Impact of Parental Beliefs and Practices about Child Feeding and Its Impact on Child Weight in Makkah City, Saudi Arabia in 2021

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Abstract

Background:

Parental beliefs, attitudes, and feeding practices play a vital role in childhood obesity. Child weight issues can be emotionally challenging for parents. Childhood obesity is a serious public health concern. Over 33% of children aged 6–11 years old were overweight or obese in the United States. Pediatric obesity and health behavior change are multifaceted phenomena. Child dietary habits (e.g., the consumption of fruits, vegetables, sweets, and soda) are largely influenced by parents and represent an important modifiable factor that families can target to help address or prevent unhealthy weight gain among children, prevalence of overweight, obesity and severe obesity among Saudi children of all age groups varies between 2 to 23.1%, children's obesity is an alarming issue, although childhood

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obesity has received significant attention over the past few decades, it remains a major public health concern. In the United States, childhood obesity has tripled in the past decade. It is estimated that about 13.7 million children and adolescents are currently obese in the United States .Aim of the study: To assess the Impact of parental beliefs and practices about child feeding and its impact on child weightin Makkah City, Saudi Arabia in 2021 Method: Crosssectional and descriptive study developed in a sample of (200) parents' study children, Saudi Arabia 2021. Child feeding, beliefs about childhood obesity, and practices about child feeding were collected. The body mass index of the children was assessed in the school, and their parents responded to a self-administered questionnaire which contained questions on parental perception of the children's weight/obesity status. Data were entered and analyzed using SPSS. Results: show there were 200 participants, and the majority age of children parental were(63.0%) in >50 years, regarding sex the majority of them were male(77.0%), while female(23.0%). The most of the participants was married(65.0%). The majority of nationality were Saudi(75.0%), have university degree (26.0%), regarding occupation (66.0%) employee. Conclusion: This study has furthered scientific understanding of the relation between parental perceptions, concerns, and feeding practices with the child's obesity and maternal education, and the pressure to eat was negatively associated with BMI z-score of elementary school-aged children and since influence's which promote obesity in children include numerous factors, this issue must be handled as one of the greatest social and public health challenges at the present time

Keywords: impact, parental, beliefs, practices, child, feeding and its impact, weight

Introduction:

Background:

Parents are critical in prevention and intervention efforts to manage childhood weight[1], in part because they are responsible for creating a home environment that fosters healthful eating 2[]. School age children (6–12 years old) who are encouraged to eat fruits and vegetables by their parents will likely eat more of such foods on their own as they enter adolescence and adulthood [3]. Thus, parent decisions can have a meaningful impact on child dietary habits. However, little is known about the ways in which parents' motivational processes (i.e., emotional experiences and beliefs) support or interfere with these decisions. Parental convictions and practices in children's nutrition also additionally who can impact their dietary status. Parental taking care of may promote overeating or overweight in children. The predominance pace of obesity in childhood is increasing conspicuously all over the

world, including KSA. In spite of the fact that corpulence is pervasive among of children of all ages, failure to thrive (FTT) continues to be discovered at excessive charges in each developed and developing countries. Eating style is one of the distinguished elements that decide energy intake. One of the affecting variables that decide parental taking care of style is parental view of the weight status of the child.[4]

Obesity is typically characterized by an increase in body fat mass [5]. The common causes of childhood obesity include diet, behavioral, and genetic factors [6]. Chronic diseases such as type 2 diabetes mellitus, hypertension, and hypercholesterolemia have been established to be associated with obesity [7]. The persistence of childhood obesity into adulthood and its connection with morbidity is a major problem [8]. Additionally, childhood obesity is with associated several short and long-term health adverse ects, so it is crucial to identify early and address it with client methods. This includes metabolic disease [9], cardiovascular related disease [9–10], retinal and renal problems[11], and nonalcoholic fatty liver disease [12]. Both weight problems and failure to thrive have become significant general medical conditions around the globe.[13] To achieve successful feeding, it is vital for set a right and solid association among parent and child.[14] variables assume a significant part past hereditary features. Eating style is one of the conspicuous components that decide energy intake.[15] The danger of weight and FTT can be impacted by early life sustenance. In this period, the sort and measure of food admission are totally connected to parental (mostly maternal) insights, practices, and decisions.[16] One of the impacting factors that decide parental taking care of style is parental view of the dietary status of the child.[17]

Notwithstanding, the role of parenting practices in this hardly ever has seldom been explored. Weight issues in early age of life will in general proceed with sometime later the life. Past research on conduct causes during childhood which connect to parent's taking care of can give a clarification on the best way to stay away from childhood obesity.[18]

Literature Review:

Unfortunately, few studies have been carried out regarding assessing of parental beliefs and practices about child feeding and its impact on child weight the following is summary of recently done studies in this regard.

in the 2016 search was done to evaluate The initial step to identify the percentage of parents who misclassify the situation with kid's weight, and decide if there is a distinction between those parents whose kids are overweight and obese and those with children of normal weight.

This cross-sectional search included 601 kids matured 6-10 years. The kids were enrolled from the grade schools situated in Al-Qassim, Saudi Arabia. The body mass index of the kids was surveyed in the school, and their folks reacted to a self-regulated poll which contained inquiries on parental view of the kids' weight/obesity status. parents with overweight/obese children had essentially more misclassification than those with typical weight kids. The vast majority of parents of the 81 overweight child misclassified and revealed that their kid had typical weight, while 65% of parents of the 61 obese kids, misclassified the kid's weight status. [19]

A cross-sectional search was led among 426 children (1-8 years old) and their parents who were enrolled from pediatric clinics from the 5 areas of Riyadh City (2016)In this investigation pervasiveness of overweight, obesity and severe obesity among Saudi children of all age bunches fluctuates between 2 to 23.1%. By and large, children obesity is not perceived as a health danger by parents, which clarifies their opposition for prevention programs. Evaluating the immediate impact of parents' perception toward their children's weight will be a viable determinant of weight the management among kids in Saudi Arabia. Socio demographics, anthropometric measures, child feeding, information and convictions about childhood obesity, and view of body image (verbal and visual) were gathered. Bivariate examination and multinomial logistic regression were conducted for correlates of knowledge and perceptions across parental characteristics. More than half (52%) of Saudi parents misperceived their kids' real weight both verbally and then visually (P = 0.01). Practically 26% of kids were classified as "overweight or obese". Among those, lone 5.3% (95%CI: 3.2-7.4) were seen accurately as such by their Parents. Parental information was not fundamentally connected with perception (P = 0.70). Child's age (6.5 years) (P < 0.001), child's abnormal BMI (P < 0.001), parents' schooling of not as much as college (P < 0.02), kid's PC/tablet utilization of 2 hours (P < 0.001), were all independent indicators of mistaken perception of kid's weight.[20]

A cross-sectional study was administered to a comfort sample of Saudi Arabian ladies living in the US to catch their view of their kid's weight, and to distinguish the kid taking feeding of practices they report utilizing with their child between 2-6 years old. This survey was performed during (2015). The survey populace contained an accommodation sample of Saudi moms in the US whose kids were 2 to 6 years old was reached. Moms were sent an online survey. Interior consistency for questions was figured utilizing Cronbach's Alpha. Spearman's connection coefficient was determined to test the relationship among CFQ scales, NRF, MA, and segment factors. Moms (n=108) finished the survey. The mean (SD) score for

worry about child weight 1.8 (1.2) was low, but pressure to eat 3.9 (0.9) and restriction 3.8 (0.8) were high. Moms with lower incomes had more noteworthy worry about child weight (r = -0.20, P = .04), and use of restricted feeding practices reported greater NRF (r = .19, P = .05; r = .20, P = .04 individually). The more MA with feeding of, the more noteworthy obligation they revealed about feeding (r = .20, P = .04). [21]

Antoniou, E. E, (2016). done an survey to explain the bearing of the relationship between picky eating and weight status and to look at the moderating role of food parenting practices. Involved a longitudinal report on the impacts of particular eating on child weight status within the KOALA Birth Cohort Study, the Netherlands. Moms and their kids were remembered for the analyses.

Children's picky eating behavior and food parenting practices were surveyed at benchmark (youngster age 5 years). Their weight status was surveyed consistently until age 9 years. Mixed effects linear and logistic regressions were used to compare picky eaters (n = 403) and non-particular eaters (n = 621) on changes in weight status throughout the long term. [22] Cross-sectional search was done in 2019 and completed a study to look at the psychometric properties of an Arabic rendition of the Child Feeding Questionnaire (CFQ-A) in an example of Saudi preschoolers and their moms. A sum of 209 moms and kids were selected from eight diverse pre-schools. Moms finished surveys via phone and child anthropometry was estimated dispassionately utilizing normalized methods; BMI Z-scores (BMIZ) were determined dependent on the age-and sex-explicit WHO development guidelines and reference information. Confirmatory factor investigation was utilized to analyze the first seven-factor CFQ model, just as an adjusted nine-factor model. Cronbach's α was determined to analyze the interior consistency of each factor; Spearman relationship was utilized to look at 2-week retest dependability. Factor-factor and factor-child BMIZ relationships were examined. Both the first seven-factor and adjusted nine-factor CFQ-A showed solid match (root-mean-square-mistake of guess < 0.05). Six out of nine elements had amazing inward consistency and all components showed astounding 2-week test-retest unwavering quality. There were critical connections between kid BMIZ and five out of the nine components; Perceived Child Weight, Perceived Parent Weight, Restriction and Monitoring were each emphatically associated with kid BMIZ, while Concern about Child's Diet was contrarily related with child BMIZ.[23]

Rationale

Child feeding and overweight is a major problem in our society and most parental don't seek medical advice. By conducting this study, it will help us to estimate the level of this problem in Makkah City, Saudi Arabia since there is no recent studies conducted to evaluate this problem. In addition to that, child overweight is a problem that affecting the quality of life physically and emotionally especially among the child's and parental population. There are many factors contribute to the incidence of child overweight including child feeding also parent's perception to child feeding one of the influencing causes can result in imbalance in energy which associated with both underweight and overweight, the researcher is interested to this topic.

Aim of the study

To assess of parental beliefs and practices about child feeding and its impact on child weight in Makkah City, Saudi Arabia in 2021

Objectives

➤ To assess of parental beliefs and practices about child feeding of primary school.

Methodology

Study area:

The study has been carried out in the city of Makkah Al-Mokarramah 2021, Makkah is the holiest spot on Earth. It is the birthplace of the Prophet Mohammad and the principal place of the pilgrims to perform Umrah and Hajj. It is located in the western area in Kingdom of Saudi Arabia and called the Holy Capital. Contains a population around 2 million. Makkah has many schools. During the August, 2021to October, 2021, in Makkah City Health Affairs General Directorate has implemented a number of training programs over the past year. The activities of these programs targeted a number of physicians, technicians, and administrative assistants and parental It is worth mentioning that in Makkah City Health Affairs General Directorate keeps on the implementation of various programs, aimed at honing the skills of the medical, technical, and administrative staff and parental in such a manner that positively reflects on the beneficiaries of the medical services in the governorate.

Study population:

the parents' of children (aged 6-10 years) from the schools from two cities (with the largest populations) in the Makkah Al-Mokarramah 2021Center, and PHC, were selected throughout the period of the study and accept to participate in the study.

Study design:

Cross-sectional ,descriptive study.

Inclusion criteria:

- Saudi and non-Saudi nationality and aged between 6 and 10 years.
- All Saudi and non-Saudi parents (males and females) have children aged 6-10 years attending to primary schools located in Makkah Al-Mokarramahregion.
- Parents who can write and read in Arabic Language.

Exclusion criteria:

- ➤ Being disabled (physically or mentally), a diagnosis of chronic disease, psychiatric illness, or immune-compromised disorder.
- > parents who refuse to participate in the study
- > parents who not have Children feeding and not have overweight children

Sample size:

Sample size was calculated using a website (raosoft.com). The resulted estimated sample size is (200) parents' study children(male: 154; female: 46) and of them returned the questionnaire completed by their parents. Although the number of boys and girls in Saudi primary schools are comparable, the low involvement of girls in this study was because of the low response from their parents. Approximately, 30% of the parents of the female students did not return the questionnaire.

Sampling technique

This study adopted a random sampling procedure. The schools from two cities (with the largest populations) in the Makkah Al-Mokarramah, were selected. An updated list of all public primary schools was used in the sampling frame: schools were randomly selected from a total of 340 schools. Thereafter, a class list was created for each of the targeted grades (from Grades I-IV) in the selected schools. Ten classes from each grade were randomly selected (40 classes). Regarding the parents' of children 'was selected (by using randomizer.org website), the data collection period during the study (in both section (male and female sections).

2.8 Data collection tool:

The researcher has been use the child feeding questionnaire The CFQ contains 31 items, loading on seven factors. Four hypothesized factors pertain to parental perception of child and parent weight, and concern about weight, which may elicit parental control in feeding: (i) Perceived responsibility (three items), assessing parents' perceptions of their responsibility for child feeding (e.g. "When your child is at home, how often are you responsible for feeding her?"); (ii) Parent perceived weight (four items), assess-ing parents' perceptions of their own weight status history; (iii) Perceived child weight (three items), assessing parents' perceptions of their child's weight status history; and (iv) Parents' concerns about child weight (three items), assessing parents' concerns about the child's risk of being overweight (e.g. "How concerned are you about your child becoming over- weight?"). Three additional hypothesized factors assess parents' attitudes and practices regarding their use of controlling child feeding strategies:(1) Monitoring (three items), assessing the extent to which parents oversee their child's eating (e.g., "How much do you keep track of the high fat foods that your child eats?"), (2) Restriction (eight items), assessing the extent to which parents restrict their child's access to foods (e.g., "I intentionally keep some foods out of my child's reach"), and (3) Pressure to Eat (four items), assessing parents' tendency to pressure their children to eat more food, typically at mealtimes (e.g., "My child should always eat all the food on her plate"). All items were measured using a 5-point Likert-type scale, with each point on the scale represented by a word anchor. The researcher was use the Arabic version of this tool since there is study conducted to validate the Arabic version. (see Appendix for girls' version)

Data collection technique:

The researcher has been use Arabic version of the questionnaire since the target parents' of children' are Saudi. The questionnaire has been distributed to all parents' of children' attending primary schools during the data collection period(which is 60 days initially). The questionnaire has been distributed equally between male and female section because it is separate departments. The researcher was train school social workers in order to optimize the inter rater reliability. The researcher has been select the parents' of children and give them the questionnaire in the waiting area in male section then waiting them to complete it and after that I has been collecting it from them while in female section, has been trained social workers was do the same in female waiting area. After that, the researcher was collecting the paper daily from the social workers for data entry and analysis after thanking the participants

for their precious time and effort, the researcher has been providing the participants with gifts as an appreciation for their participation in the study, after collecting questionnaire from them.

Data entry and analysis

Statistical analysis has been performed using SPSS software program (Statistical Package for Social Sciences), version 24.0. We descriptive the association between overweight and obesity with selected socio demographic characteristics. Using Chi-square tests, t-test to analyses the association and the difference between two categorical variables or using other statistical tests if needed. P value less than 0.05 as level of significance. We tested whether misclassification of the status of the child's weight by parents differed significantly between normal, overweight, and obese children.

Pilot Study

A pilot study on 25 on parents of overweight children, and obese in the children participants representing 10% of study sample size (out of study area) has been conducted to explore methodology tool and environment and plan to overcome these problems.

Ethical considerations

Ethical procedures were safeguarded, by obtaining prior permission from the General Directorate of education to carry out the study in schools, the authorization for data collection from the Directors of each School and free and informed consent was obtained from parents and written consents who accepted to participate

Permission from research committee in the joint program of family medicine has been obtained

All information will be confidential, and a result has been submitted to the department.

Budget: The researchhas beenself-funded

Result

Table 1:Shows the demographic characteristics of the study participants of children and their parental . (n=200)

	N	%
Age		·
<30	24	12
30-50	50	25
>50	126	63

Sex		
Female	46	23
Male	154	77
Social status	I	
Married	130	65
Not married	70	35
Nationality		1
Saudi	150	75
Non-Saudi	50	25
Qualification	I	1
Primary degree	36	18
Intermediate degree	24	12
Elementary degree	44	22
Diploma degree	24	12
University degree	52	26
Post-graduation degree	20	10
Occupation	"	-
Employee	132	66
Not employee	68	34
Physical condition		,
Below average	16	8
Average	96	48
Above average	32	16
Capable	56	28
Child's age	•	,
<8	38	19
8-10.	42	21
10-12.	58	29
>12	62	31

In the table 1 show there were 200 participants, and the majority age of children parental were(63.0%) in >50 years, regarding sex the majority of them were male(77.0%), while

female(23.0%). The most of the participants was married(65.0%) . The majority of nationality were Saudi(75.0%), have university degree (26.0%), regarding occupation (66.0%) employee, Parents of Average status of physical condition were (48.0%), regarding the Child's age the majority age was(31.0%) >12

Table 2:Description of Child Feeding Questionnaire factors, items, and response options. To create a factor score for each of the seven factors (Perceived responsibility, Monitoring, Restriction, Pressure to eat, Perceived parent weight, Perceived child weight, Concern about child weight)

				One s	sample
			Data		(test
a s	significant relation was the p-value <0.001and X ²			value=2.5)	
			SD	t	P- value
Pe	erceived responsibility	l	ı	l	
1	When your child is at home, how often are you responsible for feeding her?	3.933	1.067	26.464	0.000
2	How often are you responsible for deciding what your child's portion sizes are?	3.698	1.104	21.382	0.000
3	How often are you responsible for deciding if your child has eaten the right kind of foods?	3.809	1.032	24.999	0.000
M	onitoring	•		•	
1	How much do you keep track of the sweets (Candy, ice cream cake, pies, pastries) that your child eats?	3.773	0.946	26.522	0.000
2	How much do you keep track of the snack food (Potato chips, Doritos, cheese puffs) that your child eats?	3.662	0.949	24.118	0.000
3	How much do you keep track of the high-fat foods that your child eats?	3.657	1.046	21.792	0.000
Restriction					•
1	I have to be sure that my child does not eat too many sweets (candy, ice-cream, cake or pastries)	3.923	1.205	23.261	0.000
2	I have to be sure that my child does not eat too many high- fat foods	3.902	1.270	21.744	0.000

Tintentionally keep some foods out of my child's reach 3.830 1.318 19.868 0.000	3	I have to be sure that my child does not eat too much of her favourite foods	3.675	1.217	19.024	0.000
Second	4	I intentionally keep some foods out of my child's reach	3.830	1.318	19.868	0.000
behaviour 3.982 1.238 23.584 0.000 If I did not guide or regulate my child's eating, she would eat too many junk foods 1.410 13.723 0.000 If I did not guide or regulate my child's eating, she would eat too much of her favourite foods 3.482 1.410 13.723 0.000 Pressure to eat 1 My child should always eat all of the food on her plate 3.418 1.272 14.206 0.000 I have to be especially careful to make sure my child eats enough 4.477 0.873 44.615 0.000 If my child says "I'm not hungry", I try to get her to eat anyway 1.462 6.043 0.000 If I did not guide or regulate my child's eating, she would eat much less than she should 3.441 1.369 13.532 0.000 Perceived parent weight 1 Your Childhood (5 to 10 years old) 2.946 0.492 17.834 0.000 Your adolescence 2.936 0.475 18.055 0.000 Your adolescence 2.936 0.475 18.055 0.000 Your child during the first year of life 2.874 0.520 14.145 0.000 Perceived child weight Your child as a toddler 2.943 0.428 20.422 0.000 Your child as a pre-schooler 2.972 0.445 20.870 0.000 Your child kindergarten through 2nd grade 2.995 0.497 16.047 0.000 Wour child kindergarten through 2nd grade 2.518 1.350 0.263 0.792	5		3.168	1.436	9.156	0.000
Part	6		3.982	1.238	23.584	0.000
Seat too much of her favourite foods 3.482 1.410 13.723 0.000 Pressure to eat My child should always eat all of the food on her plate 3.418 1.272 14.206 0.000 I have to be especially careful to make sure my child eats enough 4.477 0.873 44.615 0.000 I have to be especially careful to make sure my child eats enough 4.477 0.873 44.615 0.000 If my child says `Tm not hungry'', I try to get her to eat anyway 15 I did not guide or regulate my child's eating, she would eat much less than she should 3.441 1.369 13.532 0.000 Perceived parent weight 2.946 0.492 17.834 0.000 Your Childhood (5 to 10 years old) 2.946 0.492 17.834 0.000 Your adolescence 2.936 0.475 18.055 0.000 Your 20s 3.026 0.487 21.271 0.000 A t present 3.183 0.606 22.209 0.000 Perceived child weight 2.874 0.520 14.145 0.000 Your child during the first year of life 2.874 0.422 0.000 Your child as a toddler 2.943 0.428 20.422 0.000 Your child as a pre-schooler 2.972 0.445 20.870 0.000 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Vour child kindergarten through 2nd grade 2.518 1.350 0.263 0.792 How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	7		2.876	1.609	4.606	0.000
My child should always eat all of the food on her plate	8		3.482	1.410	13.723	0.000
Thave to be especially careful to make sure my child eats enough 4.477 0.873 44.615 0.000	Pr	ressure to eat				
2 enough 4.477 0.873 44.615 0.000	1	My child should always eat all of the food on her plate	3.418	1.272	14.206	0.000
2.948 1.462 6.043 0.000	2	•	4.477	0.873	44.615	0.000
4 at much less than she should 3.441 1.369 13.532 0.000 Perceived parent weight 1 Your Childhood (5 to 10 years old) 2.946 0.492 17.834 0.000 2 Your adolescence 2.936 0.475 18.055 0.000 3 Your 20s 3.026 0.487 21.271 0.000 4 At present 3.183 0.606 22.209 0.000 Perceived child weight 1 Your child during the first year of life 2.874 0.520 14.145 0.000 2 Your child as a toddler 2.943 0.428 20.422 0.000 3 Your child as a pre-schooler 2.972 0.445 20.870 0.000 4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight 1 How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	3		2.948	1.462	6.043	0.000
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2 Your adolescence 2.936 0.475 18.055 0.000 3 Your 20s 3.026 0.487 21.271 0.000 4 At present 3.183 0.606 22.209 0.000 Perceived child weight 1 Your child during the first year of life 2.874 0.520 14.145 0.000 2 Your child as a toddler 2.943 0.428 20.422 0.000 3 Your child as a pre-schooler 2.972 0.445 20.870 0.000 4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight 1 How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	Pe	rceived parent weight				
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4 At present 3.183 0.606 22.209 0.000 Perceived child weight 1 Your child during the first year of life 2.874 0.520 14.145 0.000 2 Your child as a toddler 2.943 0.428 20.422 0.000 3 Your child as a pre-schooler 2.972 0.445 20.870 0.000 4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight 1 How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	2	Your adolescence	2.936	0.475	18.055	0.000
Your child during the first year of life 2.874 0.520 14.145 0.000	3	Your 20s	3.026	0.487	21.271	0.000
1 Your child during the first year of life 2.874 0.520 14.145 0.000 2 Your child as a toddler 2.943 0.428 20.422 0.000 3 Your child as a pre-schooler 2.972 0.445 20.870 0.000 4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight 1 How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	4	At present	3.183	0.606	22.209	0.000
2 Your child as a toddler 2.943 0.428 20.422 0.000 3 Your child as a pre-schooler 2.972 0.445 20.870 0.000 4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight 1 How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	Pe	rceived child weight				
3 Your child as a pre-schooler 2.972 0.445 20.870 0.000 4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	1	Your child during the first year of life	2.874	0.520	14.145	0.000
4 Your child kindergarten through 2nd grade 2.905 0.497 16.047 0.000 Concern about child weight 1 How concerned are you about your child eating too much when you are not around her? 2.905 0.497 16.047 0.000 2.518 1.350 0.263 0.792	2	Your child as a toddler	2.943	0.428	20.422	0.000
Concern about child weight How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	3	Your child as a pre-schooler	2.972	0.445	20.870	0.000
How concerned are you about your child eating too much when you are not around her? 2.518 1.350 0.263 0.792	4	Your child kindergarten through 2nd grade	2.905	0.497	16.047	0.000
1 when you are not around her? 2.518 1.350 0.263 0.792	Co	oncern about child weight				
2 How concerned are you about your child having to diet to 2.436 1.393 -0.911 0.363	1	, , ,	2.518	1.350	0.263	0.792
	2	How concerned are you about your child having to diet to	2.436	1.393	-0.911	0.363

	maintain a desirable weight?					
3	How concerned are you about your child becoming over	2.915	1 456	5 614	0.000	
5	weight?	2.713	1.150	3.011	0.000	

Regarding the Perceived responsibility

When your child is at home, how often are you responsible for feeding a significant relation was the p-value=0.001 and T 26.464%. While regarding how often are you responsible for deciding what your child's portion sizes are were a significant relation was the p-value=0.001 and T 21.3824%. Regarding how often are you responsible for deciding if your child has eaten the right kind of foods were the p-value=0.001 and T 24.999%.

Regarding Monitoring

How much do you keep track of the sweets (Candy, ice cream cake, pies, pastries) that your child eats a significant relation were the p-value=0.001 and T 26.522%. While regarding How much do you keep track of the snack food (Potato chips, Doritos, cheese puffs) that your child eats, were a significant relation was the p-value=0.001 and T 24.118%. Regarding How much do you keep track of the high-fat foods that your child eats, werea significant relation was the p-value=0.001 and T 21.792%.

Regarding the Restriction

I have to be sure that my child does not eat too many sweets (candy, ice-cream, cake or pastries) a significant relation was the p-value=0.001 and T 23.261%. While regarding I have to be sure that my child does not eat too many high-fat foods a significant relation was the p-value=0.001 and T 21.744%. Regarding I have to be sure that my child does not eat too much of her favourite foods a significant relation was the p-value=0.001 and T 19.024%. But regarding I intentionally keep some foods out of my child's reach almost of the parental answer is agree were (42.8%)followed by slightly agree (24.7%)while % of agreement (76.60%). While regarding I offer sweets (candy, ice cream, cake, pastries) to my child as a reward for good behaviour a significant relation was the p-value=0.001 and T 9.156%. While regarding If I did not guide or regulate my child's eating, she would eat too many junk foods a significant relation was the p-value=0.001 and T 26.464%. Regarding If I did not guide or regulate my child's eating, she would eat too much of her favourite foods a significant relation was the p-value=0.001 and T 4.606%.

Regarding Pressure to eat

My child should always eat all of the food on her plate a significant relation was the p-value=0.001 and T 14.206%. While regarding I have to be especially careful to make sure my child eats enough a significant relation was the p-value=0.001 and T 44.615%. But regarding If I did not guide or regulate my child's eating, she would eat much less than she should a significant relation was the p-value=0.001 and T 13.532%.

Regarding Perceived parent weight

Your Childhood (5 to 10 years old), your adolescence, your 20s, at present all item a significant relation was the p-value=0.001 and respectively T 17.834, 18.055, 21.271, 22.209%

Regarding Perceived child weight

Your child during the first year of life, your child as a toddler, Your child as a preschooler, your child kindergarten through 2nd grade all item a significant relation was the p-value=0.001 and respectively T 14.145, 20.422, 20.870, 16.047%.

Regarding Concern about child weight

How concerned are you about your child eating too much when you are not around her, how concerned are you about your child having to diet to maintain a desirable, how concerned are you about your child becoming overweight a significant relation was thep-value= 0.000 T 5.614% while another item no significant relation was the respectively p-value=0.792, 0.363 and respectively T 0.263 and-0.911%

Table 3: Descriptive statistics and internal consistency estimates for the final 7-factors

	Unsatis	sfied	Satisfic	ed	Chi-square	
	N	%	N	%	\mathbf{X}^2	P-value
Perceived responsibility	24	12	176	88	114.005	< 0.001
Monitoring	18	9	182	91	132.845	< 0.002
Restriction	16	8	184	92	139.445	< 0.003
Pressure to eat	22	11	178	89	120.125	< 0.004
Perceived parent weight	14	7	186	93	146.205	< 0.005
Perceived child weight	20	10	180	90	126.405	< 0.006
Concern about child weight	64	32	136	68	25.205	<0.007
Total Child Feeding	12	6	188	94	153.125	< 0.008

Table 3 shows regarding the perceived responsibility the majority of parental in the were (88.0%) and $X^2114.005$ and a significant relation were P-value=0.001. while monitoring the majority of parental in the satisfied were (91.0%) and $X^2132.845$ and a significant relation were P-value=0.002. Regarding the restriction the majority of parental in the satisfied were (92.0%) and a significant relation were P-value=0.003 $X^2139.445$, regarding pressure to eat the majority of parental in the satisfied were (89.0%) and a significant relation were P-value=0.004 $X^2120.125$, regarding Perceived parent weight the majority of parental in the satisfied were (93.0%) and a significant relation were P-value=0.005 $X^2146.205$, while perceived child weight the majority of parental in the satisfied were (90.0%) and a significant relation were P-value=0.006 $X^2126.405$.

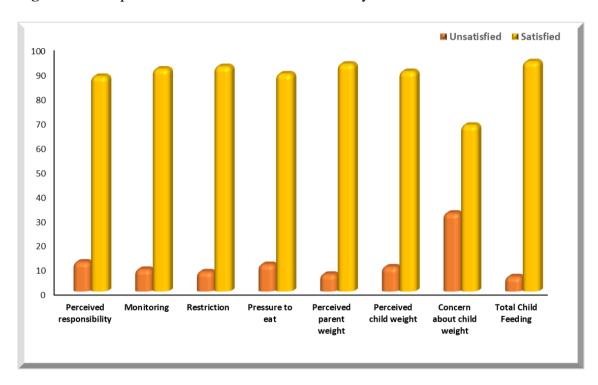


Figure 1 Descriptive statistics and internal consistency estimates for the final 7-factors

Discussion

A total of sample participated in the study invited 200 The researcher selected parents of children 6-10 years in Makkah Al-Mokarramah region, to assess of parental beliefs and practices about child feeding and its impact on child weight. Cross-sectional and descriptive study developed. The children were recruited from the primary schools located in Makkah Al-Mokarramah region, Saudi Arabia,2021. questionnaire which contained. The CFQ was designed based on Costanzo and Woody's (1985) model, and includes seven factors; four

factors measuring aspects of parents' perception and concerns regarding child risk for obesity, and three factors assessing parents' use of controlling feeding practices. Following initial scale development, confirmatory factor analysis revealed that the 7factor model fit the data well. Our results that description of Child Feeding Questionnaire factors, items, and response options of the factor score for each of the seven factors (Perceived responsibility, Monitoring, Restriction, Pressure to eat, Perceived parent weight, Perceived child weight, Concern about child weight) Parents' feeding practices that are shaped by the child's weight status provide an example of these non-shared environmental effects, and there is some evidence that these feeding practices can promote deregulation of intake, problems of energy balance, and possibly, increasing childhood weight status. the Arabic version of the Child Feeding Questionnaire (CFQ-A), with the factors Perceived Responsibility, Perceived Parent Weight, Perceived Child Weight, Concern about Child Weight, Restriction, Monitoring and Pressure to Eat (see Table 2 for a description of the factors and subscales)

These studies supported our study where little obese children are subject to early weight control and restrictive dietary practices.[24] Venkatapoorna, et al., (2020) report the prevalence of overweight and obesity among Saudi children is almost double the prevalence reported ten years ago by [25]. Many factors influence children's eating habits and weight in SA among the many factors that influence childhood obesity are family and parents who impact children's eating habits and weight [26]

Concerns for childhood obesity in Saudi Arabia are evidentand a lack of information is available related to childhood obesity and parental feeding practices and feeding styles.[24] also this results supported our result the restriction subscale and including a separate subscale to assess using food as a reward may be suitable for Saudi mothers. This approach has previously provided satisfactory results among a sample of Chinese mothers of preschoolers.[27]

Other study supported our result the family and parents who impact children's eating habits and weight. Concerns for childhood obesity in Saudi Arabia are evident [28], and a lack of information is available related to childhood obesity and parental feeding practices and feeding styles .[22] In the present study, child weight concern was negatively connected with household income indicating greater concern about child's weight for Saudi mothers with a lower income. Children from low-income families have reported a higher risk of childhood obesity [20]. Income influences the type of food purchased, low income families may be more concerned about offering healthy foods to their children. Low-income families with

overweight children, or at risk of being overweight, are likely to specify the cost of their children's diet as one factors influencing their children's weight [27]

[29] reported did not find a correlation between perceived responsibility and restriction [28], our findings are consistent with those of a study involving Turkish mothers [29]. In line with our findings, both the original CFQ study and the Turkish study reported a positive correlation between perceived responsibility and monitoring. [30]. Additionally, our findings suggest that mothers who perceive their children to have a higher weight status may apply higher restriction and monitoring, and mothers who are more concerned about their children's weight may be more concerned about their diet. This is probably due to these mothers exerting higher restriction and monitoring, leading them to feel more in control of what their children eat. [31] Supported our study Saudi mothers reporting their child with a lower weight reported a higher picky eating score. Picky eaters are often underweight; hence, parents may have less concern of overweight. Overweight children receive less pressure to eat but experience more restriction with certain kinds of food than normal and underweight children. [29]. Parents of picky eaters may have greater concern for their child not consuming sufficient amounts or types of food and being susceptible for underweight [30].

Conclusions

Parental beliefs and practices about child feeding in the face of Age, Sex, Qualification, Physical condition. On the other hand, food-related beliefs of concern about the child's weight, practices of control and pressure to eat were related to overweight children. More specifically, the higher the level of concern about the child's weight, the higher the control and the lower the pressure to eat are linked to increase overweight, guidance and support of families for the adequacy of feeding practices and, even not considering specific recommend dations for prevention of childhood obesity, teaching parents to adjust feeding practices in a perceptive and healthy manner to the growth pace and profile of children, regardless of the underlying risk factors, will certainly be beneficial for parent-child interaction and for promotion of nutritional health in preschool children.

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