

Prevalence of Wasting and Stunting among Preschool Children of low Family Socioeconomic Status

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Abstract: Background: The Emergency Nutrition Network published a report on the link between stunting and wasting. Aim: to evaluate how family socioeconomic status affects stunting and wasting in preschool-aged children. Design: The study used a descriptive design. The sample consisted of 200 youngsters, 100 in the normal group and 100 in the stunted and wasting group, and was stratified using random sampling. Stratified sampling divides the population into two or more groups (strata) according to one or more shared features using a probability sampling approach and a sort of random sample. The data collection: Tools three tools were employed 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): To evaluate socioeconomic status, utilize the socioeconomic scale. Results: Stunting children whose mothers were working, had a basic education or reading and writing skills, and whose fathers were skilled workers and rural inhabitants showed statistically significant differences ($p=0.000^*$): a statistically significant difference between the pre-schoolers personal information and waste.

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

1. INTRODUCTION

Poverty in households and child malnutrition reinforce each other. According to Srinivasan and Mohanty, children's nutritional health is greatly impacted by their household deprivation status (HDS). Malnutrition in children with HDS results in extreme poverty and hinders their capacity to work as adults. The same cycle is perpetuated by future generations living in poverty. Children who eat well do better on tests of social, cognitive, and emotional development than children who are malnourished. According to (Muhammad et al., 2022), almost one-third of Pakistan's population lives below the poverty level.

Low weight for height is referred to as wasting. Though it can sometimes last for a long period, it frequently denotes recent and significant weight loss. More than one-third of the population in Pakistan are living their lives below the poverty line (Muhammad et al, 2022)

Low height for age is known as **stunting**. Chronic or recurring undernutrition is the cause, and it is typically linked to poverty, poor maternal nutrition and health, frequent illness, and/or improper early feeding and care. Children who are stunted are unable to develop to their full physical and mental potential. Low weight for age is referred to as underweight. An underweight child may be wasted, stunted, or both. (Ashraf et al, 2021).

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Socioeconomic status (SES) encompasses subjective evaluations of social class and position, occupational prominence, and educational achievement in addition to income. A person's socioeconomic status might encompass their quality of life, as well as their opportunities and benefits in society. Specifically, poverty is not a single issue but rather a collection of physical and psychological stresses. Moreover, socioeconomic position can accurately and consistently predict a wide range of life outcomes, including mental and physical health. Therefore, SES is relevant to all behavioural and social research fields. (Julia et al 2024).

Children are the nation's most vital foundation and future. Preschoolers in urban slums who are from lower socioeconomic backgrounds and lack access to essential amenities like food, shelter, and sanitation are at risk for malnutrition, which in turn leads to illness and mortality in children (Durgawale et al., 2023).

One of the most important things a nurse does is help mothers feed their children. Provide appropriate care, resources for support, and formal and informal health education for caregivers. Help mothers with feeding by teaching them about healthy food and drink choices, age-appropriate support, and suitable structure. (Manal et al ,2021)

Significance of the Study

Every nation struggles with stunting, which is typically a sign of inadequate parenting. Poor nutrition and health during early childhood, starting in the womb, can lead to stunting, also known as chronic malnutrition. Children who are stunted do not develop to the appropriate height for their age. Additionally, the impairment alters the brain in a way that may prevent the person from reaching their full cognitive potential. (Pradana & Ru, 2021).

As a result, under nutrition causes over half (45%) of all deaths in children mal five worldwide, and kills over a million children each year. An estimated 8 million people die from wasting each year, with 60% of these deaths occurring in patients in low- and middle-income countries who are unable to regularly swallow food or liquids due to severe wasting. (Faruq et al., 2022).

Millions of children around the world are not born healthy, particularly those from low-income families. The primary cause of children's neurobiological development impairment and the resulting poor social, emotional, psychological, and physiological outcomes may be insufficient goods and services. Thus, focusing on improving support for underserved and underprivileged populations is a successful strategy to provide the groundwork for children's development of healthy behaviors. (Nirmal et al., 2023).

A nurse establishes the groundwork for long-term growth and health Monitoring a child's developmental milestones, giving food and safety advice, conducting physical examinations, and giving medication are all part of a nurse's job description. Early detection of health problems or developmental abnormalities by a nurse is essential since it enables prompt intervention that can significantly alter a child's course 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?

2. 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 the west includes (Teddy Bear Nursery School).

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Tools for data collection:

Three tools were used in the data collection process. Interview as Tool I. The child's characteristics, age, sex, domicile, level of schooling, and birth order are all included in the questionnaire that the researcher created with an interview format for data collection.

Tool II: The methods used to produce the BMI-for-age, weight-for-age, weight-for-length, and height-for-age criteria are described in the WHO Child Growth Criteria (WHO, 1983). The revised criteria are also contrasted with the NCHS/WHO growth reference (WHO, 1983) and the 2000 CDC growth charts (Robert, 2002). The WHO growth charts and tables are available in electronic format at www.who.int/childgrowth/en, along with features that make them easier to use.

Socioeconomic scale (Tool III): The four main categories are as follows: (1) education level (6 sub-items), (2) occupation (6 sub-items), (3) family income (6 sub-items), and (4) lifestyle (3 sub-items). It was developed by (Abd-Eltawab 2014).

Its purpose is to assess socioeconomic standing. Based on the overall score, three classifications were established: low (less than 60%), moderate (ranging from 60–84%), and high (ranging from 85–100%).

Content validity: A panel of five pediatric nursing specialists with over ten years of experience was shown the data-gathering tools, which aided in evaluating the instruments' content validity.

Reliability: The tool's dependability was assessed by comparing variables using the Pearson correlation coefficient test. The Pearson correlation coefficient for the variables, which ranged from $P < 0.5$ to $P < 0.001$, showed a statistically significant positive relationship between the participants' variables.

The validity and reliability findings suggest that the study's instruments could be used as valid and trustworthy ways to collect data for the current inquiry.

Ethical consideration:

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

- During its application, the research subjects were not in danger.
- The study complied with common ethical standards for clinical research.
- Confidentiality and anonymity were assured.
- Participants may withdraw from the study at any moment and without explanation, or they may choose not to participate at all.
- The study participants' privacy was considered during the data collection process.

Criteria for inclusion:

- All preschoolers aged 3-6 who exhibit stunting and wasting
- Kids of all genders.
- The parents of the kid who consent to participate in the study

Exclusion

- A youngster suffering from a chronic illness
- Stunting with a hereditary component in the family history

Method of data collection:

- The Sohag City infant school received formal clearance from the chairman.
- Before the start of data collection, the study's instruments had to be legitimate and trustworthy.
- The parents of the child gave their written consent.

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- To compare the measurements with normal values and evaluate the socioeconomic status of two groups using the Abd El Twab scale, the researcher will measure each child's height, weight, and boy mass index "weight for age" before noting the results on the pediatric growth chart.
- The children's weight was determined using Weight in kilos. Before taking each measure, the weighing scale was set at zero. The kids will be weighed while moving, wearing very little, and without shoes, and with movement on the scale. According to WHO norms, the height of children ages three to six was measured. A customized wooden device will be used to measure the standing position. Make sure your knees are straight, your arms at your sides, and your shoulders level. Make sure the child is looking directly ahead and that their line of sight is parallel to the floor. Measure the child while they are standing with their head, shoulders, buttocks, and heels touching the level surface (the wall). The height was then determined to the nearest centimeter.
- The weight-for-age Z-score (WAZ) and the height-for-age Z-score (HAZ) will be constructed using anthropometric data. HAZ and WAZ are represented by the category variables stunting, wasting, and underweight. Preschoolers are commonly classified as underweight, overweight, or obese using body mass index, a simple way to measure weight about height. The formula for it is kg/m^2 , which is the weight in kilograms divided by the square of the height in meters.
- The association between children's stunting and wasting and different socioeconomic status levels was examined.

Fieldwork:

- The researcher began the interview by briefly introducing the mothers and nursery school teachers, outlining the purpose of the study, and reassuring them that all data gathered would be kept confidential.
- The study was conducted over three days this week.
- The anthropometric measurements took two to three hours on average, depending on the children's answers.
- The weight was then precisely measured by the researcher:
- Use a digital scale, and set it up on a hard surface like wood or tile rather than carpet.
- Request that the youth take off their shoes and bulky apparel, including sweatshirts. Assist them in keeping both feet in the scale's middle. To the nearest fraction to a decimal, enter the weight.
- The precise height measurement of the researcher.
- If the child's big clothes and shoes are getting in the way of the measurement, take them off.
- Measure your height on uncarpeted floors and against a smooth surface, such as a wall without molding.
- Ask the youngster to stand with their feet together and flat against the wall. Make sure your knees are straight, your arms at your sides, and your shoulders level.
- Make sure the child is looking directly ahead and that their line of sight is parallel to the floor. As the child stands, take measurements with their head, shoulders, buttocks, and heels contacting the wall or other level surface. All points might not contact the wall, depending on the child's general body form.
- Holding a flat headpiece at a straight angle to the wall, descend it until it makes firm contact with the head's crown.
- Check to make sure the headgear and the measurer's eyes are level. Use a luminous marking to indicate the location on the headpiece where it meets the wall. Next, use a metal tape to measure from the base on the floor to the specified measurement on the wall in order to ascertain the height. Note the height precisely, to within 0.1 millimeters.

The body mass index was then determined by the researcher using Calculate your height and weight.

- See Measuring Children's Height and Weight Accurately Ate for guidance on determining your height and weight.
- Use the child's BMI to determine the BMI. The BMI is calculated using standard formulas. A person's height and mass (weight) were used to compute their body mass index, or BMI. $(\text{weight}) \text{ kg}/(\text{height}) \text{ m}^2$ is the BMI. Body height squared is divided to determine the body mass index (BMI).

3. STATISTICAL ANALYSIS

Data entry and analysis were conducted using SPSS version 19, a statistical software for social science. Displayed were the data's number, percentage, mean, median, and standard deviation. The Fisher exact test and the chi-square test were used to compare qualitative variables. The independent samples t-test was used to examine quantitative variables between groups for parametric data. The Mann-Whitney test was used to compare quantitative variables between two groups, and the Kruskal-Wallis test was used when there were more than two groups or non-parametric data. The P-value is considered statistically significant when $P < 0.05$.

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 \pm SD (Range) | 4.42 \pm 0.98 (3.0-6.0) | |
| Sex: | | |
| Male | 194 | 48.5% |
| Female | 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% |

Table (1): Reveals that 51.5% of the preschool-aged children in the study were females, and 38.5% of them were between the ages of 4 and <5, with a mean \pm SD (range) of 4.42 \pm 0.98 (3.0-6.0). In terms of birth order, second-graders were the most common group (42.3%). Lastly, kindergarten level one schooling accounted for 61.3% of the preschoolers in the study.

Figure (1):

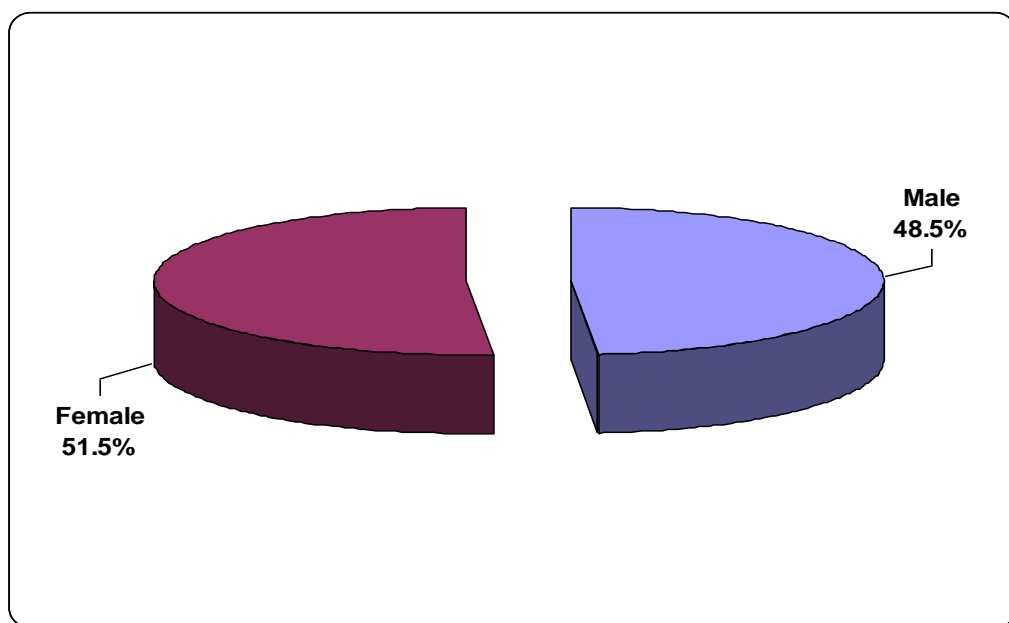


Figure (1): shows that (48.5%) of the participants were men and (51.5%) were women.

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Table (2): Personal data of 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% |
| Not working | 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% |

Regarding mother education, Table (2): shows that over half (71.5%) have a university or postgraduate degree. In terms of moms' vocations, housewives made up (69.8%) of them. In terms of father education, 86.3% of them lived in cities, and 76.3% of them had jobs.

Table (3): Social class of the studied families

| Social class | No. (400) | % |
|---------------|-----------|-------|
| Low | 118 | 29.5% |
| Middle | 211 | 52.8% |
| High | 71 | 17.8% |

Table (3): Shows that (52, 8%) of the studied families were in the middle class.

Figure (2): Social class of the studied families

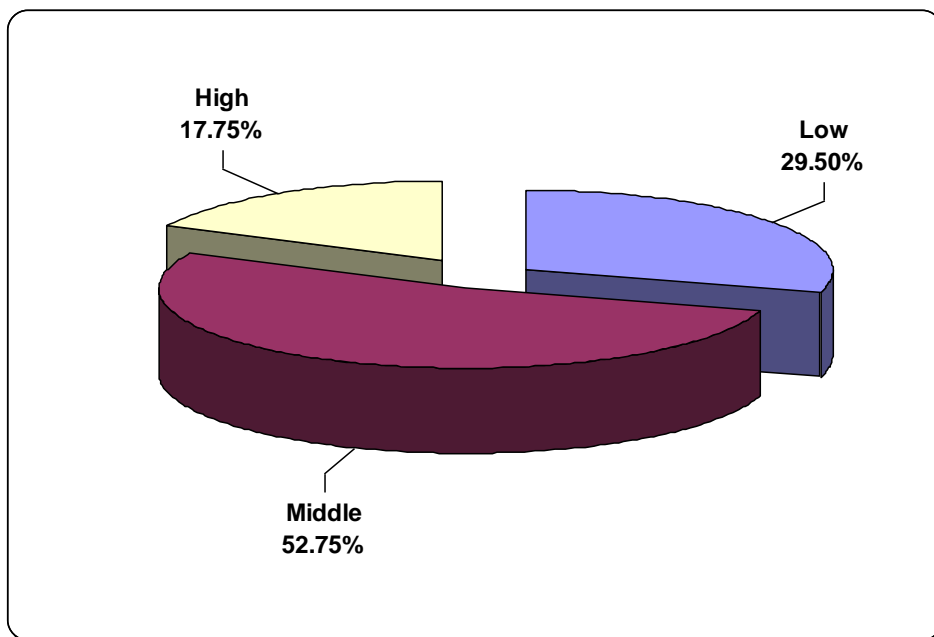


Figure (2): shows that middle-class families made up 52.75 percent of the families under study.

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Table (4): Wasting among studied pre-school children

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

Table (4) shows that more over half (88.3%) of the preschoolers in the study were normal, while 11.8% were wasted.

Figure (3)

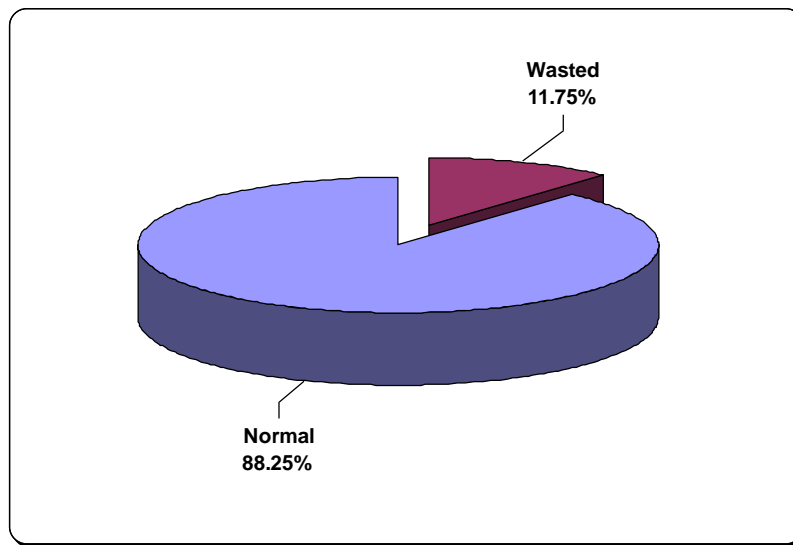


Figure (3): Illustrates that (11.75%) of the studied preschool children were wasted and more than half (88.25%) were normal.

Table (5): Stunting among studied pre-school children

| Stunting | No. (400) | % |
|----------|-----------|-------|
| Stunted | 165 | 41.3% |
| Normal | 235 | 58.8% |

Table (5): shows that over half of them (58.8%) were normal and 41.3% were stunted.

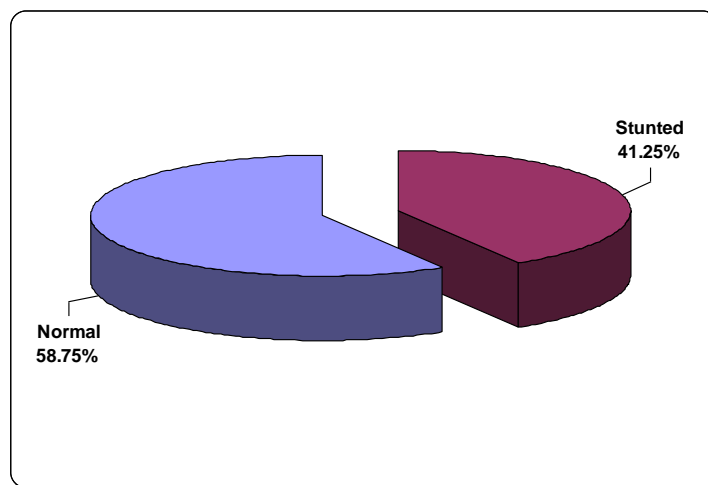


Figure (4):) reveal that over half (58.75%) of the pre-schoolers in the study were normal, while (41.25) percent were stunted..

Table (6): Relation between wasting of the studied pre-school children and personal data of the pre-school children

| | Wasting | | | | P-value |
|----------------------------|---------|-------|--------|-------|---------|
| | Wasted | | Normal | | |
| | No. | % | No. | % | |
| Age: (years) | | | | | |
| 3 - < 4 | 14 | 15.4% | 77 | 84.6% | 0.324 |
| 4 - < 5 | 17 | 11.0% | 137 | 89.0% | |
| 5 - < 6 | 6 | 7.1% | 79 | 92.9% | |
| 6 | 10 | 14.3% | 60 | 85.7% | |
| Sex: | | | | | |
| Male | 14 | 7.2% | 180 | 92.8% | 0.006* |
| Female | 33 | 16.0% | 173 | 84.0% | |
| Birth order: | | | | | |
| First | 13 | 14.0% | 80 | 86.0% | 0.468 |
| Second | 16 | 9.5% | 153 | 90.5% | |
| Third or more | 18 | 13.0% | 120 | 87.0% | |
| Level of education: | | | | | |
| KG1 | 31 | 12.7% | 214 | 87.3% | 0.481 |
| KG2 | 16 | 10.3% | 139 | 89.7% | |

Table (6): It demonstrates that a statistically significant difference was found between the male and female pre-schoolers at wasting (p=0.006).

Table (7): Relation between wasting of the studied pre-school children and personal data of the parents

| | Wasting | | | | P-value |
|-------------------------------|---------|-------|--------|-------|---------|
| | Wasted | | Normal | | |
| | No. | % | No. | % | |
| Mother education: | | | | | |
| Basic education/ Read & write | 8 | 12.9% | 54 | 87.1% | 0.615 |
| Secondary education | 4 | 7.7% | 48 | 92.3% | |
| 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% | 0.137 |
| Free business | 10 | 18.2% | 45 | 81.8% | |
| 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 (7): demonstrates that there was a statistically significant difference between children who were stunted and their moms who were employed and had a basic education, and their fathers who were skilled workers and lived in rural areas (p=0.000*).

Table (8): Relation between wasting of the studied pre-school children and social class

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

Table (8): Shows that, the high percentage of affected wasting children lie in the middle social class (13.7%).

Figure (5)

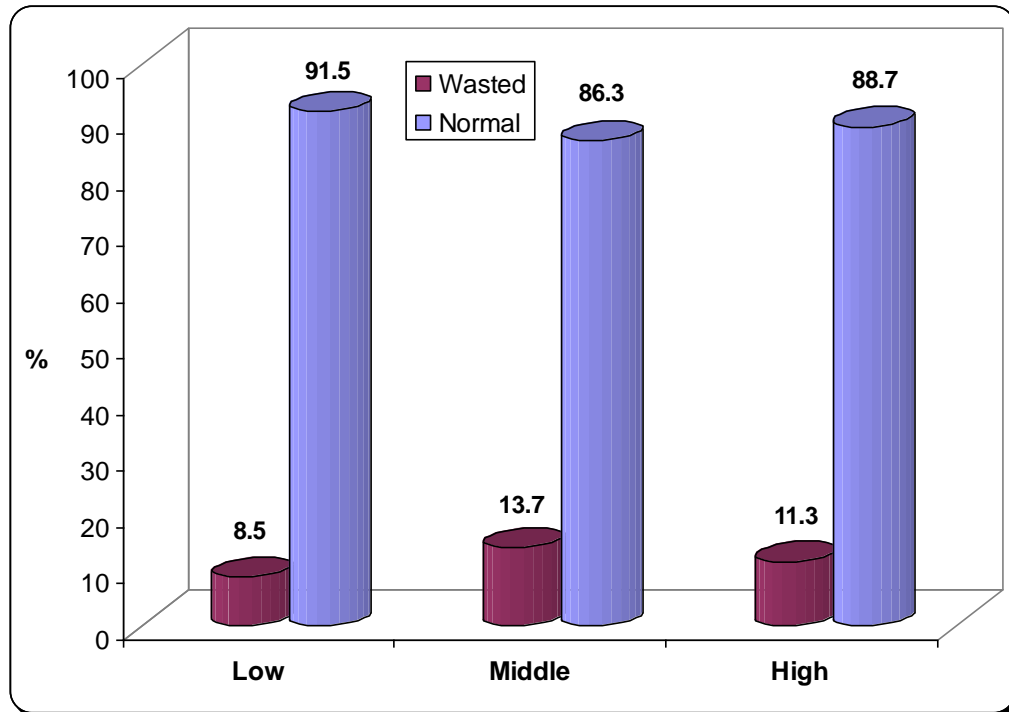


Figure (5): Shows that, the high percentage of affected wasting children lie in the middle social class (13.7%).

Table (9): Relation between stunting of the studied pre-school children and personal data of the pre-school children

| | Stunting | | | | P-value |
|----------------------------|----------|-------|--------|-------|---------|
| | Stunted | | Normal | | |
| | No. | % | No. | % | |
| Age: (years) | | | | | |
| 3 - < 4 | 38 | 41.8% | 53 | 58.2% | 0.836 |
| 4 - < 5 | 62 | 40.3% | 92 | 59.7% | |
| 5 - < 6 | 33 | 38.8% | 52 | 61.2% | |
| 6 | 32 | 45.7% | 38 | 54.3% | |
| Sex: | | | | | |
| Male | 148 | 76.3% | 46 | 23.7% | 0.000* |
| Female | 17 | 8.3% | 189 | 91.7% | |
| Birth order: | | | | | |
| First | 28 | 30.1% | 65 | 69.9% | 0.038* |
| Second | 73 | 43.2% | 96 | 56.8% | |
| Third or more | 64 | 46.4% | 74 | 53.6% | |
| Level of education: | | | | | |
| KG1 | 100 | 40.8% | 145 | 59.2% | 0.825 |
| KG2 | 65 | 41.9% | 90 | 58.1% | |

Table (9): indicates that there was a statistically significant difference between the preschoolers under study who were stunted and the male preschoolers (p=0.000) and the second preschoolers (p=0.038).

Table (10): Relation between stunting of the studied pre-school children and social class

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

Table (10): Demonstrates that, at $p=(0.000^*)$, statistically significant differences between the pre-schoolers in the study who were stunted and those from low socioeconomic classes were found.

4. DISCUSSION

The researcher's interpretations of the current study's findings are presented in this chapter, along with comparisons to those of other comparable studies and recent literature. Because it reflects the general state of development marked by low socioeconomic status, a high frequency of chronic illnesses, and poverty, stunting is a risk indicator. The main goal of the study was to determine how much stunting is associated with preschool-aged children's economic circumstances and wasting. Second, we investigated the relationship between wasting and population stunting. This study yielded several important conclusions. The prevalence of stunting and wasting in children aged three to six at the same time.

According to the sociodemographic features of preschoolers, the current study clearly showed that over one-third of them were between the ages of 4 and 5. This finding is consistent with studies by (Huda et al., 2024) and (Alisha Karki et al., 2023), which discovered that children between the ages of 4 and 5 were more prevalent than others. In 2018, 149 million children under five suffered from stunting, according to data collected by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO). The results of the most recent study revealed that over half of the preschoolers 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.

According to the study's findings, over three-fifths of moms were housewives, while university and postgraduate students represented not quite three-quarters of the mothers' occupations. The vast majority of dads lived in cities, and over three-quarters of them had jobs. According to the researcher, the sample consisted of nursery school students, and the majority of these kids had highly educated parents who worked, which can be the reason why they don't give their kids the proper attention because they spend so much time away from home. 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 study findings revealed that a statistically significant difference was detected between **the studied pre-school children at** wasting children at $p= 0.006$, and **male pre-school children at** $p= 0.006$. This is consistent with a study carried out by (Ramy, et al 2022) "Prevalence and determinants of wasting among under-5 Egyptian children" which found Earlier research made a similar conclusion with 26% higher odds of wasting in male children than their female counterparts and postulated biological and social factors for explaining the sex difference in wasting .

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 Under nutrition among Preschool Children" which found stunting (23.5%) among participants. From the perspective of the researcher, it confirmed a lack of health awareness among mother's inappropriate feeding practices, lack of dietary diversity, and insufficient complementary feeding practices.

More than thirteen percent of the preschoolers in the study were underweight, according to the current study. These outcomes are quite close. The same findings were observed in the study "Factors Associated with Childhood Stunting in

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Four North African Countries" conducted by (Nagwa et al., 2024). However, unlike the (George et al., 2021) study "Prevalence Of Under nutrition among Preschool Children," which found that 25.4% of children were underweight, food insecurity in Egypt is associated with 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, according to the researcher.

According to the findings, there were statistically significant differences between the preschoolers' wasting and the personal information of their moms who worked (17.4%) compared to those who did not. According to the researcher, a working mother has a lot of stressful responsibilities and does not have enough time to watch her child's needs for growth and development.

According to the current study's findings, there was a statistically significant difference between children who were stunted and their moms who were employed and had a basic education and their fathers who were skilled workers and lived in rural areas ($p=0.000^*$). In their study, "Prevalence and predictive factors associated with stunting in preschool children," (Huda et al., 2024). Discovered no significant relationship between stunting and family size, mother's occupation, age, or socioeconomic position ($p\text{-value} > 0.05$). 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 current study's findings, there was a statistically significant difference between the preschoolers who were underweight and those who belonged to a low socioeconomic class ($p=0.029^*$). The study found that ignorance, poverty, occupation, large family size, and poor income were all confirmed. These are the actual elements that define malnutrition in society since they have the greatest influence on living standards.

These current study's findings, there was a statistically significant difference between stunting children was found in the current investigation. According to a study by (Getnet et al., 2022), "Prevalence of stunting and associated factors among preschool children: A community-based comparative cross-sectional study in Ethiopia," a higher percentage of stunting (46.6%) was seen in male preschoolers than in female preschoolers (33.4%) in the entire study sample, which did not include the second child most affected by stunting.

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 belonged to a low socioeconomic class, and belong families living in rural residences and Understanding the relationships between this stunting and wasting of under nutrition may help to increase the effectiveness of intervention measures to improve growth.

5. CONCLUSION

Based on the present study results, the study found that acute malnutrition was present at a significant level. It mainly implies that low household socioeconomic level was a strong predictor of acute malnutrition (wasting and stunting). Thus, special attention should be paid to therapies that target the root causes of acute malnutrition in preschool-aged children.

6. RECOMMENDATIONS

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

- Health education about diet, especially during the first 1,000 days of life, is the primary line of defense against stunting. The following recommendations are offered in light of the current study's findings:
- Learn about the nutritional status of some Egyptian children.
- Create appropriate nutritional instruction, particularly for people from low income families.

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- Knowledge program: It is essential that parents be inspired to give their children a healthy environment and the right preventive measures to enhance growth, as well as that they receive sufficient knowledge about child nutrition from the government and healthcare organizations. To encourage healthy habits among its citizens, the government must implement a program of health and health justice policies.

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