. Digital recordings were made. The focus group and in-depth interviews were conducted and transcribed verbatim by the field researcher (IS).

A small sample of a population with a high level of homogeneity is sufficient to enable the development of meaningful themes and useful interpretation²⁵⁻²⁶. As first generation Turkish parents are a homogenous population, 12 participants were enough to reach saturation.

Ethical considerations

The study was conducted according to the principles of the Declaration of Helsinki²⁷, the Medical Research Involving Human Subjects Act (WMO)²⁸, Dutch Personal Data Protection Act²⁹ and Code of Conduct for Health Research³⁰. No ethical approval was necessary.

All participants have received written information about the aim of the study and have given informed consent prior to the interviews. To protect participants' identities, pseudonyms are

used to refer to quotes or other data and identifying features have been edited out. IS is employed at the Youth Health Care and did not contribute to the care of the participants to avoid role confusion.

Data analysis

The analysis was carried out in accordance with the techniques recommended by GT. Data were analysed during an iterative constant comparison process with data collection²⁴. For example, the focus group data were analysed before the in-depth interview was conducted.

IS conducted the coding; a second researcher (JW) independently coded two in-depth interviews to compare coding. The process started with line-by-line reading and identification of significant words or phrases to compare for similarities (open coding). This is an emic approach; no coding tree is provided a-priori. Similar actions, events and objects were grouped together and formed categories (axial coding). Core categories were then identified and described by thematic content (selective coding)³¹⁻³².

Memos and field notes were used to elaborate processes, assumptions and actions to go beyond individual cases and define patterns. NVivo 9.0 was used to manage and store the data.

Rigour

Several strategies were used to ensure trustworthiness and transferability of the study, such as coding by multiple researchers, peer review and data triangulation.

RESULTS

Twenty mothers and nine fathers agreed to participate in the study. Ten mothers and eight fathers never showed up despite the researchers' attempts to reschedule and make new appointments. Ten mothers, one father and one informant were interviewed. The study participants ranged in age from 20 to older than 50, nine participants had finished primary school, two secondary school and one vocational education (table 2).

Overview of themes

Two core themes, 'perception of weight' and 'willingness to change', and two contextual themes, 'role of culture' and 'role of family', emerged from the data (table 3). The framework provides a global overview of the themes. The framework is a description of the mothers' view of the total process (figure 1).

Perception of weight

To determine how the participants perceive weight in general, they were shown five pictures of Turkish children, each of a different weight status: normal weight, a bit overweight, overweight, obese and morbidly obese. In a conversational way they made the connection between their perception of weight in general and their perception of the body image of their own child. All the mothers recognized correctly which picture belonged to which weight status.

'If you look here, he's really skinny. But if you look here, you see a little belly and then step-by-step the belly grows and the legs are thicker.' (D)

When discussing the body image of their own child greater differences were seen between the answers of the participants. Although parents recognized overweight in general, they misperceived the weight of their own child.

'The weight of my child is good. She is only a child, I can't.... Maybe when she grows up, then her weight will be less. She is not sick.' (K)

'My children are not overweight. I really don't have children that are overweight.' (H)

Some parents recognized overweight in their child but misperceived the gravity of this condition. For example, the following statement was made by a mother whose child is obese.

'Yes, she is a little bit overweight. If I want to buy clothes for her and she likes something, it is not available in her size. She needs to lose a little bit of weight.' (L)

The opinion of the parents is being influenced by a complex set of factors including culture and family; both are discussed later in contextual themes.

Willingness to change

According to the mothers, it is their task to raise the children and cook; this is part of the Turkish culture. Therefore, they identified themselves as the ones who most affect the lifestyle of the children. Due to this fact, initiating lifestyle changes requires the mother's desire to change.

'My sister's child is obese. She knows that he is overweight but she doesn't think that it is a problem. She thinks that when her son is older, if he is still too heavy, he will lose weight himself without needing her to intervene.' (1)

'At first, it is the task of the mother to know for sure that she wants to change. She is the one who needs to pay attention to the child. If the mother is not willing, it isn't going to happen.' (G)

The mother needs to be supported in this process by family. Without this support the mothers think that it is difficult to overcome barriers. Some barriers that are identified by the mothers are part of habits in the Turkish culture.

Role of culture

Culture plays a big role in how parents perceived their child's weight and it influences the lifestyle of parents and children. In the Turkish community many believe that being overweight is the standard for looking good. Health problems due to overweight are trivialized and some people merely remark that those with a healthy weight can have health problems as well.

'When I go to Turkey with my children, they say the weight is good, not too heavy and not a problem at all.' (A)

My other daughter has a healthy weight but my parents are telling me that she is too skinny. They say that I don't feed her well and then they make food for her. (B)

Hospitality is an important part of Turkish culture. Participants described the culture as open and warm. Social contacts are important so friends, family and neighbours visit each other quite often. According to tradition, they always offer visitors coffee or tea and invite them to eat. The food that is prepared is greasier than Dutch food and the portions are larger. It is considered rude to refuse the food that is offered.

'I have to prepare food. All Turkish people prepare food when friends or family are visiting. Later today I have a visit from friends and I have to make dinner when I get home.' (I)

'We prepare food differently than Dutch people do. We prepare it with butter and whole milk. We use more grease.' (D)

Another aspect of the culture is physical inactivity. Participants described themselves as not being a role model for their children in, for example, organized sports.

'Turkish parents don't exercise themselves or participate in organized sport. They can't set an example for their children. Maybe some fathers are exercising, playing soccer or going to swimming but I don't see the mothers doing that. Sometimes the children go with their father but overall they just play outside but without exercising.' (1)

Role of family

The family, politeness and respect are very important in the Turkish culture. Mothers are confronted by relatives who share the common opinion that being overweight is not a problem and that children will outgrow their overweight. It is confusing and creates tension.

'But sometimes people tell me not to worry about my child's weight. If they grow up, they lose weight. Sometimes people say 'no, your child's weight is good, it suits her' and others say to my daughter 'no, it's okay, don't lose weight.' I don't know what to do.' (L)

While talking about the role of family the mothers expressed the feeling that it is especially difficult to go against the grandparents' will. Often grandparents do not agree with the mothers when the mothers are trying to make changes in lifestyle.

'What role do my parents play? They interfere very much with how I raise my children. If you say no then she (the grandmother) often says yes. You can't reject what they say. You must remain polite and respectful. So it is a big problem, I think.' (1)

The role of the father is not as restricted by the culture. There are some fathers that work a lot and have little influence on the lifestyle of their children and there are fathers that are more involved, for example, by helping to set rules. Despite this, fathers can influence the mothers' willingness to change, either positively or negatively.

'At home, dad needs to help also with rules about food. If I say: 'No, you can't have that' and dad says: 'Yes', that would be very bad.' (F)

'We are divorced but the father sees the children regularly. He says to me that I need to let her go and don't worry about her weight. When she grows up she will lose the weight herself. He told me that she is not going to be sick because of her weight.' (L)

Mothers think that caregivers need to empower and educate them. They suggest that the open, warm and social aspect of their culture could be helpful, for example, enabling educational sessions to be held in groups. But the involvement of the family is also needed when changing the lifestyle of the children.

DISCUSSION

This study describes how Turkish parents perceived their child's weight. It identifies two core themes, 'perception of weight' and 'willingness to change', and two contextual themes, 'role of culture' and 'role of family'. This is the first study, known to the researcher, that qualitatively assesses the perception of Turkish parents with an overweight or obese child.

Overall, the parents recognized overweight in general but misperceived the weight status of their own child. A quantitative study conducted in Turkey concluded that more than 73.3% of Turkish mothers with an overweight child misperceived their child's weight¹⁴. These findings are consistent with several quantitative studies in different countries that conclude that parents misperceived their child's weight³³⁻³⁵. Research conducted in Rotterdam suggests that observed unawareness of overweight status by parents is not dependent on ethnicity³⁶. Maybe parents are in denial as a kind of coping skill. Perhaps they are afraid that admitting that their child has an unhealthy bodyweight will lower their child's self-esteem. Further research is needed to explore why parents misperceive their child's bodyweight and to understand the underlying causes.

By conducting this research we learned more about the huge role culture and family plays in the perception and lifestyle of Turkish parents and their children. Mothers expressed the tension between the perceptions of overweight by the culture versus their own perception. They even seemed to apologize, non-verbally during the interviews, for eating habits within their culture and remarked that changing the lifestyle of their children is very difficult for them due to the influence of family (especially grandparents). To help these parents and reduce the prevalence of childhood overweight in the future, it is necessary to start a dialog within the Turkish community. For example, key figures such as imams could be used to raise social-cultural awareness of the health risks and other issues that are associated with childhood overweight and obesity.

The study is limited to first generation Turkish parents who speak the Dutch language. Nine fathers gave consent to participate in the study, but they did not show up for their appointments for unknown reasons. No information is gathered from second and third generation immigrants and the role of acculturation is not investigated. This information would provide a broader view of the needs of Turkish parents. To ensure the participation of fathers, future research could recruit male key-informants within the Turkish community. Moreover, this study only includes participants who were from one Youth Health Care Centre. All participants knew that they were invited to participate specifically because caregivers assessed their child as overweight or obese, which could have influenced the results.

In addressing childhood obesity, it is important to recognize that parental, family and community messages and methods are different for each ethnic group because of cultural traditions, norms and habits³⁷. When parents are unaware of their child's overweight, they

cannot be expected to change their child's lifestyle. School nurses are in a valuable position to take the lead to tackle the problem of childhood overweight and obesity³⁸⁻⁴⁰. In the current Dutch youth health care system there are no guidelines for school nurses that advise them on how to reach and motivate Turkish parents to make lifestyle changes. The framework (figure 1) can be helpful for school nurses to gain understanding of how Turkish mothers view the process of initiating healthy lifestyle changes. Therefore, school nurses and other caregivers should evaluate parents' perceptions about their children's weight and correct their misperceptions by educating them about weight, health risks and cultural influence. In this process it is important to acknowledge the role of the family and involve them in the intervention. A culturally tailored nurse-led intervention needs to be developed focusing first on making Turkish parents aware of their child's weight status and empowering and educating them by using the open, warm and social aspect of their culture. It is recommended that researchers continue assessing and involving Turkish parents or key informants when developing this intervention, to make sure that it is culturally tailored and not based on the assumptions of the developer.

CONCLUSION

Overweight and obesity among Turkish children could be caused by parental unawareness of their child's weight status. Turkish parents recognized overweight in general but are strongly influenced by cultural traditions, habits and family in how they perceive their child's weight and their family lifestyle.

Recommendations

School nurses and other health professionals should evaluate mothers' perceptions about their children's weight and take cultural and family factors into account. The framework (figure 1) could be useful by school nurses and other health professionals to gain understanding of the process of initiating lifestyle changes within Turkish families. To raise social-cultural awareness it is necessary to start the dialog within the Turkish community. Considering the limitations of this study, it is recommended that future research further assess the role of the culture and its social aspects on a broader Turkish population within the Netherlands before developing a nurse-led culturally tailored intervention. Involving male key-informants can help researchers reach fathers and encourage them to participate.

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Conflict of interest

The authors declare no conflicts of interest.

Author contributions

IS, JW and BM were responsible for the study concept and design. IS performed the data collection, data analysis and was responsible for the drafting of the manuscript. JW and BM made critical comments to the article and supervised the study.

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Tables and figures

Table 1 topic guide

Topic:	Start questions:
Perception	<ul style="list-style-type: none"> - What does overweight and obesity in children mean to you? And in the culture? - When do you think that a child is overweight? - What do you think of your child's weight and why? - Do you think that overweight in children is a problem? And in the culture?
Experiences	<ul style="list-style-type: none"> - Tell us about your experiences related to the lifestyle of Turkish children. - Which aspects of the Turkish culture influence the lifestyle of children?

Added topics

Topic:
Role of culture in perception
Role of family, grandparents and father
Aspects in the Turkish culture that can be used in initiating a healthy lifestyle

Table 2 Description of participants

Pseudonym	Gender	Age group	Education	Classification BMI child
A	Female	>50	Primary school	Overweight
B	Female	20-29	Primary school	Obese
C	Female	30-39	Primary school	Overweight
D	Female	30-39	Secondary school	Obese
E	Female	30-39	Primary school	Obese
F*	Female	20-29	Secondary school	Normal
G	Female	>50	Primary school	Overweight
H	Female	30-39	Primary school	Overweight
I	Female	30-39	Primary school	Overweight
K*	Male	>50	Primary school	Overweight
L*	Female	30-39	Primary school	Obese
Informant 1*	Female	30-39	Vocational school	Normal

* Theoretical sample

Table 3 Overview core themes

Core theme	Sub-category	Quote	Conclusion
Perception of weight	In general	<i>If you look here, he's really skinny. But if you look here, you see a little belly and then step-by-step the belly grows and legs are thicker.'</i> (D)	Although recognizing overweight in general, they misperceive the gravity of their child's weight status.
	Body image of their child	<i>'My son looks like the third picture, a little belly. Really the same.'</i> (E)	
Willingness to change		<i>'If the mother is not willing, it isn't going to happen.'</i> (G)	Changing the lifestyle of a child lies within the mother. She needs to be determined to change.

Table 5 Overview contextual themes

Contextual theme	Sub-category	Quote	Conclusion
Role of culture	Perception of weight	<i>'In Turkey people think that when children are overweight, they're going to be very tall when they grow up.'</i> (C)	In the Turkish community being overweight is not a problem. The social aspect of the culture and the habits influences family lifestyle.
	Social aspect	<i>'All Turkish people make food when friends or family are visiting.'</i> (I)	
	Habits	<i>'I think that Turkish children are heavier because of how they eat and because they do not exercise. After school every mother goes to the park if the weather is good, if not the children stay home and watch TV or play PlayStation all day.'</i> (L)	
Role of family	Father	<i>'Her dad tells her that she can eat whatever she wants; when she is 15 or 16 years old she will want to lose weight herself.'</i> (A)	The role of father is not as rigid and differs per family. Family members such as grandparents need to be respected, which can confuse
	Grandparents	<i>"My parents find the</i>	

weight of my child very good; they say 'You look good'. They think it's good to be replenished. It's healthy.' (E) mothers considering lifestyle changes.

Figure 1 Framework to describe mothers' view of the total process of initiating healthy lifestyle changes

