Family Socioeconomic Status on Wasting and Stunting among their Preschool Children

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Abstract

Background: The report on the connection between stunting and wasting was released by the Emergency Nutrition Network. **Aim**: To assess the effect of family socioeconomic status on wasting and stunting in young children in preschool children. **Design**: A descriptive research design was adopted. **Sample**: A stratified random sample included, a total number of children is 200 children, (100 children in the normal group and 100 kids in the group that is stunted and wasting) Using a probability sampling technique and a type of random sample, stratified sampling split the population into two or more groups (called strata) based on one or more shared characteristics. **Tools** Three tools were employed in the process of gathering data. **Tools (I)**: An Interview Structured Questionnaire was used for the collection of data; **Tool (II):** WHO Child Growth criteria (WHO, 1983) and outline the procedures utilized in the development of the length/height-for-age criteria. Weight-for-age, weight-for-length, weight-for-height, and BMI-for-age. **Tool (III)**: Socioeconomic scale: used to assess socioeconomic status. **Results**: A statistically significant differences between stunting children whose mothers had Basic education/ Read & write, Working, and whose fathers were Skilled workers and rural residents with p=(0.000*): A statistically significant difference between wasting and personal data of the pre-school children. **Conclusion**: A cute malnutrition (stunting and wasting) was significantly predicted by low family socioeconomic level. **Recommendations**: Quality of the diet for some Egyptian children and design proper nutritional education, especially those belonging to low-income families.

Keywords: Family, Socioeconomic, Preschool children, Stunting, Wasting.

Introduction

Adequate nutrition is very necessary for balanced growth and childhood development, the health of children's nutritional status is an indicator of the community's nutrition and overall health and the nutritional profile of the entire country. Not only is undernutrition a major contributor to morbidity and mortality in children, but it jeopardizes the physical as well as mental development of children. The Public Distribution Scheme did not incorporate a wider variety of healthful foods; instead, it maintained its slant toward calories and subsidies on wheat and rice. **(George & Murthy 2021)**.

By any measure of child anthropometric failures (including stunting, underweight, and wasting), the worldwide burden of child undernutrition remains high. Stunting was expected to affect 149 million children in 2018, or 21.9% of the total. 1. The Sustainable Development Goal of ending all kinds of malnutrition by 2030 must be met immediately. This can help fulfill other goals related to child survival, academic success, and general well-being. To comprehend the reasons behind child undernutrition, several conceptual models have been created, the majority of which use a multifactorial framework. **(Zhihui et al ., 2020)**

The term "wasting" refers to a state of recent onset nutritional deficiency caused by abrupt food restriction or malabsorption of nutrients, resulting in weight loss and a weight-for-height below the NCHS/WHO median value by less than two standard deviations. If it was less than -3 SD, it was considered severe waste. **(Tsedeke et al., 2020).**

Stunting is a standard marker of failure in early growth. Stunting is connected to decreased mental development, low academic performance, and diminished intellectual capacity. It is a highly reliable indicator of societal advancement and human capital. Egyptian demographic and survival indicators have shown marked improvement in life expectancy and under-5 mortality **(Saleh et al., 2020).**

Even with these advancements in healthcare, children's linear growth is yet significantly impeded. About one in five children under the age of five are considered stunted due to macronutrient deficits, and one in ten are considered severely stunted. The regulation of linear growth is significantly influenced by nutrition. Inadequate nutrition leads to diminished cartilaginous growth and osteoplastic activity; insufficient protein intake with a resultant negative nitrogen balance interferes with the

deposition of organic material in bone **(Saleh et al., 2020).**

Maternal autonomy (for health care, mobility, and money), environmental conditions (water source, sanitation facility, and stool disposal), maternal reproductive care (antenatal care, skilled birth attendant at delivery, family planning needs), and maternal marriage age are all factors that influence a woman's socioeconomic status. Previous research has shown a high correlation between child anthropometric deficiencies and household wealth, maternal traits, and home environment. We included a paternal nutritional status in the supplemental analysis even though it has only been briefly studied, because of the possibility of biological and psychosocial channels between fathers and their children. We also included characteristics related to maternal reproductive care, such as the care mothers had before become pregnant, the risks, the kid encountered during delivery, and the families' ability to achieve the targeted birth spacing. **(Zhihui et al., 2020).**

Mattei & Alfonso, (2020) stated that clinical dietetics, nutrition science, and medical nutrition therapy are areas of expertise that nurses must have. They also need to engage in continuing education regarding the most recent recommendations and guidelines regarding nutrition. These include organizing food education programs, creating and supervising the preparation of unique meal plans, suggesting dietary adjustments and options for a poor diet, developing wellness programs for organizations, helping people lose weight, treating illnesses by encouraging healthy eating habits and managing enteral (feeding tubes) and parenteral nutrition in patients who are unable to eat or drink normally.

Significance of the Study

Stunting is a global problem faced by every country and generally indicates poor parenting functioning. Stunting, or chronic malnutrition, is the result of poor nutrition and health in early childhood, beginning in the womb. Stunted children do not grow to a proper height according to their age. The impairment also affects the brain in such a way that their cognitive potential may not be realized **(Pradana & Ru, 2021).**

As a result, undernutrition kills more than a million children annually and accounts for over half (45%) of all fatalities in children under the age of five worldwide. It is estimated that wasting causes 8 million fatalities annually, with severe wasting accounting for 60% of these deaths in patients in low- and middle-income nations who are unable to consume food or liquids routinely. **(Faruq et al., 2022).**

Millions of children worldwide, especially those from low-income backgrounds, do not begin life in a healthy state. This may be the result of inadequate products and services, which are the main reasons why children's neurobiological development is impaired and leads to subpar social, emotional, psychological, and physiological results. Therefore, concentrating on enhancing assistance for marginalized and impoverished communities is an effective tactic to provide the foundation for healthy behaviors in the development of children **(Nirmal et al., 2023).**

A nurse laying the foundation for long-term development and wellbeing.

A nurse's duties include keeping an eye on a child's developmental milestones, providing dietary and safety recommendations, performing physical examinations, and administering medication. A nurse's ability to identify early signs of health issues or developmental abnormalities is crucial since it allows for timely intervention that can drastically change a child's trajectory in life **(Louise et al., 2021).**

The aim of the study

To assess the effect of family socioeconomic status on wasting and stunting among their preschool children.

Research questions

Does family socioeconomic status affect wasting and stunting among preschool children?

What is the relationship existing between children's wasting and stunting and the socioeconomic level of their families?

Subject and method

Research design

A descriptive research design was employed in this study.

Setting

The study was carried out in Sohag , in the north includes (Rwad EL Bian Nursery School), in the south includes (El Sondos Nursery School), in the east includes (Nasser Nursery School) and in the west includes (Teddy Bear Nursery School).

Tools for data collection: Three tools were employed in the process of gathering data. **Tool I**: An Interview. The researcher developed a questionnaire with an interview structure for the collection of data; It comprises the child's traits as well as their age, sex, place of residence, degree of

education, and birth order. **Tool II**: The WHO Child Growth Standards **(WHO, 1983)** outline the procedures utilized in the development of the standards for BMI-for-age, weight-for-age, weight-for-length, and height-for-age. Additionally, a comparison is made between the new criteria and the 2000 CDC growth charts **(Kuczmarski, 2002)** as well as the **NCHS/WHO** growth reference **(WHO, 1983)**. You can get electronic versions of the **WHO** growth charts and tables, along with features designed to make them easier to use, by visiting www.who.int/childgrowth/en.

Tool III: Socioeconomic scale: It was created by **Abd-Eltawab** (2014) and consists of four primary items: (1) education level (6 sub-items), (2) occupation (6 sub-items), (3) family income (6 sub-items), and (4) lifestyle (3 sub-items). It is intended to be used to evaluate socioeconomic status. Three classes were created based on the total score: high (ranging from 85–100%), moderate (ranging from 84–60%), and low (less than 60%).

Content validity

The data - collecting tools that were presented to a panel of five pediatric nursing specialists with more than 10 years of experience helped assess the content validity of the tools.

Reliability

By comparing variables using the Pearson correlation coefficient test, the reliability of the tool was determined. There was a statistically significant positive connection between the participants' variables, as evidenced by the Pearson correlation coefficient for the variables, which varied from P. < 0.5 to P. < 0.001. The study's instruments may be utilized as legitimate and reliable means of gathering data for the current investigation, according to the validity and reliability findings.

Ethical consideration

Sohag University Faculty of Nursing's Ethical Committee approved the research proposal.

- The research subjects were not at risk while it was being applied.
- Common ethical guidelines for clinical research were adhered to by the study.
- Anonymity and confidentiality were guaranteed.
- Participants are free to decline participation at any time or to leave the study at any point without giving a reason.
- When gathering data, the privacy of the study participants was taken into account.

Inclusion criteria

- All preschool children (3-6 years) with wasting and stunting
- Children from both sexes.
- The child's parents who accept to take part in the research

Exclusion criteria

- A child with chronic disease
- Family history of stunting with genetic factor

Method of data collection

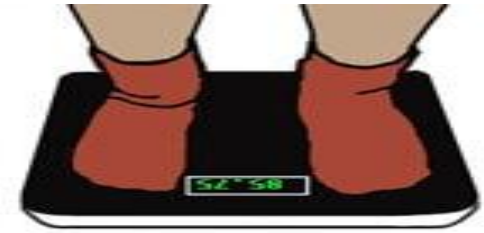
1- The chairman granted official approval to the nursery school in Sohag City.
2- The tools that were used for the study must be valid and reliable before the beginning of data collection.
3- Written consent from the child's parents was obtained
4- The researcher will measure height, weight, and boy mass index "weight for age "and then mark on the pediatric growth chart to compare this measuring with normal values and assess socioeconomic status for two groups according Abd El Twab scale for all children at the nursery school.

- The weight of children was assessed with Weight measured in kilograms. The weighing scale was calibrated to zero before taking every measure. The children will be weighed with minimal clothing, without shoes, and with movement on the scale.
- Children aged three to six had their height measured by WHO guidelines. The standing position will be measured with a specialized wooden apparatus. Verify that your shoulders are level, your arms are at your sides, and your legs are straight. Verify that the child's line of sight is parallel to the floor and that they are staring straight ahead. As the child stands with his or her head, shoulders, buttocks, and heels in contact with the level surface (the wall), measure. Then, the height was calculated to the closest centimeter.
- Anthropometric data will be used to construct the weight-for-age Z-score (WAZ) and the height-for-age Z-score (HAZ). The categorical variables underweight, wasting, and stunting stand in for HAZ and WAZ. Body mass index, a straightforward measure of weight about height, is frequently used to categorize preschoolers as underweight, overweight, or obese. It is expressed as kg/m2, which is the weight in kilograms divided by the height in meters squared.

- The relationship between classified levels of socioeconomic status and children's stunting and wasting was done

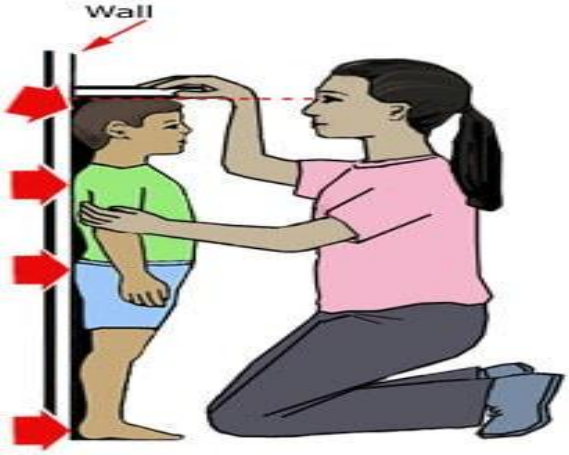
Fieldwork

- At the start of the interview, the researcher gave a brief introduction to the moms and teachers of the nursery school and explained the goal of the study, assuring them that all information collected would be kept private.
- The research was carried out over 3 days throughout this week.
- Depending on the kids' responses, the anthropometric measurements took an average of two to three hours to complete.
- Then the researcher measured weight accurately:



Use a digital scale.

- Instead of using carpet, place the scale on a hard surface like tile or wood.
- Ask the young person to take off their shoes and bulky garments like sweatshirts.
- Assist the young person standing with both feet in the scale's middle.
- Enter the weight to the closest fraction to a decimal.
- The researcher's Accurate Height Measurement.
- Take off the child's large clothing and shoes if they are obstructing the measurement.



- Measure your height against a smooth surface, like a wall devoid molding, and on uncarpeted flooring.
- As the child stands, have them place their feet flat against the wall and together. Verify that your shoulders are level, your arms are at your sides, and your legs are straight.
- Verify that the child's line of sight is parallel to the floor and that they are staring straight ahead. Measure while the child stands by the head, shoulders, buttocks, and heels touching the flat surface (wall). Depending on the overall body shape of the child, all points may not touch the wall.
- Make a straight angle to the wall using a flat headpiece, then lower it until it firmly contacts the head's crown. Make sure the measurer's eyes are at the same level as the headpiece.
- Mark the spot on the headpiece where it meets the wall with a light marking. Next, to determine the height, measure with a metal tape from the base on the floor to the designated measurement on the wall. Accurately record the height to the nearest 0.1 centimeters.
- The researcher then calculated body mass index using Determine weight and height .
- Determine your weight and height for advice, see Measuring Children's Height and Weight Accurately Ate.
- To calculate the BMI, use the child's BMI. Standard formulas are used to compute the BMI value. The body mass index, or BMI, was calculated using a person's height and mass (weight). BMI (weight) kg/(height) m2. The body mass index (BMI) is calculated by dividing the body height squared.

Statistical analysis

The statistical package for social science, SPSS version 19, was used for both data entry and analysis. The number, percentage, mean, median, and standard deviation of the data were displayed. To compare qualitative variables, the chi-square test and Fisher exact test were employed. For parametric data, the independent samples t-test was utilized to compare quantitative variables between groups. When comparing quantitative variables between two groups, the Mann-Whitney test was employed, and when there were more than two groups or non-parametric data, the Kruskal-Wallis test was utilized. When $P < 0.05$, the P-value is regarded as statistically significant.

Results

Table (1): Shows that (38.5 %) of the studied preschool children, their age were between (4 and <5) with Mean ± SD (Range) 4.42 ± 0.98 (3.0-6.0), (51.5%) of them were girls. Regarding birth order, second pre-school children were most prominent from others (42.3%). Finally, 61.3% of the studied pre-school children were in kindergarten level one of education.

Figure (1): Illustrates that (51.5%) of the studied were female and 48.5%of them were male.

Figure (2): Illustrates that that (38.5 %) of the studied preschool children, their age were between (4 and <5) with Mean ± SD (Range) 4.42 ± 0.98 (3.0-6.0), (51.5%) of them were girls.

Regarding mother education, Table (2): Demonstrates that University/ postgraduate present in more than half (71.5%). Concerning mothers, occupations, 69.8% of them were housewives. Regarding father education, (76.3%) of them were employed and 86.3%of them were living in urban areas.

Figure (3): Shows that (13.0%) of the studied, regarding mother education were secondary educations.

Figure (4): Shows that (17.8%) of the studied families were in the high class

Figure (5): Illustrates that (41.3%) of the studied preschool children were stunted and more than half (58.75%) were normal.

Figure (6): Shows that (13.5%) of the studied preschool children were underweight and more than half (86.50) were normal.

Table (3) Illustrates that (11.8%) of the studied preschool children were wasted and more than half (88.3%) were normal.

Table (4): There were statistically significant differences between the wasting of the studied preschool children and personal data of their mothers working more affected than non-working (17.4%).

Table (5): Shows that there was a statistically significant difference between stunting children, their mothers had a basic education, working, and their fathers skilled workers and living in rural residences at p= (0.000*)

Table (6): Portrays that statistically significant differences were detected between the studied preschool children at stunting and low social class at p= (0.000*).

Table (7): Shows that, the high percentage of affected wasting children lie in the middle social class (13.7%).

Table (8): Statistically significant differences were found between the studied underweight preschool children, their mothers had a basic education, and were in rural at p= (0.005*)

Table (9): Demonstrate that a statistically significant difference was found between the studied preschool children who were low social class and underweight at p= (0.029*)

Results

Table (1): Personal data of the pre-school children

Child data	No. (400)	%
Age: (years)		
3 - < 4	91	22.8%
4 - < 5	154	38.5%
5 - < 6	85	21.3%
6	70	17.5%
Mean ± SD (Range)	4.42 ± 0.98 (3.0-6.0)	
Sex:		
Boys	194	48.5%
Girls	206	51.5%
Birth order:		
First	93	23.3%
Second	169	42.3%
Third or more	138	34.5%
Level of education:		
KG1	245	61.3%
KG2	155	38.8%

Figure (1): Preschool children distribution regarding their gender

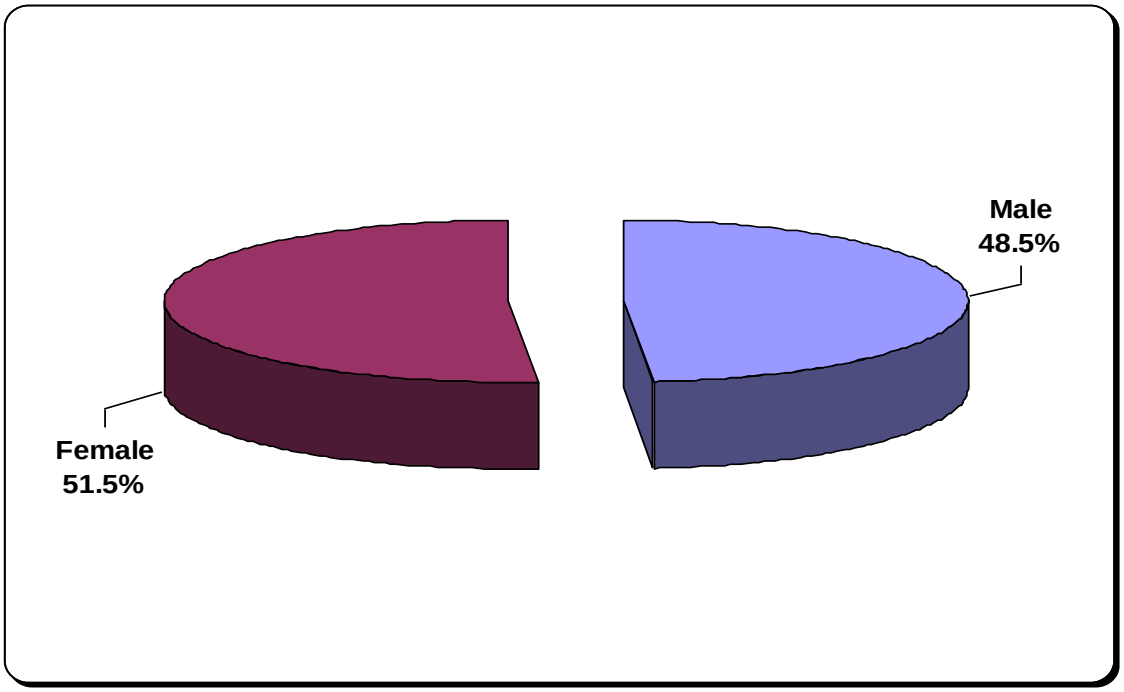


Figure (2): Age distribution among the studied preschool children

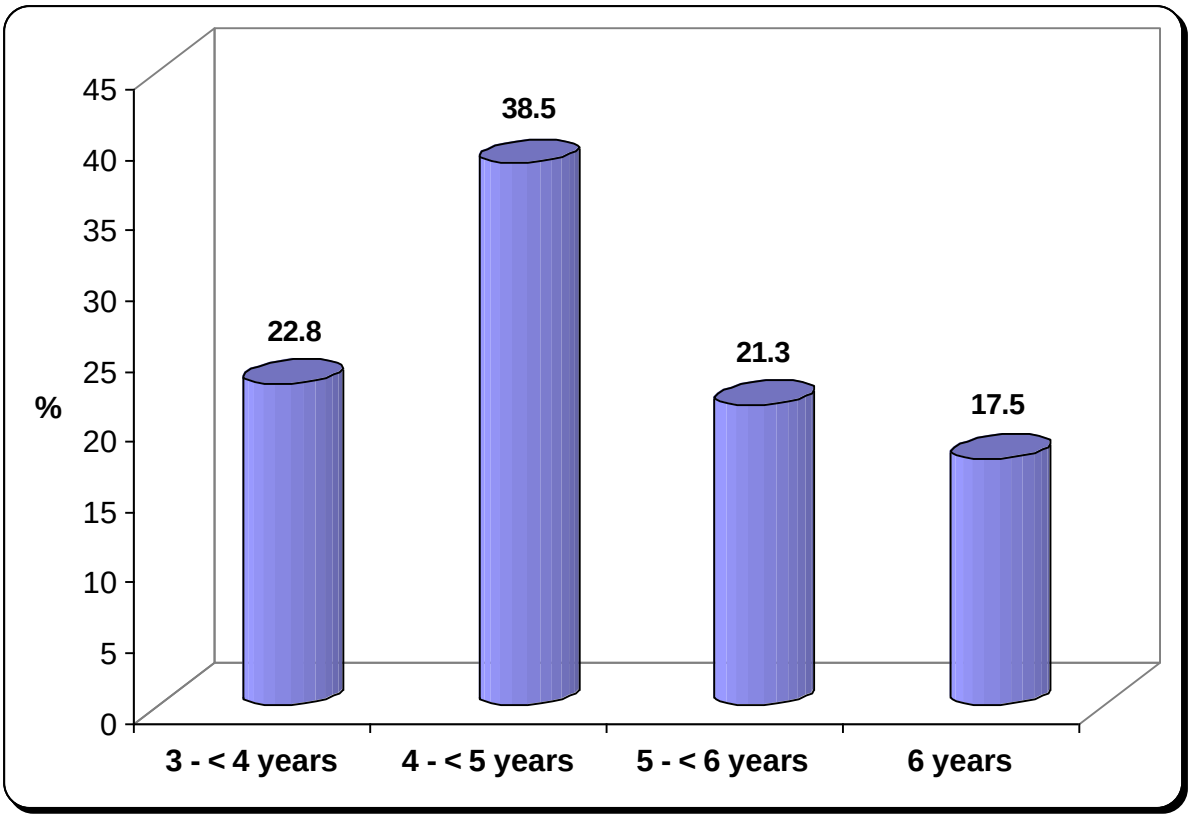


Table (2): Personal data of the studied parents

	No. (400)	%
Mother education:		
Basic education/ Read & write	62	15.5%
Secondary education	52	13.0%
University/ postgraduate	286	71.5%
Mother Occupation:		
Working	121	30.3%
Housewives	279	69.8%
Father Occupation:		
Employee	305	76.3%
Free Business	55	13.8%
Skilled worker	40	10.0%
Residence:		
Rural	55	13.8%
Urban	345	86.3%[

Figure (3): Mother distribution regarding their education level

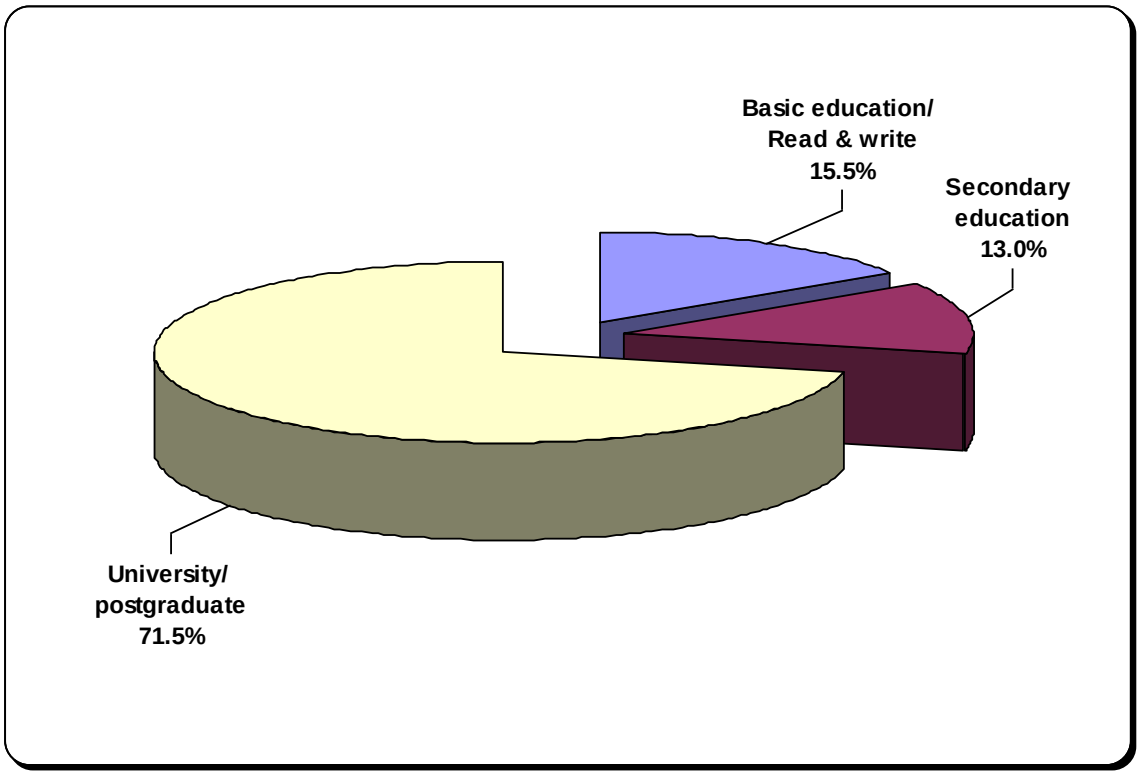


Figure (4): Social class among the studied families

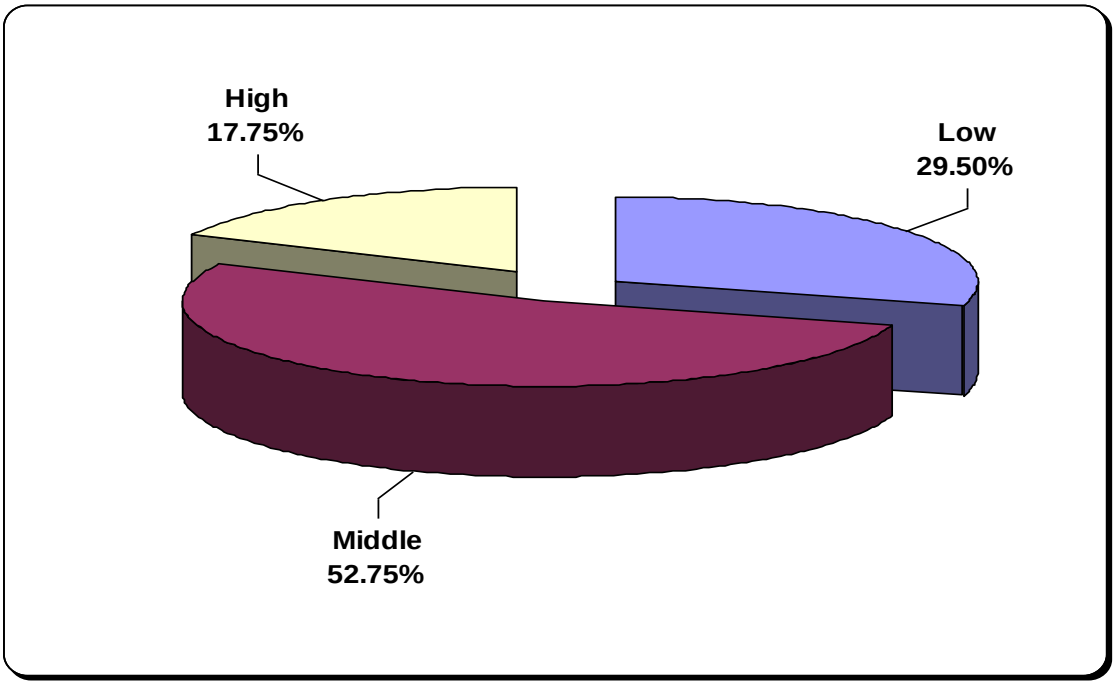


Table (3): Wasting among studied preschool children

Wasting	No. (400)	%
Wasted	47	11.8%
Normal	353	88.3%

Figure (5): Stunting distribution among the studied preschool children

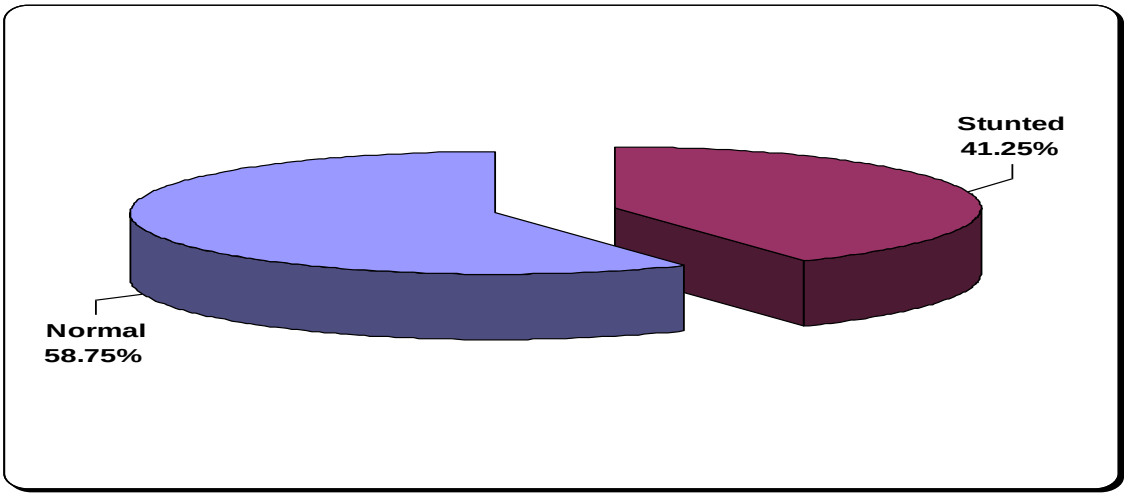


Figure (6): Underweight distribution among the studied preschool children

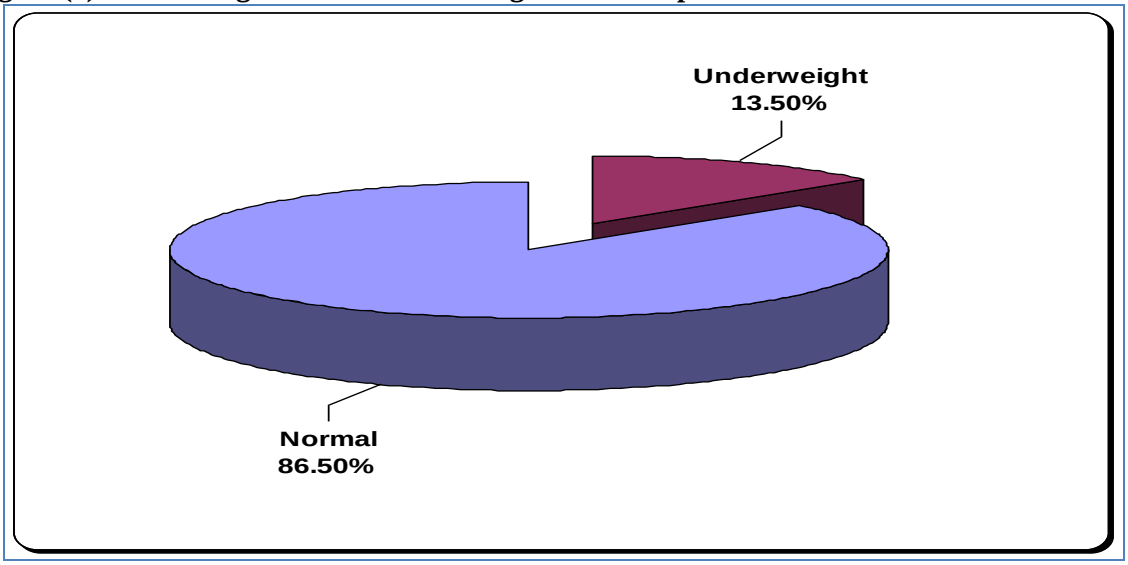


Table (4): Relation between wasting of the studied preschool children and the personal data of their parents

	Wasting				P-value
	Wasted		Normal		
	No.	%	No.	%	
Mother education:					
Basic education/ Read & write	8	12.9%	54	87.1%	
Secondary education	4	7.7%	48	92.3%	0.615
University/ postgraduate	35	12.2%	251	87.8%	
Mother Occupation:					
Working	21	17.4%	100	82.6%	0.022*
Not working	26	9.3%	253	90.7%	
Father Occupation:					
Employee	35	11.5%	270	88.5%	
Free Business	10	18.2%	45	81.8%	0.137
Skilled worker	2	5.0%	38	95.0%	
Residence:					
Rural	10	18.2%	45	81.8%	0.111
Urban	37	10.7%	308	89.3%	

Table (5): Relation between stunting of the studied preschool children and the personal data of their parents

	Stunting				P-value
	Stunted		Normal		
	No.	%	No.	%	
Mother education:					
Basic education/ Read & write	58	93.5%	4	6.5%	
Secondary education	10	19.2%	42	80.8%	0.000*
University/ postgraduate	97	33.9%	189	66.1%	
Mother Occupation:					
Working	32	26.4%	89	73.6%	0.000*
Not working	133	47.7%	146	52.3%	
Father Occupation:					
Employee	113	37.0%	192	63.0%	
Free Business	18	32.7%	37	67.3%	0.000*
Skilled worker	34	85.0%	6	15.0%	
Residence:					
Rural	40	72.7%	15	27.3%	0.000*
Urban	125	36.2%	220	63.8%	

Table (6): Relation between stunting of the studied preschool children and social class

Social class	Stunting				P-value
	Stunted		Normal		
	No.	%	No.	%	
Low	74	62.7%	44	37.3%	
Middle	73	34.6%	138	65.4%	0.000*
High	18	25.4%	53	74.6%	

Table (7): Relation between wasting of the studied preschool children and social class

Social class	Wasting				P-value
	Wasted		Normal		
	No.	%	No.	%	
Low	10	8.5%	108	91.5%	
Middle	29	13.7%	182	86.3%	0.360
High	8	11.3%	63	88.7%	

Table (8): Relation between underweight of the studied pre-school children and personal data of their parents

	Underweight				P-value
	Underweight		Normal		
	No.	%	No.	%	
Mother education:					
Basic education/ Read & write	16	25.8%	46	74.2%	
Secondary education	6	11.5%	46	88.5%	0.009*
University/ postgraduate	32	11.2%	254	88.8%	
Mother Occupation:					
Working	12	9.9%	109	90.1%	0.167
Not working	42	15.1%	237	84.9%	
Father Occupation:					
Employee	40	13.1%	265	86.9%	
Free Business	8	14.5%	47	85.5%	0.920
Skilled worker	6	15.0%	34	85.0%	
Residence:					
Rural	14	25.5%	41	74.5%	0.005*
Urban	40	11.6%	305	88.4%	

Table (9): Relation between underweight of the studied pre-school children and social class

Social class	Underweight				P-value
	Underweight		Normal		
	No.	%	No.	%	
Low	24	20.3%	94	79.7%	
Middle	24	11.4%	187	88.6%	0.029*
High	6	8.5%	65	91.5%	

Discussion

This chapter presents the researcher's interpretations of the current study's findings and compares them with those of other similar studies and contemporary literature. Stunting is a risk indicator because it represents the overall state of development characterized by poor socioeconomic levels, chronic illness prevalence, and impoverished conditions. The primary objective of the research was to evaluate the extent to which preschool-aged children's socioeconomic status and wasting are related to stunting. Second, we looked into the connection between population stunting and wasting. This study produced several significant findings. The frequency of simultaneous stunting and wasting in children between the ages of 3-6 years.

Regarding socio-demographic characteristics of preschool children, it was evident from the present study, that their age was from (4 - < 5) which represents more than one-third. This result is in the same line with research conducted by **(Huda, et al., 2024)** and (**Alisha Karki, et al, 2023**) found that children aged was from (4 - < 5) represented more than others, According to statistics gathered by the World Health Organization (WHO) and **the United Nations Children's Fund (UNICEF) in 2018, 149 million** children under the age of five were stunted. The latest study's findings showed that more than half of the preschoolers under investigation were female.

The findings of the study, "Prevalence and predictive factors associated with stunting in preschool children" by **(Huda et al. 2024)** are consistent with this outcome. **"**, and found that females presented more than half.

The study's findings demonstrated that (university/postgraduates) presented not quite three-quarters, of mothers' occupations, and more than three-fifths of them were housewives. More than three-quarters of fathers were employed, and the majority of them were living in urban areas. From the researcher's point of view, the sample was taken from nursery school children, and most of the nursery children had highly educated parents who worked which may be the cause that they do not care for their children sufficiently because they are outside the home for many hours.

The current study's findings showed that slightly over half of the families under investigation belonged to the middle class. From the point of view of the researcher, it may explain that an increase in the body's demand for energy with a lack of income and increased requirements for the child to grow and develop is the

cause of the inability to provide health care with sufficient nutritional items.

The findings of the current study demonstrated that more than two-fifths of the studied preschool children were stunted and over half were normal. This is not consistent with a study carried out by (**George, et al 2021**)" Prevalence Of Undernutrition among Preschool Children" which found stunting (23.5%) among participants. From the perspective of the researcher, it confirmed a lack of health awareness among mothers inappropriate feeding practices, lack of dietary diversity, and insufficient complementary feeding practices.

The present study demonstrated that Over thirteen percent of the studied preschool children were underweight. These results nearly. the research done by **(Nagwa et al 2024)** which studied "Factors Associated with Childhood Stunting in Four North African Countries found the same results. On the other hand, not similar to **(the George, et al 2021)** study "Prevalence Of Undernutrition among Preschool Children " found that being underweight (25.4%), From the researcher's point of view, In Egypt food insecurity is linked to poor eating habits, a lack of nutritional awareness among the general public, and limited access to a balanced diet for the lowest segments of society.

The results indicated that there were statistically significant variances between the wasting of the studied preschool children and personal data of their mothers working more affected than non-working (17.4%). From the researcher's point of view, a working mother does not have enough time to observe the child's requirements for growth and development, and she has many stressful burdens.

The results of the current study revealed that there was a statistically significant difference between stunting children, their mothers had a basic education, working, and their fathers skilled workers and living in rural residences at p= (0.000*)**.** The study by **(Huda, et al 2024**), "Prevalence and predictive factors associated with stunting in preschool children," found no significant correlation between stunting and age, mother's occupation, family size, or family socioeconomic status (p-value > 0.05). This result was consistent with the study's findings. According to the researcher, it can be explained by poor nutrition (eating insufficient amounts of food or foods lacking in nutrients that promote growth), chronic illnesses or recurrent infections that result in poor nutrient intake, absorption, or utilization, and limited access to healthcare in rural areas.

The study findings revealed that statistically There were significant variances found between the studied underweight preschool children, their mothers had a basic education and were in rural at p= (0.005*) From the perspective of the researcher, it reflected that the mother did not have enough information that causes inadequate nutrition knowledge and recurrent infections may result in an inadequate nutritional intake, absorption or utilization and lack access for medical services in a rural area.

These findings of the current study demonstrated that the preschoolers in the study who belonged to a low socioeconomic class and were underweight showed a statistically significant difference at p= (0.029*). According to the study, it was verified that low income, a big family size, ignorance, poverty, and occupation. Since they have the biggest impact on living quality, these are the real factors that determine malnutrition in society

These findings revealed that the frequency of simultaneous stunting and wasting in children between the ages of 3-6 years and their mothers working and their mothers had a basic education level and who belonged to a low socioeconomic class, and belong family living in rural residences and Understanding the relationships between these stunting and wasting of under nutrition may help to increase the effectiveness of intervention measures to improve growth.

Conclusion

Based on the present study results, the study concluded that there was a significant level of acute malnutrition. It primarily suggests that acute malnutrition (stunting and wasting) was significantly predicted by low family socioeconomic status. Therefore, interventions aimed at addressing the causes of acute malnutrition in preschool-aged children should get particular focus.

Recommendations

Based on the study findings, the following suggestions are put forth: -

- The first line of defense against stunting is health education regarding diet, particularly in the first 1,000 days of life. Considering the results of the current study, the following suggestions are made:
- Know the quality of the diet of some Egyptian children
- Design proper nutritional education, especially for those who belong to low-income households.
- Education program, it is crucial that parents receive adequate education about child nutrition from government and healthcare organizations, and that they are inspired to provide their kids with healthy environment and appropriate preventive measures to improve growth.
- The government must adopt a health and health equity policy program to promote positive health behaviors among its population .

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