DOI: https://doi.org/10.53350/pjmhs221651294

ORIGINAL ARTICLE

Assessing the Associations of the Parental Beliefs and Practices about Child Feeding and its Impact on Child Weight

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ABSTRACT

Background: Prevalence of overweight, obesity among children age in Egypt and severe obesity among of all age groups varies very high, children's obesity is an alarming issue. Continually rising prevalence of obesity and overweight in children is a major public health concern. This is due to its various and serious health hazards on one side and its preventable nature on the other side. The problem primarily relies on the ability of parents to recognize their child's overweight/obesity, and to be aware that obesity is a risk factor for long-term health issues. Several studies showed that many parents are not concerned about their children's body weight, because they either think too little of their child's body weight or believe that obesity is inherited, thus modifiable. Parent's perception of child feeding is one of the influencing causes that contribute to child weight status. Although the prevalence of childhood obesity has increased significantly in Egypt, parents are unable to appreciate obesity in their child. Parental beliefs and practices in children's nutrition may determine deviations in the acquisition of the child's food preferences and in their self-regulation, who can influence their nutritional status. Childhood obesity and metabolic complications related thereto emerge as a challenge to global health in the 21st century, given its dramatic increase in the last decade in most countries

Aim of the study: to assess of parental beliefs and practices about child feeding and its impact on child weight.

Setting: The research was conducted on sample of parents (mother, father, children), living in some regions at Menoufia Governorate, Egypt.

Method: Cross-sectional and descriptive study developed in a sample of (388) parents' study children aged 6-10 years. The children were recruited from the primary schools located in Al- Menoufia region, Egypt. 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: There were 388 participants, were the data ranged from (23to76) by mean+ SD (42.172±7.970). The majority of them were male (79.1%), while female (20.9%). The most of the participants was married (59.3%). Child's age were the data ranged from(6to18)by mean+ SD (9.734±2.244) . Child should always eat all of the food on her plate almost of the parental answer is slightly agree were (33.8%) followed by agree (21.9%) while % of agreement (68.35%), regarding I have to be especially careful to make sure my child eats enough the majority of parental answer agree were (67.5%) followed by slightly agree were (17.5%)while % of agreement (89.54%).

Conclusion: This study highlights the importance of being aware of child's weight status when feeding practices were provided to them. 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. Nutrition education for parents should take account for parents' perceptions and concerns as well as the modification of feeding practices to improve children's eating behaviors. Pressures to eat were related to overweight children.

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

INTRODUCTION

Background: Overweight/obesity is a multi-factorial problem, which results from rapidly changing social, economic, and physical environments that have led to an energy imbalance. [1]

An important goal in addressing the global obesity epidemic is childhood obesity prevention. In recent decades, the worldwide obesity epidemic is increasing at an alarming rate in childhood and can be observed in developing countries, which have shown an increase in the prevalence of childhood obesity .Obesity is an established "risk factor" for several chronic diseases [2]. The World Health Organization [3] recognised obesity as a major public health epidemic. Obesity is a multi-factorial problem, because of rapidly changing social, economic, and physical environments that have led to an energy imbalance in the population through a dramatic reduction in physical activity [4-5] and changes in dietary patterns [6]. 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 Egypt. 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.[7]

Parents' responses to children's appetitive traits may have profound consequences for the development of children's food preferences, eating habits, and body weights [8–7]. Links between child eating behavior and parental feeding practices, therefore, have been the focus of several research studies [1, 8–9]; however, the clinical implications of these links remain unclear. This study aims to assess of parental beliefs and practices about child feeding and its impact on child weight. Identifying these associations is important for the development of a clearer framework to guide childhood obesity interventions—a framework that accounts for the co-constitutive dynamics of eating and feeding in the family context.

The prevention and treatment of childhood overweight is quite possibly the main public health challenges. The commonness of overweight among 6-to 11-year-old U.S. children has generally multiplied since the 1960s, with the latest recent prevalence at 15%.[10]. Comparable patterns have been accounted for among low-income preschool children [11]. These numbers are overwhelming considering the health risks chances related with childhood overweight, including raised blood pressure, dyslipidemia, weakened glucose resilience, insulin resistance, body image disparagement, and expanded mortality in men [12].

Both weight problems and failure to thrive have become significant general medical conditions around the globe. [13-7] To achieve successful feeding, it is vital for set a right and solid association among parent and child. [8]

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. [14]

Parental taking care of procedures may assume a role in the improvement of children's overweight. [15] on the grounds that unreasonable control in kid taking care of has been related with less eating guideline, which is identified with expanded body mass [16]

Concentrating on children's on external prompts, for example, food divide size, rewards [17], and cleaning the plate.[16] may subvert their capacity to react to inner signals that sign appetite and satiety. Limiting admittance to exceptionally attractive nibble food sources has additionally been appeared to expand children's' inclinations and solicitations for such taboo food sources.[18] Then again, a few reports have to detect significant associations between maternal feeding care of system and expanded child body mass.[19-20]

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. [21]

Reviewing literatures for current results: as regards BMI-Z score classes, Bahbah et al. [22] in their study of obesity and overweight in primary school children living in Menoufia governorate; Menouf district; revealed that the incidence of obesity was higher among urban than among rural children; which coincides with our results; and children attending private schools and of high socioeconomic levels were more obese. This variation could be attributed to dietary variation between urban and rural children.

On the other hand, Koiralaa et al. [23] in their study on prevalence and factors associated with childhood overweight/obesity of private school children in Nepal found that children from families, having ≤ 2 siblings, upper-class family and advantaged ethnic group and children who were of larger birth weight (> 4.0 kg) had a greater likelihood of being overweight/obese.

Talat and El Shahat [24]; in Urban Sharkia Governorate; Egypt; concluded that risk factors for overweight and obesity were high in low level of parent education. The students of illiterate fathers and mothers had the highest incidence of obesity while the students of university fathers and mothers had the lowest incidence of obesity. The relation between the level of father's & mother's education and obesity was found to be significant. However, childhood obesity and overweight in the present study were more prominent in highly educated fathers (college or above).

A cross-sectional search was led among 426 children (1-8years 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.[25]

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.[26]

Rationale: In Egypt, obesity among school age children constitutes an emerging concern; the Egyptian Medical Association for the Study of Obesity in early 2010 estimates that 15 percent of Egyptian (school-age) children are obese, in comparison with its 1990's estimate of only six percent, child obesity and overweight were more prominent in urban than rural areas, 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 region 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.

Aim of the study: To assess of parental beliefs and practices about child feeding and its impact on child weight.

Objectives:

- To assess of parental beliefs and practices about child feeding of primary school.
- To examine of parental perception of the children's weight/obesity status.

METHODOLOGY

Research Design: A cross sectional and descriptive study research design was utilized in the present study via a web-based survey to assess the prevalence of obesity among children between 6 - 10 years in Menoufia in Egypt **.**

Study area: The research was conducted on sample of parents (mother, father, children) , living in some regions at Menoufia Governorate, Egypt.

Study population: In this study, a systemic random sample the parents' of children (aged 6-10 years)was used to include school children in the above-mentioned settings (388).were selected throughout the period of the study and accept to participate in the study.

Inclusion criteria:

- Egyptians and non- Egyptians nationality and aged between 6 and 10 years.
- All Egyptians and non- Egyptians parents (males and females) have children aged 6-10 years attending to primary schools located in Al- Menoufia region.
- Parents who can write and read in Arabic Language.
- Children who are available during the collection of data.

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
- School children who didn't complete the answers to the questionnaire sheet

Sample size: Sample size was calculated using a website (raosoft.com). The resulted estimated sample size is (388) parents' study children. Although the number of boys and girls in Egyptian 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 Al-Menoufia region were selected. An updated list of all public primary schools was used in the sampling frame: 34 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 is 120 days (four weeks minus weekends) in both section.

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 used the Arabic version of this tool since there is a study conducted to validate the CFQ-A in Arabic version.

Data collection technique :The researcher has been use Arabic version of the questionnaire since the target parents' of children'. Data collection was conducted from January to April 2021, the questionnaire has been distributed to all parents' of children' attending primary schools during the data collection period (which is 30 days initially). The questionnaire has been distributed between male and female section. The researcher was train school social workers in order to optimize the inter rater reliability. The researcher has been selecting the parents' of children and gives them the questionnaire in the waiting area then waiting them to complete it and after that I has been collecting it from them. 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 participants after collecting questionnaire from them.

Variables:

Dependent variables : The significantly overweight and obese among normal child's weight

Independent variable : Parents and children differed Age, Gender, Educational level, Monthly income, Occupation, Presence of chronic disease, Social problems, Family history of overweight, and obese

Data entry and analysis: Statistical analysis has been performed using SPSS software program (Statistical Package for Social Sciences), version 26.0. 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 35 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: Following an explanation of the purpose that participation in the study is voluntary, local authorities granted authorization to conduct the study. Those who agreed to participate in the study gave their informed consent. The collected information was kept secret..

Limitations : Possible limitations: Time limitation.

Budget :The research has been self-funded.

RESULTS

Table 1: Shows the demographic characteristics of the study participants of children and their parental . (n=388)

	N	%
Age		
<30	14	3.6
30-40	123	31.7
40-50	183	47.2
50-60	57	14.7
>60	11	2.8
Range	23-76	
Mean±SD	42.172±7.970	
Sex		
Female	81	20.9
Male	307	79.1
Social status		
Married	230	59.3
Not married	158	40.7
Nationality		
Egypt	269	69.3
Non- Egyptian	119	30.7
Qualification		
Primary degree	64	16.5
Intermediate degree	32	8.2
Elementary degree	94	24.2
Diploma degree	21	5.4
University degree	138	35.6
Post-graduation degree	39	10.1
Occupation		
Employee	253	65.2
Not employee	135	34.8
Physical condition		
Below average	23	5.9
Average	229	59.0
Above average	47	12.1
Capable	89	22.9
Child's age		
<8	49	12.6
8-10	137	35.3
10-12	126	32.5
>12	76	19.6
Range	6-18	
Mean±SD	9.734±2.244	

There were 388 participants, and the majority age of children parental was(47.2%) in (40-50)years, while the age(30-40)were(31.7%), were the data ranged from(23to76)by mean+ SD (42.172±7.970). The majority of them were male(79.1%), while female(20.9%). The most of the participants was married(59.3%)

while not married (40.7%). The majority of nationality were Egypt (69.3%), have university degree (35.6%) while Elementary degree were(24.2%), regarding occupation (65.2%) employee, Parents of Average status of physical condition were (59.0%), and those of capable physical condition were(22.9%), regarding the Child's age the majority age was(35.3%) in (8-10)years, while the age(10-12) were(32.5%), were the data ranged from(6to18)by mean+ SD (9.734±2.244).

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)

		data										% of agreement
		1 Never		2 Seldom		3 Half of the time		4 Most of the time		5 Always		
		N	%	N	%	N	%	N	%	N	%	
Perceived responsibility												
1	When your child is at home, how often are you responsible for feeding her?	4	1.0%	45	11.6%	75	19.3%	113	29.1%	151	38.9%	78.66
2	How often are you responsible for deciding what your child's portion sizes are?	15	3.9%	48	12.4%	78	20.1%	145	37.4%	102	26.3%	73.97
3	How often are you responsible for deciding if your child has eaten the right kind of foods?	7	1.8%	42	10.8%	82	21.1%	144	37.1%	113	29.1%	76.19
Monitoring												
1	How much do you keep track of the sweets (Candy, ice cream cake, pies, pastries) that your child eats?	6	1.5%	25	6.4%	116	29.9%	145	37.4%	96	24.7%	75.46
2	How much do you keep track of the snack food (Potato chips, Doritos, cheese puffs) that your child eats?	6	1.5%	32	8.2%	130	33.5%	139	35.8%	81	20.9%	73.25
3	How much do you keep track of the high-fat foods that your child eats?	13	3.4%	34	8.8%	121	31.2%	125	32.2%	95	24.5%	73.14
Restriction												
1	I have to be sure that my child does not eat too many sweets (candy, ice-cream, cake or pastries)	25	6.4%	28	7.2%	63	16.2%	108	27.8%	164	42.3%	78.45
2	I have to be sure that my child does not eat too many high-fat foods	29	7.5%	34	8.8%	57	14.7%	94	24.2%	174	44.8%	78.04
3	I have to be sure that my child does not eat too much of her favourite foods	30	7.7%	34	8.8%	88	22.7%	116	29.9%	120	30.9%	73.51
4	I intentionally keep some foods out of my child's reach	37	9.5%	32	8.2%	57	14.7%	96	24.7%	166	42.8%	76.60
5	I offer sweets (candy, ice cream, cake, pastries) to my child as a reward for good behaviour	80	20.6 %	55	14.2%	50	12.9%	126	32.5%	77	19.8%	63.35
6	I offer my child her favourite foods in exchange for good behaviour	29	7.5%	25	6.4%	51	13.1%	102	26.3%	181	46.6%	79.64
7	If I did not guide or regulate my child's eating, she would eat too many junk foods	124	32.0 %	58	14.9%	46	11.9%	62	16.0%	98	25.3%	57.53
8	If I did not guide or regulate my child's eating, she would eat too much of her favourite foods	57	14.7 %	38	9.8%	81	20.9%	85	21.9%	127	32.7%	69.64
Pressure to eat												
1	My child should always eat all of the food on her plate	42	10.8 %	55	14.2%	75	19.3%	131	33.8%	85	21.9%	68.35
2	I have to be especially careful to make sure my child eats enough	3	0.8%	13	3.4%	42	10.8%	68	17.5%	262	67.5%	89.54
3	If my child says ``I'm not hungry'', I try to get her to eat anyway	100	25.8 %	56	14.4%	64	16.5%	100	25.8%	68	17.5%	58.97
4	If I did not guide or regulate my child's eating, she would eat much less than she should	49	12.6 %	54	13.9%	76	19.6%	95	24.5%	114	29.4%	68.81
Perceived parent weight												
1	Your Childhood (5 to 10 years old)	2	0.5%	48	12.4%	311	80.2%	23	5.9%	4	1.0%	58.92
2	Your adolescence	5	1.3%	39	10.1%	323	83.2%	18	4.6%	3	0.8%	58.71
3	Your 20s	5	1.3%	20	5.2%	329	84.8%	28	7.2%	6	1.5%	60.52
4	At present	5	1.3%	17	4.4%	278	71.6%	78	20.1%	10	2.6%	63.66
Perceived child weight												
1	Your child during the first year of life	11	2.8%	46	11.9%	313	80.7%	17	4.4%	1	0.3%	57.47
2	Your child as a toddler	5	1.3%	31	8.0%	334	86.1%	17	4.4%	1	0.3%	58.87
3	Your child as a pre-schooler	5	1.3%	28	7.2%	329	84.8%	25	6.4%	1	0.3%	59.43
4	Your child kindergarten through 2nd grade	6	1.5%	48	12.4%	313	80.7%	19	4.9%	2	0.5%	58.09
Concern about child weight												
1	How concerned are you about your child eating too much when you are not around her?	129	33.2 %	73	18.8%	73	18.8%	82	21.1%	31	8.0%	50.36
2	How concerned are you about your child having to diet to maintain a desirable weight?	149	38.4 %	63	16.2%	71	18.3%	68	17.5%	37	9.5%	48.71
3	How concerned are you about your child becoming over weight?	96	24.7 %	60	15.5%	93	24.0%	59	15.2%	80	20.6%	58.30

Regarding the Perceived responsibility

When your child is at home, how often are you responsible for feeding almost of the parental answer is always were (38.9%) followed by most of the time(29.1%) while % of agreement (78.66%). While regarding how often are you responsible for deciding what your child's portion sizes are the majority of parental answer most of the time was (37.4%), followed by always were (26.3%) while % of agreement (73.97%). Regarding how often are you responsible for deciding if your child has eaten the right kind of foods the majority of parental answer most of the time

was(37.1%%), followed by always were(29.1%)while % of agreement (76.19%).

Regarding Monitoring

How much do you keep track of the sweets (Candy, ice cream cake, pies, pastries) that your child eats the parental answer most of the time were (37.4%) followed by Half of the time (29.9%) while % of agreement (75.46%). While regarding How much do you keep track of the snack food (Potato chips, Doritos, cheese puffs) that your child eats the majority of parental answer most of the time was (35.8%), followed by Half of the time were (33.5%)while % of agreement (73.25%). Regarding How much do you keep track of the high-fat foods that your child eats the majority of parental answer most of the time was(32.2%)followed by Half of the time were(31.2%)while % of agreement (73.14%).

Regarding the Restriction

I have to be sure that my child does not eat too many sweets (candy, ice-cream, cake or pastries) almost of the parental answer is agree were (42.3%)followed by slightly agree (27.8%)while % of agreement (78.45%). While regarding I have to be sure that my child does not eat too many high-fat foods the majority of parental answer agree were (44.8%) followed by slightly agree were (24.2%)while % of agreement (78.04%). Regarding I have to be sure that my child does not eat too much of her favourite foods the majority of parental answer agree were(30.9%)followed by slightly agree were(29.9%)while % of agreement (73.51%). 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 the majority of parental answer slightly agree were (32.5%) followed by disagree were (20.6%)while % of agreement (63.35%). Regarding I offer my child her favourite foods in exchange for good behaviour the majority of parental answer agree were(46.6%)followed by slightly agree were(26.3%)while % of agreement (79.64%). While regarding If I did not guide or regulate my child's eating, she would eat too many junk foods the majority of parental answer disagree were (32.0%) followed by always were (25.3%)while % of agreement (57.53%). Regarding If I did not guide or regulate my child's eating, she would eat too much of her favourite foods the majority of parental answer agree were(32.7%)followed by slightly agree were(21.9%)while % of agreement (69.64%).

Regarding Pressure to eat

My child should always eat all of the food on her plate almost of the parental answer is slightly agree were (33.8%)followed by agree (21.9%)while % of agreement (68.35%). While regarding I have to be especially careful to make sure my child eats enough the majority of parental answer agree were (67.5%) followed by slightly agree were (17.5%)while % of agreement (89.54%). Regarding If my child says ``I'm not hungry'', I try to get her to eat anyway the majority of parental answer agree were(25.8%)followed by disagree were(25.8%)while % of agreement (58.97%). But regarding If I did not guide or regulate my child's eating, she would eat much less than she should almost of the parental answer is agree were (29.4%)followed by slightly agree (24.5%)while % of agreement (68.81%).

Regarding Perceived parent weight

Your Childhood (5 to 10 years old) almost of the parental answer is normal were (80.2%) while % of agreement (58.92%). While regarding Your adolescence the majority of parental answer normal were (83.2%) while % of agreement (58.71%). Regarding Your 20s the majority of parental answer normal were(84.8%) while % of agreement (60.52%). But regarding At present almost of the parental answer is normal were (71.6%)followed by overweight (20.1%)while % of agreement (63.66%).

Regarding Perceived child weight

Your child during the first year of life almost of the parental answer is normal were (80.7%) while % of agreement (57.47%). While regarding your child as a toddler the majority of parental answer normal were (86.1%) while % of agreement (58.87%). Regarding Your child as a pre-schooler the majority of parental answer normal were(84.8%) while % of agreement (59.43%). But regarding your child kindergarten through 2nd grade almost of the parental answer is normal were (80.7%) while % of agreement (58.09%).

Regarding Concern about child weight

How concerned are you about your child eating too much when you are not around her almost of the parental answer is never were (33.2%) while % of agreement (50.36%). While regarding how concerned are you about your child having to diet to maintain a desirable weight the majority of parental answers never were (38.4%) while % of agreement (48.71%). Regarding How concerned are you about your child becoming overweight the majority of parental answer never were(24.7%) followed by most of the time were(24.0%)while % of agreement (58.30%).

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

	Unsatisfied		Satisfied		Score	
	N	%	N	%	Range	Mean±SD
Perceived responsibility	38	9.8	350	90.2	3-15.	11.441±2.747
Monitoring	29	7.5	359	92.5	3-15.	11.093±2.563
Restriction	24	6.2	364	93.8	10-40.	28.838±5.544
Pressure to eat	19	4.9	369	95.1	5-20.	14.284±2.896
Perceived parent weight	17	4.4	371	95.6	8-20.	12.090±1.268
Perceived child weight	25	6.4	363	93.6	4-16.	11.693±1.413
Concern about child weight	178	45.9	210	54.1	3-15.	7.869±3.367
Total Child Feeding	5	1.3	383	98.7	60-125	97.307±10.705

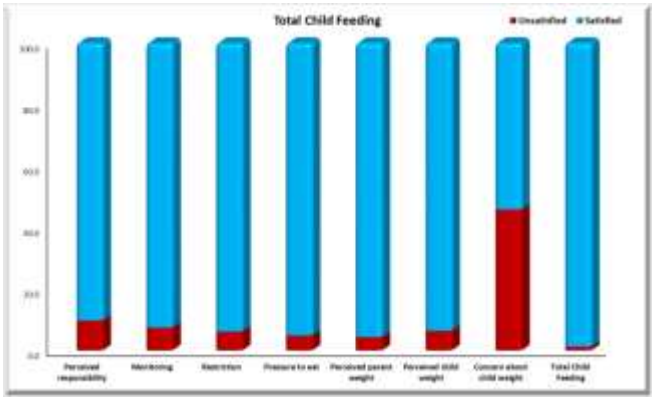

Figure 1: Descriptive statistics and internal consistency estimates for the final 7-factors

Table 3 shows item variances, factor loadings, and direct factor-item correlations. All items were meaningful indicators of the factors, as indicated by item loadings. Factor loadings ranged of satisfied from (54.1%) to (95.6%) while the total Child Feeding satisfied were (98.7%) and the data ranged from(60- 125)by mean+SD(97.307±10.705).regarding the perceived responsibility the majority of parental in the satisfied were (90.2%) and the data ranged from(3- 15)by mean +SD(11.441±2.747). while monitoring the majority of parental in the satisfied were (90.5%) and the data ranged from(3- 15)by mean +SD(11.093±2.563). Regarding the restriction the majority of parental in the satisfied were (93.8%) and the data ranged from(10- 40)by mean +SD(28.838±5.544), regarding pressure to eat the majority of parental in the satisfied were (95.1%) and the data ranged from(5- 20)by mean +SD(14.284±2.896), regarding Perceived parent weight the majority of parental in the satisfied were (95.6%) and the data ranged from(8- 20)by mean +SD(12.090±1.268). while 3erceived

child weight the majority of parental in the satisfied were (95.6%) and the data ranged from(4- 16)by mean +SD(11.693±1.413), regarding Concern about child weight the majority of parental in the satisfied were (54.1%) and the data ranged from(3- 15)by mean +SD(7.869±3.367)

Table 4: Description of the relation between Socio-demographic data and Total child feeding

		N	Total Child Feeding			F or T	ANOVA or T-test	
			Mean	±	SD		test value	P-value
Age	<30	14	106.500	±	9.936	F	5.880	<0.001*
	30-40	123	98.000	±	9.261			
	40-50	183	97.437	±	10.651			
	50-60	57	92.632	±	12.610			
	>60	11	99.909	±	6.978			
Sex	Female	81	100.593	±	9.568	T	3.141	0.002*
	Male	307	96.440	±	10.835			
Social status	Married	230	97.717	±	10.648	T	0.912	0.363
	Not married	158	96.709	±	10.794			
Nationality	Egyptian	269	96.770	±	10.951	T	-1.488	0.137
	Non - Egyptian	119	98.521	±	10.067			
Qualification	Primary degree	64	94.313	±	11.667	F	2.402	0.037*
	Intermediate degree	32	101.063	±	9.069			
	Elementary degree	94	96.096	±	10.895			
	Diploma degree	21	99.000	±	9.508			
	University degree	138	98.210	±	10.559			
	Post-graduation degree	39	97.949	±	9.934			
Occupation	Employee	253	97.858	±	10.261	T	1.390	0.165
	Not employee	135	96.274	±	11.459			
Physical condition	Below average	23	98.000	±	9.249	F	4.887	0.002*
	Average	229	96.559	±	10.314			
	Above average	47	94.170	±	12.136			
	Capable	89	100.708	±	10.556			
Child's age	<8	49	96.592	±	10.966	F	0.097	0.961
	8-10	137	97.277	±	11.308			
	10-12	126	97.556	±	10.109			
	>12	76	97.408	±	10.572			

Regarding age show that is a significant relation between age and total child feeding were f=5.880 and P-value= 0.001, increase(in <30and >60 years), the mean +SD respectively were (106.500±9.936, 99.909±6.978). Regarding gender show that is a significant relation between six and total child feeding were t=3.141and P-value=0.002, increase(in female than male), the mean +SD respectively were (100.593±9.568than 96.440±10.835). Regarding social status show that is no significant relation between social status and total child feeding were t=0.912and P-value=0.001, increase(in Non –Saudi than -Saudi), the mean +SD respectively were (98.521±10.067than 96.770±10.951). Regarding Qualification show that is a significant relation between Qualification and Total Child Feeding were f=2.402 and P-value=0.037, increase(in Intermediate degree, Diploma degree and University degree than primary degree), the mean +SD respectively were (101.063±9.069, 99.000±9.508, 98.210±10.559 than 94.313±11.667).

Regarding Occupation, Child's age, show that is no significant relation between Occupation, Child's age and Total Child Feeding were respectively (T =1.390 and F= 0.097) and respectively P-value=0.165, 0.961). Regarding Physical condition show that is a significant relation between Physical condition and Total Child Feeding were f=4.887 and P-value=0.002, increase (in Capable and Below average), the mean +SD respectively were (100.708±10.556, 98.000±9.249).

DISCUSSION

A total of sample participated in the study invited 388. The researcher selected parents of children 6-10 years in Al-Menoufia Governorate 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 Al-Menoufia Governorate region, Egypt, 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.

Parental age was range (23-76) and Mean ±SD (42.172±7.970), and about more than half of the sample (79.1%) was male. The majority (approximately 69.3 %) of children and parental were Egyptian, In addition, the majority of parental (35.6 %) had a University degree education and about more than half (65.2 %) reported that they were employee, the Child's age the majority age was(35.3%) in (8-10)years the data ranged from(6to18)by mean+ SD (9.734±2.244).(See Table 1)

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.) Regarding the Perceived responsibility, the parental answer is always were % of agreement (78.66, 73.97, 76.19%). Regarding Monitoring the parental answer is most of the time)37.4%, 35.8%, 32.2%), but regarding the restriction the parental answer is slightly agree (27.8%, 24.7%, 32.5%,26.3%,21.9%). These studies supported our study where little obese children are subject to early weight control and restrictive dietary practices.[27] El Mouzan et al., (2012) report the prevalence of overweight and obesity among Saudi children is almost double the prevalence reported ten years ago by El Hazmi and Warsy [28-29]. 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 [30]. Concerns for childhood obesity in Saudi Arabia are evident, and a lack of information is available related to childhood obesity and parental feeding practices and feeding styles.[31] 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.[31-32] suggesting that parenting/feeding strategies among Middle-Eastern and Asian families might be comparable. Indeed, when comparing our restriction factor mean with that of the study involving Chinese mothers.[32] (total mean scores out of 5),we observed that they are almost similar (mean = 4•40, SD = 0•94 and mean = 4•18, SD = 0•80, respectively).

Among the many factors that influence childhood obesity are age that is a significant relation between age and total child feeding were f=5.880 and P-value= 0.001, increase(in <30and), the mean +SD respectively were (106.500±9.936), gender that is a significant relation between six and total child feeding were t=3.141and P-value=0.002, increase(in female), the mean +SD respectively were(100.593±9.568), qualification that is a significant relation between qualification and Total Child Feeding were f=2.402 and P-value=0.037, increase(in Intermediate degree, the mean +SD respectively were (101.063±9.069) and Physical condition that is a significant relation between Physical condition and Total Child Feeding were f=4.887 and P-value=0.002, increase(in Capable), the mean +SD respectively were (100.708±10.556). (see table 4)

Other study supported our result the family and parents who impact children's eating habits and weight. Concerns for childhood obesity in Egypt are evident [33], and a lack of information is available related to childhood obesity and parental feeding practices and feeding styles.[31] 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 [34]. 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 [34].

The present study showed factor loadings ranged of satisfied from (54.1%) to (95.6%), while the total Child Feeding satisfied were (98.7%) and the data ranged from(60- 125)by mean +SD(97.307±10.705), regarding the perceived responsibility the majority of parental in the satisfied were (90.2%) and the data ranged from(3- 15)by mean +SD(11.441±2.747)(see table3). Birch et al. did not find a correlation between perceived responsibility and restriction[31], our findings are consistent with those of a study involving Turkish mothers[30]. 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. [35]

Our results showed a satisfied correlation between Child Weight and Pressure to eat the majority of parental in the satisfied were (95.1%) and the data ranged from(5- 20)by mean +SD(14.284±2.896)(see table3) which is consistent with results from previous studies in Western samples.[35] Saudi parents are seemingly aware obesity is unhealthy and are aware of the need to address obesity in their children, which was indicated in the present study.[30] This is present in our study of the high percentage of satisfaction our study the perceived parent weight the majority of parental in the satisfied were (95.6%) and the data ranged from(8- 20)by mean +SD(12.090±1.268). while 3erceived child weight the majority of parental in the satisfied were (95.6%) and the data ranged from(4- 16)by mean +SD(11.693±1.413), regarding Concern about child weight the majority of parental in the satisfied were (54.1%) and the data ranged from(3- 15)by mean +SD(7.869±3.367) (see Table3), 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]. Another study showed excessive use of restrictive feeding practices affiliated with negative reactions to food. Previous literature has identified negative outcomes of restrictive feeding practices: increasing the consumption of restricted foods, eating in the absence of hunger, and the high vulnerability of obesity [36]. Concerned mothers of overweight children are likely to use restrictive feeding practices with their child. [17] While mothers using restrictive feeding practices were not concerned about weight in the participants frequently reported use of restrictive feeding practices with their children.

These cross-cultural similarities/differences might be attributed to societal norms regarding the role and responsibility of mothers in feeding their children, as well as availability and access to quality early childhood care centres (e.g. daycare centres and pre-schools), which affects the amount of time mothers spend being in charge of feeding their children.

CONCLUSIONS

In this study the assessment of parental beliefs and practices about child feeding and its impact on child weight . Parental beliefs and practices about child feeding in the face of Age, Sex, Qualification, Physical condition. In sum, there were differences in eating behaviors and home environment between genders among the children. Parents tend to use higher food restriction and monitoring in girls and in boys. 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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