

■ Basic Research

Determinants of Picky Eating Behavior Among Preschoolers in Zagazig City, Egypt

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Abstract

Background: Early life is a crucial period for human development. Picky eating behavior refers to rejecting new or unfamiliar foods and preferring food that lead to less food intake diversity which in turn lead to growth disruption. Moreover, current estimates of picky eating prevalence among preschoolers vary widely. Hereafter, the current study **aimed** to investigate the determinants of picky eating among preschoolers in Zagazig city, Egypt. **Design:** This study employed a cross-sectional descriptive research design. **Setting:** The present study was carried out in six non-governmental nursery schools in Zagazig city, Sharkia governorate, Egypt. **Sample:** comprised 272 preschoolers and their primary caregiver where children were from both sexes; aged 2 through 5 years; the child's primary caregiver ready to take part in the research and competent to communicate. **Tools:** four tools were used; interview questionnaire (Socio-demographic characteristics & child related questions), Anthropometric measurements, Parental Feeding Style Questionnaire and Child Eating Behavior Questionnaire. **Results:** from 272 preschoolers, 137 (50.4%) were picky eaters, 41.5% of children were obese, 19.5% had sever stunting and 3.7% had sever wasting. Prompting/encouragement and control overeating were the highest reported parental feeding style domains. Meanwhile, satiety responsiveness and food fussiness were the highly reported child eating behaviors. Moreover, statistically significant positive correlation was found between instrumental feeding and emotional feeding and encouragement, also, between emotional feeding and encouragement, while a statistically significant negative correlation was observed between instrumental feeding and picky eating. **Conclusion:** Picky eaters under five years of age are relatively prevalent. Parents bear responsibility towards their children picky eating behavior. No relation was recorded between picky eating and nutritional status (WHZ, WAZ and HAZ) of preschool children. **Recommendations:** Caregivers of children fewer than five need to be well informed and taught about feeding strategies and appropriate dietary interventions to develop sound child feeding practices and eating behaviors. Future research is advised to examine any connections between fussy eating and a child's development.

Keywords: Picky Eating, Stunting, Wasting, Parental Feeding Style, Child Eating Behavior, Sharkia Governorate

I. Introduction

Early childhood nutrition is crucial for laying the groundwork for long-term and short-term good health. Short-term optimal physical and cognitive growth and development are influenced by good nutrition. Long-term risk reduction for obesity and chronic diseases linked to diet depends on nutrition [1]. The preferred expression of anthropometric indicators is standard deviation or Z-scores. It refers to the difference between individual value and the median value of the reference population for the same age or height, divided by the standard deviation of the reference population. In other words, Z-score describe how far a child's weight is from the median weight of a child at the same height in the reference value [2].

Refusal to eat common foods or try new foods which are characterized by various reactions to refuse eating certain types of foods is a common behavior known as picky, fussy, faddy, selective, or choosy eating; where eaters either eat the same food excessively or the food which is cooked with a certain method or booth [3]. Picky eating can anguish families. Moreover, parents in their endeavor to promote consumption of nutritious foods but may employ improper techniques that impede the formation of healthy eating habits. [4]. Parental feeding style refers to techniques or behaviors adopted by parents and influence the food intake of their children. It can be a key factor in clearing up parental influence on children's diet and even their body weight. [5] Moreover, Studies have established relationship between parental feeding practices and children's weight [6].

Feeding practices may include healthy/unhealthy foods available in home and behaviors used by parents to feed their children. These behaviors include; pressuring instrumental feeding practices, monitoring children's food intake and controlling when/what children may eat. Highly controlling practices have been negatively associated with children's ability to regulate intake in response to energy content of foods [7]. Picky eating can lead to poor dietary variety during early childhood. This, in turn, can lead to concern about the nutrient composition of the diet and thus possible adverse health-related outcomes [1]. A picky eater child do not consume a variety of diverse foods so that it can cause the failure of growth and development, decreased intelligence, not focus on learning, malnutrition, and even stunting [8].

Stunting means child's height for age is more than two standard deviations below the median. One of the factors that contribute to stunted growth and development is an inadequate infant and young child feeding because of a picky eater [3]. Wasting is the term used to describe weight for height that is less than the median weight for height of the standard reference population by two standard deviations. W/H below the -3SD or less than 70% of the mean NCHS/WHO standard values is considered severe wasting. Nut Stat is a program used to measure and evaluate children's and adolescents' length, height, weight, head circumference, and arm circumference. With the aid of create View, it can be

connected to an Epi Info View or run independently. Nut Stat determines percentiles, the amount of standard deviations (Z-scores) from the mean, and occasionally, the percentage of the median [9].

Healthcare professionals should encourage parents to use feeding practices that help children develop healthy food preferences early in life. These practices should discourage the use of forceful or restrictive feeding practices and foods as rewards and instead promote patience, time with family, and exposure to role modelling, where the child observes their parent or caregiver enjoying the foods themselves [10]. Additionally, health care professionals ought to encourage parents of picky eaters to repeatedly offer and reject foods to their kids without putting any pressure on them and respecting their autonomy [11]. Ultimately, nurses can provide education about the effects of picky eating behavior on children in parents [12].

Significance of the study:

Early childhood is a crucial period for the development of healthy eating behaviors [13]. Picky eating behavior also known as fussy or choosy eating is an eating behavior commonly occurs among young children. Moreover, it is severe enough to interfere with daily routines to an extent that is problematic to the parent, child, or parent-child relationship [14]. The emergence of fussy eating during toddlerhood can contribute to problematic parent-child feeding interactions [15]. Early food and eating experiences for children are significantly shaped by their parents and other caregivers. Parental feeding habits may affect how children eat and behave, which in turn may affect how much they weigh [7].

Since selective eating and neophobia are prevalent in preschoolers, many parents find it difficult to educate their kids healthy eating habits [4]. Pressure to eat, personality traits, parental feeding practices, parental control, and social influences, as well as specific factors like the absence of exclusive breastfeeding, the introduction of complementary foods before 6 months, and the late introduction of chewy foods, may all have an impact on the development of picky eating [14].

Aim of the study: The current study sought to determine the determinants of picky eating among preschoolers in Zagazig city, Egypt.

This aim has been achieved through the following objectives: -

1. Determine the prevalence of picky eating among preschoolers in Zagazig city.
2. Value the anthropometric measurements of preschoolers in Zagazig city.
3. Identify parental feeding style of preschoolers in Zagazig city.
4. Explore eating behaviors of preschoolers in Zagazig city.
5. Examine the determinants of picky eating among preschoolers in Zagazig city.

II. Subjects and Methods

2.1. Research Design: -

Cross sectional descriptive design was utilized.

2.2. Study Setting: -

The existing study was conducted in six non-governmental nursery schools in Zagazig city, Sharkia governorate, Egypt. As the governmental nursery schools accepts children at age of four for grade one kindergarten (KG1) and age five for grade two kindergarten (KG2), and for the reason that the existing study aimed to enroll children aged 2 through 5, so non-governmental nursery schools were the best choice.

2.3. Subjects: -

The study sample comprised 272 preschoolers and their primary caregiver according to the **following inclusion criteria**; both sexes; aged 2 through 5 years; the child's primary caregiver capable of communicating and ready to take part in the research.

Exclusion criteria; the preschooler is free from:

- ❖ Chronic disease such as Diabetes Mellitus, heart disease,...
- ❖ Mental disorders such as cerebral palsy
- ❖ Psychiatric illness such as anorexia. Gastro-esophageal reflux disease, food allergies
- ❖ Acute illness such as flu or diarrhea

Sampling technique: A multistage cluster sample technique was used. Zagazig city constitutes two main neighborhoods namely first and second neighborhood, so six non-governmental nursery schools were selected from each randomly. Each nursery school composed of a number of classes from which one or two classes were selected randomly. Finally, children who matched the criteria were enrolled in the study until the desired sample size was reached.

Sample size calculation:

The sample size was calculated by software Epi-info package Assuming a prevalence of picky eating behavior among children about 77% as reported by **Qazaryan & Karim** ^[16], level of confidence 95% and power of test 80% the sample size was computed to be 272 preschooler.

Sample size

The sample size determined according to the following equation; ^[17]

$$\text{Necessary Sample Size} = (Z\text{-score})^2(p)(1-p) / C^2$$

*This equation is for an unknown population size or a very large population size.

Z = standard normal deviation set at 95 % confidence level (1.96)

P= percentage picking a choice or response (77%) =0.77

C= confidence interval (0.5)

$N = (1.96)^2(0.77)(1-0.77) / (0.5)^2$

$N = ((1.96)^2 \times 0.77(0.23)) / (0.5)^2$

$N = (3.8416 \times 0.1771) / .0025$

$N = 0.6803 / .0025 = 272.14$, the sample size was 272.

2.4. Tools for data collection:- four tools were used to collect data they were:

Tool I: interview questionnaire composed of two parts:

Part 1: Socio-demographic characteristics [18] It evaluated the socio demographic attribute of the preschoolers, as It served to gather information regarding age, sex, parents educational level, occupation, monthly income ...etc.

Scoring system: to determine the socio-economic class of the preschooler, score less than 40% was considered as a low social class, from 40% to less than 70% considered as a middle class, and score of 70% or more considered as a high social class.

Part 2: child related questions: This section was created by the researcher to gather information on breastfeeding type (natural or artificial), duration of feeding, waning time, eating fast food, eating food with or without family, appetite (good or bad) and primary caregiver of child.

Tool II: Anthropometric measurements

Data about the children's height and weight were measured, where Height was measured to the nearest 0.1 cm using a measuring tab and children were bare foot. Body weight was measured to the nearest 0.1 kg using Momert Analog bathroom scale 120 Kg. Children were weighed in their cloth since the weather was nice and there were no heavy cloths worn, besides they were asked to urinate before weighing; moreover, if the child was using a diaper, a new one was put on before weighing.

After that, the researchers used BMI chart developed by **Centers for Disease Control and Prevention** [19]. This chart was used to assess BMI of children between 2 and 20 years old, BMI was interpreted relative to a child's age and sex, because the amount of body fat changes with age and varies by sex. Percentiles specific to age and sex was used to classify Body Mass Index BMI.

Finally, BMI was calculated according to **Castillo-Martinez et al.** [20] by dividing the body weight in Kg by the squared height in meters. The BMI was then categorized according to percentile charts. Body mass index-for-age categories and corresponding percentiles were:

- Less than the fifth percentile **for underweight.**
- 5th percentile to the 85th percentile **for a healthy weight.**
- 85th to less than the 95th percentile **for overweight people.**
- Equal to or more than the 95th percentile **for obesity.**

BMI z-scores were generated using online calculator based on **WHO** guide ^[21] where percentile conversion from Z-Score was done by table look-up in the standard Normal Table. Percentiles provided for Z Scores between -3.09 and 3.09. Values beyond these extremes return percentiles of 0.1 and 99.9 respectively.

- Moderate malnutrition was defined as moderate stunting or wasting.
- Severe malnutrition was defined as severe stunting or severe wasting, or edematous malnutrition.
- Patients with edematous malnutrition (Kwashiorkor) should be considered to have severe malnutrition even if stunting or wasting z-scores are not in the severe range.

Tool III: Parental Feeding Style Questionnaire (PFSQ), by Wardle et al. ^[22]

The questionnaire consisted of 27 items organized into four subscales, emotional feeding (five items), instrumental feeding (four items), prompting/encouragement to eat (eight items), and control over eating (ten items). Five items in control over eating were reversed. The response answers were originally on a 5-point rating scale ranging from 1 (*never*) to 5 (*always*), but it was modified into three point likert scale to make it easier for participants to respond, as recommended by participants in the pilot study; where, always "3", sometimes "2" and never "1". Higher score corresponds to a higher tendency for the adoption of a specific style.

Tool IV: Child Eating Behavior Questionnaire (CEBQ), by Wardle et al. ^[23]

It is a 35-item parent-report questionnaire assessing eating style in children. Eating style was assessed on eight scales; food responsiveness (4 items), enjoyment of food (4 items), emotional overeating (4 items), desire to drink (3 items), satiety responsiveness (5 items), slowness in eating (4 items), and emotional underrating (4 items), and fussiness (7 items). parents rate the frequency of their child's behaviors and experiences on a 5-point scale ranging from 1 (*never*) to 5 (*always*), but it was modified into three point Likert scale to make it easier for participants to respond, as recommended by participants in the pilot study; where, always "3", sometimes "2" and never "1".

Picky eating:

Child picky eating was measured by using the Food Fussiness subscale. Questions were answered on a 1 to 3 point Likert scale and averaged to create a mean score with a possible range of 1 to 3, with higher scores indicating picky eating. Where, score of 2 or 3 was considered picky.

2.5. Preparatory phase: -

In order to stay current with the research challenge and create the study instruments, the researchers read relevant literature on a variety of study-related topics from books and papers that were readily available.

2.6. Content validity: -

Three members of the nursing academic staff made up the group of experts who assessed the tools and determined their clarity, relevance, thoroughness, and understandability

2.7. Content reliability: -

The study involved test-retest reliability, in which the same people were given the identical instruments under the same circumstances twice. Additionally, Cronbach alpha coefficients were calculated and results for parenting feeding style and child eating behaviour were 0.677 and 0.634, respectively.

2.8. Pilot study: -

With the help of their primary caregivers, 28 preschoolers (10% of participants) were enrolled to evaluate the questions for any ambiguity and determine the viability of the instruments. The main study sample did not include any participants in the pilot trial.

2.9. Fieldwork: -

Upon granting permission, the researchers set up a schedule for collecting data with the help of the director of each nursery school who stipulated data collection with the primary caregivers' approval. The researchers then sought the primary caregivers' approval, after that, interviewed each caregiver individually. The researchers typically started by introducing themselves, then explained the aim and nature of study and confirmed the secrecy of information obtained. The time spent for filling out the forms ranged from 20-25 minutes including the anthropometric measurements which were done by one of the researchers while the other researcher was beside the caregiver while filling out the forms. The researchers visited the nursery schools from the time it opens in early morning until it close in the afternoon (the opening and closing time varied from nursery school to another). From mid-April 2021 to mid-June 2021, two months of data collecting were conducted.

2.10. Ethical Considerations: -

The approval of participation was taken verbally where researchers fully explained the study purpose, They were informed that they might withdraw at any moment and that any information obtained would be kept private and used solely for research purposes. The anonymity of participants was ascertained by not writing names.

2.11. Administrative Design: -

An official letter from faculty of nursing X University confirming researchers' identity and containing the aim of the study was issued to whom its matter. To prove the researchers' identity, and in some instances the researchers' national Id and University Id were used as an extra prove.

2.12. Statistical Design: -

Statistical Package for the Social Sciences (SPSS) 20 was used for both the statistical analysis and data entry. Descriptive statistics were used to portray the data as frequencies and percentages for the qualitative variables, and median and standard deviations for the quantitative variables. Qualitative categorical variables were compared using chi-square test. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors, multiple linear regression analysis was used and analysis of variance for the full regression models was done. Statistical significance was considered at p-value <0.05.

III. Results

The current study enrolled 272 preschoolers, from whom 165 (60.7%) aged 4 to 5 years with mean age $3.99 \pm .95$ year, 54.8% were females and 79.4% were residing in rural area. Considering parent education, father and mother had university education (39.7%, 43%) respectively. As to mother job, 69.1% of children's mothers were housewives. Finally, 63.2% children belonged to middle social class.

Considering child feeding characteristics, results illustrated that 74.6% of them received normal breast feeding with mean duration of 16.89 ± 4.14 months and 55.5% of them weaned gradually. Additionally, 70.2% of them consumed fast food but not on daily bases and 89% of children cared by their mothers primarily. Ultimately, 79% of children were selective in their food and 50.4% of children were picky eaters.

As for children growth parameters, table 1 show that 41.5% of children were obese, 19.5% had sever stunting and 3.7% had sever wasting. Regarding child eating behavior, table 2 reveals that the highest mean scores were for satiety responsiveness and food fussiness domains (11.65 ± 1.91 & 11.48 ± 2.34) respectively with total mean score 69.89 ± 7.98 .

Table 3 illustrates parental feeding style, as the table reveals the highest mean score domains were prompting/encouragement and control overeating domains (20.92 ± 2.39 & 18.81 ± 3.48) respectively with total mean score 58.33 ± 6.02 .

As for the relation between picky eating and children characteristics, table 4 demonstrates a statistically significant relation between being picky eater and child residence, birth order, being selective ($P= 0.019, 0.008$ & 0.001). Where being from urban area, being the last child and being selective indicates being picky child.

Table 5 indicates a statistically significant positive correlation between instrumental feeding and emotional feeding and encouragement ($p < 0.01$), also, a statistically significant positive correlation between emotional feeding and encouragement, while a statistically significant negative correlation was observed between instrumental feeding and picky eating score ($p < 0.05$).

Table 1: Growth parameters of children (n=272)

BMI/ Weight category	Frequency	%
Under weight	18	6.6
Healthy weight	105	38.6
Overweight	36	13.2
Obesity	113	41.5
Stunting:		
No stunting	183	67.3
Moderate	36	13.2
Sever	53	19.5
Wasting:		
No wasting	253	93.0
Moderate	9	3.3
Sever	10	3.7

Table 2: Child eating behavior domains mean score (n=272)

Child eating behavior	Mean	SD
Food responsiveness "FR"	8.02	2.06
Emotional over-eating "EOE"	6.02	6.15
Enjoyment of food "EF"	8.13	2.14
Desire to drink "DD"	6.48	1.73
Satiety responsiveness "SR"	11.65	1.91
Slowness in eating "SE"	8.47	1.98
Emotional under-eating "EUE"	9.60	1.73
Food fussiness "FF"	11.48	2.34
Total scale score	69.89 ± 7.98	
Rang	44.0 -166.0	

Table 3: Parental feeding style domains mean score (n=272)

Parental feeding style	Mean	SD
Control over eating	18.81	3.48
Prompting/encouragement	20.92	2.39,
Emotional feeding	10.33	2.42
Instrumental feeding	8.24	2.01
Total scale score	58.33 ± 6.02	
Rang	41.0 -79.0	

Table 4: Relation between picky eating prevalence and children characteristics

Child characteristics	Prevalence				X ² test	p-value
	Non picky (n=135)		Picky (n=137)			
	No.	%	No.	%		
Age:						
2-4 years	48	35.6	59	43.1		
4-5 years	87	64.4	78	56.9	1.607	.205
Gender:						
Male	61	45.2	62	45.3		
Female	74	54.8	75	54.7	Fisher	.544
Residence:						
Rural	115	85.2	101	73.7		
Urban	20	14.8	36	26.3	5.464	.019*
Social class:						
Low	7	5.2	3	2.2		
Medium	91	67.4	81	59.1		
High	37	27.4	53	38.7	5.011	.082
Rank of child between siblings:						
Single	4	3.0	5	3.6		
The first	38	28.1	41	29.9		
The last	34	25.2	56	40.9	11.716	.008*
Other: [the second, third, fourth, fifth, sixth & seventh]	59	43.7	35	25.5		
Previous feeding type:						
Normal	102	75.6	101	73.7		
Bottle	9	6.7	13	9.5	.739	.691
Mixed	24	17.8	23	16.8		
Feeding duration:						
2- 10 months	8	5.9	11	8.0		
11-19	91	67.4	100	73.0	2.496	.287
20- 24	36	26.7	26	19.0		
Weaning:						
Gradual	74	54.8	77	56.2		
Sudden	61	45.2	60	43.8	Fisher	.903
Child is selecting his food:						
Yes	96	71.1	119	86.9		
No	39	28.9	18	13.1	10.183	.001*

Table 5: Correlation between children total mean score of parenting feeding style domains Scores and picky Scores.

Scores	Total mean score			
	Instrumental Feeding	Control Feeding	Emotional Feeding	Encouragement
Instrumental Feeding				
Control Feeding	-.092			
Emotional Feeding	.404**	.062		
Encouragement	.322**	-.053	.225**	
Picky	-.119*	.059	-.076	-.010

R: Pearson's correlation coefficient

(*) statistically significant at p<0.05

(**) statistically significant at p<0.01

IV. Discussion

Picky or selective eating is a common behavior in infancy and childhood. It frequently refers to kids who have strong food preferences and those who don't eat a diverse enough diet. Early-stage picky eating may develop into eating problems throughout adolescence and maturity [15].

Considering demographic characteristics of preschoolers enrolled in the existing study, their mean age was $3.99 \pm .95$ years, 45.2% were males and 89% of children cared by their mothers primarily. In the same stream, **Encinger and Raikes** [7] in USA found that Mean age of children was 4.22 years, 55% were males, and 90% of children primary caregivers were mothers.

Considering nutritional status of preschoolers enrolled in the existing study, 6.6% were under weight, 19.5% had sever stunting and 3.7% had sever wasting. In the same stream, Iranian researcher [24] found that the rate of wasting was 4.4%. Also, a study conducted in Central Vietnam [25] revealed that the prevalence of stunting, wasting and underweight were 11.6%, 2.2% and 2.2%, respectively. Moreover, **Flores et al.** [26] in Mexico found that 11.9% of preschool children presented stunting and less than five percent had sever stunting.

Regarding parental feeding style of preschoolers, the present study results revealed that the highest mean score domains were prompting/encouragement and control over eating (20.92 ± 2.39 & 18.81 ± 3.48) respectively. This might reflect behavior of parents with their children of using encouragement and control style as they thought its effectiveness for child to eat. Similarly, the results of Malaysian study undertaken by **Mok et al.** [27] illuminated that the highest mean score domains were prompting/encouragement and control over eating domains respectively. Where, parent of picky eaters tend to use greater instrumental, emotional feeding and high parental monitoring over children's diet.

Regarding child eating behavior, the current study results revealed that the highest mean scores were for satiety responsiveness and food fussiness domains (11.65 ± 1.91 & 11.48 ± 2.34) respectively. The possibility that this finding might be that 69.1% children mothers were house wives and so have more time to take care and offer different kinds of food to their kids; whereas, fussiness might be attributed to the result that 79.4% of children belonged to rural areas where the food culture have limited food choices. Moreover, 63.2% belonged to middle social class. Likewise, **Silva et al.** [28] in Brazil and **Al-Hamad et al.** [29] in Saudi Arabia declared that younger children had higher scores in the subscale satiety responsiveness.

Picky eating is an eating problem of great concern to many parents especially in early childhood as it can lead to poor dietary intake and long term effects on growth status [30]. Pertaining to prevalence of picky eating of preschool children, the study result showed that slightly more than half (50.4%) of preschoolers were picky eaters, from the researchers' point of view child can become picky eater for various reasons; as some children are naturally sensitive to smell, taste and texture, in addition to modeling parents' fussy eating habits. In the same line, **Hardianti et al.** [31] clarified that the prevalence of picky eaters was 52.4% in Indonesian preschoolers, and **Chao et al.** [32] in Taiwan reported 54%. Moreover, higher prevalence was recorded by **Qazaryan and Karim** [16] in Iraq/Kurdistan where 77% of study subjects were found to have picky eating behavior.

Pertaining to the relation between picky eating and children characteristics, birth order was statistically significant independent positive predictor of picky eating score ($P= 0.000$). Such relation might be attributed to that, children after the first child usually cared by their older brothers or sisters, and less supervision from mothers. Congruently, **Horst et al.** [4] found statistically significant relation between birth order and picky eater status $P= 0.003$.

As for the relation between picky eating and children's nutritional status, BMI category was independent negative predictor of picky eating score. While stunting and wasting were independent positive predictors of picky eating score. Such result means that as the child is overweight or obese he/she have the appetite to eat variety of food and vice versa. On the contrary, Results propose that pickiness may not be related to the development in BMI among young Danish children [33]. As well, **Hardianti et al.** [31] in Indonesia found no correlation between picky eating and nutritional status of WHZ, WAZ and HAZ ($p>0.05$) in preschool children.

Family feeding behavior has a significant effect on a child's food preference [3]. With regards to the relation between parental feeding style and child eating behaviors, a statistically significant negative correlation was found between instrumental feeding and picky eating. This result means using food as a reward or punishment tool decrease child pickiness and vice versa. Possible explanation of such finding is the young age of the current study subjects, where children stile young to understand the link between being obliged to

eat certain types of food and reward or punishment, which means that the child follows his/her free will. Contradictory result was reported by Australian researchers [34], who reported that pressure to eat and instrumental feeding, or utilizing food to promote good behavior and healthy food consumption, were positively correlated with food fussiness.

Conclusion

Picky eaters under five years of age are relatively prevalent. Parents bear responsibility towards their children picky eating behavior. The satiety responsiveness and food fussiness are highly occurring in terms of child eating behavior. Moreover, being the last child, coming from an urban area region, and being selective are further indicators of being a picky child. Ultimately, there is no linkage between fussy eating and preschoolers' nutritional status (WHZ, WAZ, and HAZ).

Recommendations

Caregivers of children fewer than five need to be well informed and taught about feeding strategies and appropriate dietary interventions to develop sound child feeding practices and eating behaviors among preschoolers. Future studies should investigate the potential influence of picky eating

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محددات سلوك الأكل الانتقائي بين أطفال مرحلة ما قبل المدرسة

في مدينة الزقازيق ، مصر

مقدمه

تعد الطفولة المبكرة فترة حاسمة لتنمية سلوكيات الأكل الصحي. و سلوك إنتقاء الأكل، و المعروف أيضًا باسم الأكل الإنتقائي أو الإختياري هو سلوك شائع بين الأطفال الصغار. علاوة على ذلك ، من الخطورة بما يكفي للتدخل في الأعمال الروتينية اليومية، الشئ الذى يمثل مشكلة بالنسبة إلى الوالد أو الطفل أو العلاقة بين الوالدين والطفل. و من ثم يمكن أن تساهم صعوبة الأكل أثناء الطفولة المبكرة في مشاكل متعلقه بالتغذية بين الوالدين والطفل.

يلعب الآباء ومقدمو الرعاية دورًا أساسيًا في تشكيل تجارب تناول الطعام وتناول الطعام المبكر للأطفال. و من هنا قد تؤثر ممارسات التغذية الأبوية على سلوكيات أكل الأطفال والمدخول الغذائي الذي يمكن أن يؤثر بدوره على حالة وزن الطفل. لذا يكافح العديد من الآباء لتعليم أطفالهم سلوكيات الأكل الصحي لأن سلوكيات رفض الطعام مثل الأكل الانتقائي شائعة لدى الأطفال في سن ما قبل المدرسة. ومن هنا كان هدف الدراسة الحاليه و هو التحقق من محددات الأكل الانتقائي بين أطفال مرحلة ما قبل المدرسة في مدينة الزقازيق، بمحافظة الشرقية، مصر.

تصميم البحث: تم استخدام تصميم وصفي مقطعي لإجراء الدراسة الحالية. **عينة ومكان البحث:** شملت الدراسة الحالية 272 طفل و طفله في سن ما قبل المدرسه و (مقدم الرعاية الأساسى لهم من الآباء و الأمهات) من 6 حضانات غير حكوميه بمدينة الزقازيق، والذين تم اختيارهم بطريقة العينه العنقوديه متعددة المراحل.

أدوات البحث: تم تجميع البيانات باستخدام اربع أدوات وهى: **الأداة الأولى** ورقة استبيان مقسمه لجزئين، **الجزء الأول:** الخصائص الاجتماعية والديموغرافية. **الجزء الثاني:** بيانات خاصه بالطفل. **الأداة الثانية:** مؤشرات القياسات البشريه. **الأداة الثالثة:** إستبيان أسلوب تغذية الوالدين. **الأداة الرابعة:** إستبيان سلوك أكل الطفل.

النتائج: أسفرت نتائج الدراسة الحاليه على أنه من بين 272 طفلاً في مرحلة ما قبل المدرسة ، كان 50.4% منهم إنتقائيين في الأكل ، فى حين كان 41.5% منهم يعانون من السمنة ، و 19.5% يعانون من التقزم الشديد ، و 3.7% يعانون من الهزال الشديد. فى الوقت ذاته، كان الدافع / التشجيع والتحكم في الإفراط في تناول الطعام هما الأسلوبان الأعلى إستخداما بين أساليب التغذية الأبوية. بينما، كانت استجابة الشبع والانزعاج من تناول الطعام هي سلوكيات أكل الأطفال الأكثر حدوثاً. علاوة على ذلك ، أثبتت الدراسة ارتباط إيجابي ذي دلالة إحصائية بين التغذية الفعالة والتغذية العاطفية والتشجيع ، وكذلك بين التغذية العاطفية والتشجيع ، بينما لوحظ وجود علاقة سلبية ذات دلالة إحصائية بين التغذية الفعالة والأكل الانتقائي.

الاستنتاجات: إن السلوك الإنتقائي فى الأكل منتشر بين الأطفال دون سن الخامسة. فيما يتحمل الآباء المسؤولية تجاه سلوك أطفالهم الإنتقائي هذا. كما تعد استجابة الشبع و القلق تجاه الطعام ناتجه بشكل كبير عن سلوك الطفل ذاته. علاوه على ذلك، كون الطفل من قاطنى المدن و الاخير بين إخوته هي مؤشرات على كون الطفل انتقائى فى الأكل. فى حين لم تسجل الدراسة أي علاقة بين انتقائية الأكل والحالة التغذوية (متوسط الطول بالنسبة للعمر، و متوسط الوزن بالنسبة للطول، و متوسط الوزن بالنسبة للعمر) للأطفال في سن ما قبل المدرسة.

التوصيات: يجب أن يكون مقدمو الرعاية للأطفال دون الخامسة على دراية جيدة بإستراتيجيات التغذية والتدخلات الغذائية المناسبة لتطوير ممارسات تغذية الطفل السليمة وسلوكيات الأكل. أيضا يوصى بإجراء دراسات مستقبلية لاستكشاف العلاقات المحتملة بين الأكل الانتقائي ونمو الطفل.