

Effects of maternal employment on nutritional status of children

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CHAPTER-I INTRODUCTION

Kids are the future of society, and mothers play a crucial role in safeguarding that future. The primary objective of every household and civilization should be to raise excellent beings who are physically, psychologically, socially, and mentally developed. Nutrition serves as the foundation for human health across all age groups. Particularly, children require adequate nutrition and protein to fulfill their energy needs and to support their cell growth and development. In recent years, malnutrition has emerged as one of the most significant threats to children's survival and overall development (1)

During the preschool stage, children require heightened attention due to their fast growth and development. This phase makes them exceptionally prone to malnutrition, which can have far-reaching consequences for their future and severely impact their physical and mental well-being. Lack of nutrition among pre-schoolers is alarmingly prevalent in the continent of Africa, with available data indicating that approximately half of the kids in this age group category go through varying degrees of malnutrition. Lack of nutrition make weak a child's immune system, contributing to over 50% of deaths related to diseases which happen from infection in this age group(2).

Throughout the preschool period, children typically rely on their mothers to meet their nutritional requirements. Therefore, it is argued that the mother's condition within the family may influence the nutritional status of her child Although working mother can add to family profits, more than a few studies propose that it may be harmful to kids health. This study employed a countrywide representative sample of 12,888 Egyptian children aged 0 to 5 years to look at the impact of mother work on child nutritional indicators, such as stunting, wasting, underweight, and overweight (3).

To account for observable and unobservable household characteristics and determine the underlying effects of maternal employment, a variety of estimation techniques were used, including propensity score matching (PSM), ordinary least square (OLS) regression controlling for a wide range of individual characteristics, and an instrumental variable two-stage least squares (IV 2SLS) approach.

The link between child malnutrition and mother employment is rather moderate by PSM and OLS data. The IV 2SLS research, however, points to a greater and more substantial connection between mother work and children's low nutritional status. (4)

Obesity has emerged as a significant health concern surrounded by children in the United States today. In the past thirty years prevalence of weight problems between children has escalated to the extent that it is often referred to as an epidemic. In the earlier periods, approximately 4% of youngsters aged 6 to 11 were deemed to be overweight, but this figure has more than tripled to 13% (Centre for Disease Control)(5).

However, it is significant to note that the prevalence of childhood weight problems varies considerably based on socioeconomic status. For instance, in the 1963-1965 period, just 1.7% of black boys were recorded as overweight, but this rate has increased nearly tenfold to 15.1% for black boys, 18.8% for Mexican American boys, 17.4% for black girls, and 11.7% for white girls(6).

Children from poor families and those with less educated parents are notably higher likelihood of being overweight. The escalating issue of childhood obesity is a concern for authorities in public health and researchers. On a fundamental physiological level, the explanation of this surge in childhood obesity is obvious.: gaining weight occurs when energy intake surpasses energy expenditure. However, what remain unclear are the factors that have disrupted the equilibrium between energy use and output over the past thirty years. It is essential to investigate the causes of childhood obesity, including Outside factors that might affect energy use or intake. Some experts have emphasized elements like the availability and intake of fast food that is high in calories and increasing television viewing, and reduced physical activity. Nevertheless, this explanation raises the question of why these behaviors have distorted despite the long-standing presence of fast food and television for several decades(7).

In the United States, 71% of mothers are employed, considering the predominant role of mothers as primary caregivers. Concerns related to the trade-offs working moms must make between time spent at work and time spent at home are raised by the rising trend of maternal employment (8).

Many nations and jurisdictions have put legislation in place that allow women to take paid or unpaid leave in order to increase the amount and quality of time that mothers spend with their newborns.

After giving birth, These evaluations are founded on the knowledge that a child's cognitive and emotional development depends greatly on the infant life. Countries such as the United States, Canada, Denmark, the United Kingdom, and states like California have implemented such policies(9).

However, the health of children and maternal employment over a longer time period remains unknown. According to the Bureau of Labor Statistics, 71% of mothers in the United States were employed, given their continued role as primary providers of childcare. This Concerns relating to the trade-offs working moms must make between time spent working and time spent at home are raised by a growth in maternal employment(10).

Adolescents' subjective health is negatively correlated with prolonged parental unemployment, and this correlation is true even when social status and financial stress are taken into account(11).

In modern times, a majority of mothers have joined relative to prior generations, the work force. The nutritional state of the kid is impacted by the mother's work and has an impact on feeding patterns. Studies have shown that child weight is closely connected to BMI for the mother, but not for the father. Child health and future dietary choices are significantly influenced by feeding practices (12).

Enhanced nutritional intake in children has been associated with improved educational achievements among children in Malaysia. Research indicates that mothers who have inconsistent work shifts encounter difficulties in preparing meals and establishing regular activity schedules for their children. Moreover, the study revealed a noteworthy rise in a child's body mass index (BMI) when their mothers worked irregular hours. Consequently, children with working mothers were found to have a higher likelihood of displaying unfavorable eating patterns and spending more time inactive activities than kids whose moms were not working (13).

Multiple studies have established a association among childhood obesity and maternal employment. The majority of these studies indicate a higher occurrence of childhood obesity in mothers who are employed compared to those who are unemployed(14).

For instance, one study uncovered a greater probability of overweight children among mothers who worked full-time. Likewise, another study observed that longer working hours were linked to an elevation in the child's body mass index (BMI)(15).

A study was done in Malaysia where the women aged between 25-35 years were established as major working women or mothers which had blocked the breastfeeding to their child or infants in a time period which was less than three months. If we consider Chinese and Indian mothers they have higher threat of stopping the breast feed to their child as compared to the Malay mothers and this can be caused by less facility to breast feed their child at their work places. However, these findings were contradicted by a study which claims there was a quantity of evidence linking mother's working hours to a reduced BMI in children, possibly due to the children spending more time in school or childcare. Likewise, a cross-sectional study found no relationship between 8 to 9 hours job employed mothers and child BMI. Instead, According to the study, obese/overweight children were more prone to engage in screen time and lack of study time, and sleep less than 10 hours per night, contributing to their overweight/obesity(16).

Well in early studies it was found that the cow milk can cause iron deficiency in child or infants because the cow milk is considered as the poor source of iron. Stunting and wasting is the types of malnutrition and can be stopped by feeding practices. There are some rules which were introduced by the Infant and young care feeding. The study also noted that the relationship between early development patterns and future growth (17)

In addition it is reported that, the better nutritional status of the child the better results in educational achievement and better growth and development of the child in Malaysia. The study also stated that, thin or weak children can lead to the low BMI in future (teenage or adulthood) and it can also lead to the disease and decrease their work efficiency and also increase the rate of mortality and morbidity. The children which are overweight or obese have higher blood pressure, low density lipoprotein and hypertriglyceridemia present in 6 to 11 years of age in Kolkata(18).

Well this study will give us the information about the kids nutritional condition of employed and also unemployed mothers aged 4 -6 years in the targeted area which is kinder garden in Selangor, Malaysia. This aims to get nutrition status of child on the basis of maternal employment in Malaysia, Selangor. And these studies help to build new policy and effective intervention for optimizing the child nutrition status in Malaysia(19).

There has been a noticeable rise in the proportion of working-age women who are mothers in recent decades. In 1975, the Bureau of Labor Statistics reported that 54.9% of women with children between the ages of 6 and 17 were employed in the civilian sector. This percentage increased to 79.4% in 2001, but it slightly decreased to 76.9% in 2005. It is important to take into account both the costs and advantages of women's labor force participation in order to properly understand the economic ramifications. Potential effects on the health and welfare of their children are one important factor. Poor child health can impair a kid's development in addition to having direct financial repercussions like increased healthcare costs and use, child's cognitive development, Furthermore, an expanding body of research indicates that childhood experiences can have long-term effects on adult health(20)

From 50% in 2014 to 49% in 2018, the percentage of women in employment decreased somewhat over the world. The gender wage gap is progressively closing, though. With rates of 69% compared to the worldwide average of 65%, the percentage of women in work is higher in emerging nations, especially those in sub-Saharan Africa. According to certain research, working mothers have less time for because of the demands of their employment, childcare. However, some research have discovered that the amount of time spent at work does not always translate into less time spent providing children with physical and interactive care. Additionally, it has been found that income from job might improve a child's diet and overall health.

Development Goal 8 is to encourage inclusive and effective economic growth and employment for all. Additionally, Goal 2 of the Agenda for Sustainable Development aims to address problems including poverty, food security, and better nutrition, all of which are directly impacted by maternal work. In Uganda, for instance, eradicating all types of hunger is one of the main goals of the National Development Plan II, which will eventually move the nation into middle-income status. The health of both the mother and the child is affected by maternal work. Factors like financial standing and child care methods have an impact on the connection among mother work and kid's nutrition. The contribution of women's income to household food and health budgets is critical. But on the other hand, work that On the other hand, employment that requires the mother's absence may lead to partial weaning or discontinuation of breastfeeding and the inability to closely check kid's feeding and care(21).

The relationship linking by mother employed during the first year of a child's life and subsequent child growth has been extensively explored by developmental psychologists and

researchers from various fields. However, many questions remain regarding the impact of first-year mother employed on children's outcomes. This review article examines existing theories and prior research on the link between first-year maternal employment and child development, highlighting key hypotheses, findings, and unanswered questions. Drawing from developmental psychology, sociology, and economics, the review explores the home environment, time management, role conflict, family stress, investment, human capital, specialization, and selection, to name a few. Additionally, the study combines empirical data from a variety of fields, such as demography, public health, and public policy.(22).

The presence of mothers at home, prioritizing family and children, has traditionally been viewed as a form of family investment ensuring the future welfare of children. However, there is an increasing number of As seen in the Indonesian context, where 50% of married women aged 17 to 70 worked outside of their homes in 2013, moms choose to join in the labor market (23).

Objectives:

1. To assess the nutritional status of the children of employed and unemployed mothers.
2. To assess the dietary habits of children of employed and unemployed mother.

CHAPTER-II

LITERATURE REVIEW

Well the maternal employment can affect the child nutritional status and also the dietary intake. The affect of maternal employment is considered in two forms. One is increase in the income of the family and the second is decrease in the time availability in the house hold(24). Efficiency and household preferences differ depending on the number of hours worked and are like to have a important in these relations. It can comprehensive measure inputs were devised and using a concept called differentiation which can be is characterized as the ability to process a variety of information kinds. And these concepts were indentified at both the household and maternal levels(24).

Over the past two decades, Europe has experienced a significant rise in the employment rate of women. Political and popular debate has connected this rise to possible harm to children's development and health, including obesity. We performed a review using data from the IDEFICS project, which included children aged 2 to 9 from 16 areas across 8 European nations, to look at this link between mother work and childhood obesity(25). By studying various anthropometric and other measurements, we aimed to investigate the impact of maternal employment on the main causes of obesity, such as excessive calorie intake and lack of physical activity. Although the study provided limited evidence of a connection between maternal employment and childhood obesity, it did reveal associations with calorie intake and physical activity levels(26).

We used linked mother-child information from the nationwide longitudinal survey of children and applied econometric techniques to better control both obvious and unobservable characteristics across people and their households that may affect both maternal employment habits and child weight. According to our findings, children whose moms employed more hours every week throughout their lives are more likely to acquire weight or be overweight. Specifically, the analysis revealed that higher socioeconomic status mothers who work intensively have a greater chance of having overweight children (27).

Additionally, our study discovered that, in comparison to children of nonworking moms, children of full-time working mothers often had lower overall Healthy Eating Index scores. Even after taking into account variations in maternal and household factors, these kids still

consume less iron plus fiber, as well as more soda and fried potatoes .These dietary variations between children whose moms worked and those whose mothers did not work were more apparent and did not follow a clear pattern. (28).

Several theories emerge when considering the potential connections between childhood obesity and mother work. Firstly, There are several household factors that might affect how many calories are consumed and expended by both parents and children when a woman chooses to work outside the home. To distinguish between the many activities moms engage in, it is crucial to note that the mother spends less time at home. Previous evidence suggests that employed mothers allocate less time to activities such as housework and homemaking and instead prioritize time with their children to compensate for their increased work hours (29).

Additionally study has shown that mother job and away from home food costs are positively correlated, with households with part- and 8 to 9 hour job employed moms spending more on meals out, fast food, and specialized shops. These foods often have higher calorie and fat contents (30). Additionally, moms who spent longer away from home are more inclined to leave their kids in the care of relatives, daycare centers, or schools. The standard of the food served and the childcare in these situations play a crucial role. Research has demonstrated that higher-quality childcare can positively impact child development, and it may also impact dietary intake and eating habits (31).

Another aspect to consider is that when children have less parental supervision, they may spend more time indoors playing video games and watching TV are signs of sedentary activity. They are more prone to choose unhealthy foods when buying or making their own snacks in these situations. According to studies, youngsters who are left unattended and unmonitored are more likely to select unhealthy, calorically loaded foods that are deficient in nutrients. Within each income bracket, this disparity is present. Additionally, food bought outside the home often has higher calorie and fat content. Additionally, servings at restaurants and fast food outlets have been bigger, and studies have shown that this encourages people to eat more. However, the Children under have not been found to be affected by portion size at the age of 5(32)

A mother's employment has a complicated effect on her child's weight, which is influenced by a number of variables, including household income. Household income often rises when moms enter the workforce, which can improve a child's health. It's crucial to remember, too,

that this extra money may also be used to treat oneself to indulgences like calorie-dense restaurant meals. Children may also receive a portion of the additional money as their weekly allowance, and they frequently choose to purchase sweets over healthier foods, which might result in weight gain (33).

Kludges et al. conducted a study that revealed a tendency among children to decide unhealthy, high-calorie foods with low nutritional value when unsupervised and unmonitored. The consumption of unhealthy foods and the overall calorie content of meals were observed to decrease with the presence and intensity of parental supervision. (34). It can be inferred that when mothers enter the workforce, household income increases, which may positively impact child health, although the effects may vary across different socio-economic groups(35).

On the other side, families may also splurge on luxuries like restaurant meals, which frequently have higher calorie counts, with the extra money. Children may also get a portion of this additional cash as a weekly allowance. Children frequently choose sweets over wholesome snacks, which might lead to weight gain. (36). The effects of mother work on a child's weight, however, are complicated, likely to be non-linear, varied among various groups, and challenging to ascertain with precision. (37).

Anderson et al.'s influential paper on the impact of maternal employment on child weight has led to a significant body of literature on this topic. Few studies from continental Europe exist, with only two studies found in Spain and Denmark , Garcia et al(38).

Garcia et al. found that maternal employment increased the likelihood of childhood overweight and obesity based on data from the Spanish National Health Survey. Conversely, Grave's study using data from the Danish Longitudinal Survey of Children found that increased maternal work hours may reduce child obesity at the age of 7(39). The subject of previous studies on mother employment and child obesity, We are alert of very few studies that specifically examine the impact of maternal employment on meal patterns and diet, even though some do show that maternal employment has an optimistic impact on spending on purchased meals (Horton and Campbell, McCracken and Brandt, and that such meals tend to contain more calories and fats). (40).

Previous studies primarily focused on obesity while some studies the link between childhood obesity and mother employment. While some studies indicated that maternal employment

absolutely influenced expenditure on purchased meals, which often contained more calories and fats, only a few in a straight line analyzed the effect of maternal employment on meal patterns and diet. Demonstrate how a mother's job situation influences her children's eating habits in a way that might result in weight issues among a sample of 12- to 13-year-old Japanese schoolchildren. There are additional studies on teenage eating habits and mother employment (41).

For instance, NeumarkSztainer et al. discover that family dinners are less frequent in the United States when moms of teens between the ages of 11 and 18 are full-time workers. Meal habits of adolescents and mother work were more often examined, with findings suggesting that full-time maternal employment reduced the frequency of family meals in the United States(42).

Research examining the direct relationship between maternal employment and children's calorie intake is limited. Studies on physical activity indicated that children of employed mothers tend to watch more television compared to children of non-employed mothers (Brown et al.; Fertig et al.; Zion et al.). However, no studies have utilized accelerometer data to evaluate the relationship between maternal employment and child obesity(43).

UK is the main country in Europe that has a few examinations on this point. Scolders based on data from the British National Child Development Study (NCDS) demonstrate that a child who has a mother who works full-time when they are By around 5.5 percentage points, children aged 7 have a higher probability of being overweight by the time they are 16 of age (44). Similarly, using information from the UK Millennium Cohort Study (MCS), Hawkins et al. examined the connection between mother employment and overweight in children aged 3 In conclusion, research on the connection between parental work and childhood obesity shows complicated and variable impacts. While some studies suggest a positive impact on child health due to increased income, others highlight potential risks such as increased use of junk foods and sedentary behavior. For a better understanding of the connection between maternal employment and meal patterns, physical activity, and child obesity(45).

Offspring of utilized moms ordinarily observe more TV as contrast with the offspring of moms who are not utilized. Similarly, Fertig et al. used diary data from the Panel Study of Income Dynamics (PSID)'s Child Development Supplement (CDS). expose the fact that a child's preference for activities like reading and watching television is influenced by a

mother's employment. In a more recent research, Bonze and Greve found no indication of a relationship between parental working hours and children's time allocations using data from the Danish Time-Use and Consumption Survey (DTUC) (46).

A comparable outcomes got by Zion-Visitor et al.(2012) utilizing information from the U.S. Public Longitudinal Overview of Youth. They demonstrate that paternal work hours have no effect on the child's BMI; however, for children of highly educated mothers, there is a connection between maternal work hours and the child's BMI, which is partially mediated by time spent watching television. A more straightforward measure for the degree of kids' actual work can be gotten utilizing information from accelerometers. However, to our knowledge, no analysis of this data has yet been done to determine the relationship between mother work and childhood obesity(47).

In United States many of research is conducted to investigate the sequel of maternal employment on children. The outcomes of this research are blended in some studies it shows that first month of child life of maternal employment interrelated with less but eloquent, neglect in children's consecutive outcomes, especially when mothers have to work more than 30 hours very week(48).

Distinctiveness of a child can effects both mother's work decisions and his academic outcomes and performance. Mothers have to focus more on their child lifestyle and up bringing specially those who are not doing well performance in social and academic levels mothers have to spend more time with their child rather than spending in work or earning. On the other hand there are some mothers who have great aptitude and education and they can manage both work and child bringing and their child may manage to get good grades in school. Many early papers in this research made experimental methods with neglected element that could connected the both maternal employment and child bringing success. If maternal features is ignored there is likely to be partiality to estimate the relationship between working mothers and children's consecutive academic performance(49).

The research was conducted to assess the result of working mothers on children's academics act. This research was conducted in Danish the data from 135,000 were obtained from the birth to 9th grade. In this research they include first three to first fifteen years which point out average grade of 9th. They conduct this study on rich set of households with good education and compare it with local household unemployed child. They found out the optimistic impact

of mother employment on kids academics performance specially when mothers work part time. This literature as compare with others who have different context related to mother employment and Studies discover that parental work has little to no impact on the cognitive and academic development of children. (50).

Mothers have to concern about their child upbringing and for that there all focus should be on their child health and what they need to be well being and along with that they have to focus on their academic performance and for that they have to reduce their works hours. Recent research have shown that there is a optimistic result of mother education on child outcomes. However some research invested that there is a optimistic result on mother education and as well as negative impact of that. Its important for mothers to complete their education after the child born to understand the impact that maternal education is important. Increase maternal education increase child academics performance along with that higher quality home learning environment have good academics and behavioral outcomes(51)

The reason of maternal employment increase due to increase demand of household income which gives mother extra burden. In Ethiopia , malnutrition is a serious health issues now a days. This study's goal was to determine how working mothers' nutritional health affected kids in Abala town, north Ethiopia, who were between the ages of 6 and 59 months. A cross-sectional survey of 723 kids aged 6 to 59 months found that 361 of them were employed and 362 were jobless. A simple random sampling method were used to collect the data. The study found the results of overall prevalence of nutritional status of wasting, stunting, underweight the result shows 12.1%, 30.5% and 24.3% in that order. This study shows that malnutrition is the main health issue in Ethiopia. As compare to employed mothers the prevalence of stunting and wasting found more in unemployed mothers(52).

Rich set of house hold provide good effect on child bringing as it provide variety of food and nutrition which they need. There are 5 recent studies which shows that there is no positive or unenthusiastic result of maternal employment on kids, cognitive and behavioral impact and also on their academics performance (53).

However in some studies maternal employment show negative effect on child dietary intake. The study was conducted in Japan to see the effect. The study shows negative effect on children dietary habits. They choose 1693 pairs of Japanese in primary school of 5th and 6th grades and also their mothers. They collect data by two questionnaires one was brief self administrated and the other was lifestyle questionnaire. The consequence shows that kids of

working mothers contain extra rice through which they have more body mass index (BMI) and their attitudes towards diet and nutrition were not good because they were not taking essential fruits and vegetables (54).

The association between working mother and kids and malnutrition status has many studies on several countries. The goal of this study was to conduct casual effect of mother employment on nutritional status of child in 5 countries of South Asia. This study obtained information from 55200 children age between 0-5year by the Demographic Health Surveys (DHS). They conduct an instrumental variable approach from Pakistan, India, Bangladesh, Maldives, and Nepal. The result shows the unenthusiastic result of working mother on kids nutritional status as they were 37.9% and 33.6% were underweight. Bangladesh (39.9-26.6%) and Pakistan(28-34.4%) were on high range whereas moderate level were found in India (5.3-4.2%) and Nepal (8-9%). It shows that in present study there is an adverse effect of maternal employment(55).

Child hood obesity becoming serious issue these days. The trouble of child hood obesity has to be over come by conducting governmental policies in the beginning of school year. The policy include guidelines and awareness about child health and also include policy which include less calories intake and more physical activities. In school , due to busy schedule students don't focus on physical activities and take fast food from canteen and restaurants these are the main cause of child hood obesity that calories taken more than its burn. Culter et al. claims that fattening food and inactive lifestyles are the reason of obesity whereas Chou et al. claims that lesser the smoking and increase in the amount of fast food restaurants are accountable(56).

Many studies shows that increase maternal employment can increase childhood obesity in economy. This is because mothers who are employed don't have as much time to prepare meals at home. So that they prefer to order it from restaurants and have ready to eat meals. These meals contain more calories as compare to home prepare meal. Also skipping breakfast is another reason of obesity because after skipping breakfast they take meals in large amount which turns them in childhood obesity. So this study suggest that higher maternal employment turn into higher childhood obesity(57).

Like this, mothers who are employed have less time to spend with their children and to take a look on their activities and be a part with them. Children of employed are more sovereign in

choosing their own activities and thus they spend more time in someone else care in schools or child care centers(58).

According to rumors, parents are more concerned about their children's future health than other caregivers or the children themselves. This concern may lead to increased TV time, reduced outdoor activities, and more consumption of harmful snacks. Anderson and But argue that schools contribute to the problem by providing students with easier access to junk food and soda, which leads to weight gain. However, Bianchi's research of time usage data indicates that working women cut back on their own leisure time rather than sacrificing time with their children. (59).

Other caregivers, on the other hand, could provide a more regimented schedule with physical activity and healthier diets than parents can. In contrast to the school year, von Hippel et al. show that youngsters tend to acquire weight more quickly during the summer. Therefore, it is unclear whether increased maternal working hours directly result in weight gain(60).

A sizable amount of evidence demonstrates a detrimental association between obesity and socioeconomic level. There is disagreement on the causes of this link. Higher discretionary income can allow families to buy better food or enroll kids in activities that support healthy weight control. However, this association could also be due to selection bias, as individuals with lower discount rates tend to invest in education and prioritize their health, resulting in a healthier weight ranges(61)

While it is generally believed that higher income has a unenthusiastic impact on chubbiness, upper household revenue may lead to more eating place (if considered normal goods), potentially contributing to higher body weight. Hence, economic theory does not definitively foresee whether this channel leads to higher or lower body weight in children. Additionally, it is expected that working mothers nowadays return to work sooner after giving birth, which may limit their ability to breastfeed or continue breastfeeding (62)

A research was done. In 2006, it was shown that fathers' chronic disease and women's self-rated health were both positively correlated with mothers' long-term unemployment. However, there was no correlation between the occurrence of health problems or poorer medical conditions in children with either mothers' or dads' unemployment. Both genders' self-rated health and long-term well-being were found to be negatively impacted by both

parents' unemployed status. Even after taking education for parents and financial harm into account, long-term unemployment's harmful consequences continued (63).

The National Longitudinal Survey of Youth was used in the study to track the link over time between single moms' work status and the wellbeing of their adolescent children. For two years, 14 to 16-year-old adolescents and their moms were observed in the research. The results imply that adolescents whose moms lost their jobs without obtaining new ones suffered detrimental effects on their feeling of mastery and self-esteem compared to adolescents whose mothers were consistently engaged in secure positions. Adolescents with mothers continuously employed in low-quality jobs were more likely to repeat grades, while those with persistently unemployed mothers or mothers who lost multiple jobs faced an increased risk of school dropout and poor nutritional status(64).

In 80 homes in low-income urban districts in Nicaragua, the research also looked at the association between women's work, care-giving techniques, and the nutritional condition of children aged 7 to 12. Even after adjusting for socioeconomic position, maternal education, paternal financial assistance, the quality of the child care, the child's gender, and age, the research revealed that children with working moms had superior weight-to-height ratios than children with unemployed mothers. Even after controlling for the aforementioned factors and mother employment, children with poor child care, such as care given by preteens or care at the workplace, had lower heights for age. The study also looked at variations in caregiving practices across families based on the mother's employment position and the availability of adequate child care. (65).

Hand washing was less likely to be prioritized in households with working moms, indicating that the beneficial correlations between labor and income could be related to the income itself rather than better child care. A poor child care system was linked to less food (66).

Childhood malnutrition continues to be a prevalent issue in many regions worldwide, contributing to approximately 45% of all deaths among children under the age of five. Global statistics indicate that 24.7% of children under five suffer from stunting, 15.1% are underweight, and 7.8% experience wasting. In African countries, more than 150 million children under the age of five, accounting for 39.9% of the population, are affected by malnutrition . Among these countries, Ethiopia, located in sub-Saharan Africa, has one of the highest rates of malnutrition. According to the recent Ethiopian Demographic and Health

Survey (EDHS) report, 44.4% of children under five are stunted, 9.7% are wasted, and 38% are underweight .

The causes of malnutrition can be categorized as immediate, underlying, and basic factors. Immediate causes include inadequate or inappropriate dietary intake and infectious diseases. Underlying causes encompass limited access to child care, food, clean water, and the environment. Political, cultural, religious, economic, and social institutions, as well as women's place in society, are the basic variables. Women's employment has the potential to increase household income, leading to enhanced status and empowerment for women. This, in turn, may result in women prioritizing spending their earnings on health and nutrition(67).

Consequently, women who have control over their income and decision-making authority within the household can take actions to improve their children's nutritional status. However, maternal employment can also have negative effects on children's nutritional status, as it may reduce the time mothers can dedicate to caring for, feeding, and breastfeeding their children, leading to increased reliance on alternative caregivers. Therefore, this study aims to investigate the relationship between maternal employment status and the nutrition and health status of children. The findings of this research are expected to provide valuable insights for government and non-governmental organizations, facilitating the development of effective intervention programs to improve child health and nutritional outcomes(68).

Considerable research There is a link between mother work and the nutritional condition of children, according to research undertaken in low- and lower-middle-income countries (LLMICs). The impact of parental employment and occupation on the outcomes of a child's development, however, is not well understood. Furthermore, little empirical research has been done to determine the processes by which the parental profession influences child outcomes. In addition to monitoring childcare methods and the empowerment of women as possible variables, this study sought to evaluate the links between maternal and paternal work (particularly comparing farm and non-agricultural employment) and child development. The study utilized data from nine Demographic and Health Surveys conducted in Benin, Burundi, Cambodia, Congo, Haiti, Rwanda, Senegal, Togo, and Uganda, involving 8,516 children aged 36 to 59 months.

In order to determine the relationships between parental employment and child development, early childhood care and education program (ECCE) attendance, child supervision (ensuring the child is not left alone or with an older child for more than one hour), and child stimulation

(measured by the number of activities provided by the mother, father, and other household members), generalized linear models were used and the empowerment of women. All of the dads and 85% of the mothers in the tested population were working, and 40% of households had two parents who worked in agriculture. The study indicated that parental agricultural work was linked to lower child development compared to non-agricultural employment after accounting for numerous household, child, and parent-related confounding variables. (relative risk (RR) 0.86 (95% CI 0.80, 0.92)), greater child stimulation provided by other household members (mean difference (MD) 0.26 (95% CI 0.09, 0.42)), inadequate child supervision (RR 0.83 (95% CI 0.78, 0.80)), lower attendance in ECCE programs (RR 0.46 (95% CI 0.39, 0.54)), and reduced women's empowerment (MD -1.01 (95% CI -1.18, -0.84)). These According to research, parental involvement in agriculture may be a serious risk factor for young children's development. To more fully understand these complex linkages and to offer guidance for treatments and policies that benefit working parents in the agricultural industry with young children, more research using more complete exposure and outcome measures is required.(69)

In 2018, according to Food and National Research Institute of the department of sciences and technology (DOST) find out that there were 30.3% children of Philippines under the age of five were stunted. In 2017 a survey conducted by save the children by International child welfare organization which reported that Philippines rank on 96 in terms of stunting among 172 countries. Prolong and repeated episodes of malnutrition beginning from mother's pregnancy reported stunting which is the form of under nutrition. After this survey in 2018 it is pointed out that stunting has to be taken seriously because it effects child social survival, productivity and educational performance.

It is very difficult for child to survive out if he got stunt in their growth and cognitive. Previous studies show that there are negative and positive effects of maternal employment and child nutrition status. Rashad and Sharaf in 2019 found that there is negative effects of maternal employment on child stunting in Egypt. As compared with employed mothers the unemployed mother's children were 30% less stunted. The children of mothers who work in agriculture or manual works were more stunted than the mothers who works professionally in offices in Uganda.

One the major reason of children bad health or stunting in Philippines was parent's low education. This study analysis the effects of maternal employment along with mother's

education, civil status and wealth and child age, gender and number of siblings in Philippines. This research uses the data from logit regression and from 8th National Survey 2015 of the Department of Sciences and Technology and Nutrition Institute. Results showed that child stunting can be decreased if mothers are educated. It was found that male children whose age was 25-36 months were more stunted. Based on logit regression, policies should focus on employed mothers, especially those whose work is about agriculture or manual, and also focus on mothers' education to avoid child stunting. Serious attention should be given to children's age, sex, and family poverty (70).

In Ethiopia, there have been efforts to reduce morbidity and mortality rates among children under 5 years of age, as well as to promote breastfeeding and exclusive breastfeeding (EBF). However, progress in these areas has been limited in the past decade. Currently, 85% of infants between the ages of 12 and 17 months and 76% of infants between the ages of 18 and 23 months are breastfed. Furthermore, 6% of infants under the age of six months do not receive any breast milk at all.

One of the reasons for this trend is the rapid increase in maternal employment, driven by the need for increased household income due to rising food prices. Research studies have shown that children of unemployed mothers are at a higher risk of developing wasting, which is often an indicator of critical nutrition deficiency and predicts child mortality.

Malnutrition can be caused by various factors, including inadequate dietary intake, disease, poor diet, severe and repeated infections, and maternal education. Employed mothers are less likely to practice exclusive breastfeeding compared to unemployed mothers. Non-exclusive breastfeeding can have long-term impacts, such as poor school performance, reduced productivity, and impaired intellectual and social development (71).

The sustainable development goal aims to improve child health and aims to eliminate preventable deaths of newborns and children within 1000 days by 2030. All countries are striving to reduce neonatal mortality to a rate no higher than 12 per 1000 live births (4, 9). However, despite their employment outside the home, women are still burdened with their domestic responsibilities, resulting in a double burden of work and childcare.

This combination affects not only the mother's work but also the quality of childcare provided. The highest prevalence of malnutrition (wasting) is observed in young children aged 6–23 months, but there is limited literature available on this specific population group.

No previous studies have been conducted on this topic in the Bale Robe area of the Oromia Region, Ethiopia. Therefore, it is crucial to gather evidence on the nutritional status of children aged 6–23 months with employed and unemployed mothers in this region for future actions(72).

The ability of women to control their fertility through contraception and abortion has been found to have positive effects on education and employment. However, once women transition into motherhood, their employment and wages often decline significantly. It is unknown whether the effects on employment, working hours, and salaries are different for women who planned their transition into parenthood compared to those who did not. About one-third of births are unintentional. We conducted a study utilizing panel data from the National Longitudinal Survey of Youth, which spans from 1979 to 2014, using fixed-effects models to answer this issue. We analyzed both White and Black females. The findings show that among White women who planned their transition into parenthood as opposed to those who had an unanticipated first pregnancy, the association between motherhood and work is much more unfavorable. When it comes to first pregnancies, those who were employed often worked less hours and made less money than those who had unexpected pregnancies. The connection between parenting and labor market outcomes among Black women did not appear to change significantly according to fertility planning, however.

Prior studies have emphasized how cultural expectations, conventions, and job markets that may not easily accommodate parenting might impact women's choices. Our findings may be explained by variations in women's preferences for parenthood and employment, as well as in their capacity to carry out those desires. Additionally, our study adds to the body of knowledge already available about the detrimental effects of unexpected pregnancies.(73).

This study's goal was to identify the effects of mother work, education, and family size on the nutritional status of kids. From September 2015 to April 2017, the case-control research was carried out at the OPD of the Children's Hospital in Lahore. There were 340 kids in total—170 cases and 170 controls—and their mothers, who ranged in age from six months to five years. The WHO growth charts were matched to anthropometric measures. 170 controls (>-2 SD) and 170 wasting children (<-2 SD) were matched. Comparisons between the cases and controls were made for maternal employment, education, and family size.

Confounding factors were identified and grouped. Maternal education, occupation, and family size were among the factors studied in a univariate analysis to determine their

associations. Analysis using logistic regression was used to investigate the independent connection. With an odds ratio (OR) of 1.32 and a confidence interval (CI) ranging from 1.1 to 1.623, the findings demonstrated a statistically significant relationship between maternal education and growth characteristics. An OR of 1.132 with an insignificant confidence interval (CI=0.725 to 1.768) was found for mothers' work status. The odds ratio (OR) for family size was one, with a non-significant confidence interval (CI=0.8-1.21). Following the use of bivariate logistic regression analysis, the correlation remained unchanged. The nutritional condition of children is, thus, significantly and positively impacted by maternal education. It is crucial to address this key factor in order to prevent and improve childhood malnutrition(74).

Under nutrition is a key factor in the death of children under the age of five (U5) in low- and middle-income countries. This study used information from the 2016 Uganda Demographic and Health Survey (UDHS) to explore the relationship between mother employment and the nutritional health of U5 children in Uganda. In order to assess the link between mother employment and nutritional outcomes while accounting for other relevant factors, chi-squared tests and multivariate logistic regressions were performed. 3531 young children under the age of five who were born to working moms between the ages of 15 and 49 made up the sample.

The research showed that, compared to children whose mothers had no formal education, those whose moms had a secondary education had decreased probabilities of stunting and underweight. In addition, compared to infants with low birth weight, children with normal birth weight had decreased chances of stunting, wasting, and being underweight. Additionally, children with moms who worked in agriculture and physical labor had a higher risk of stunting, whereas children with mothers who worked for people who were not related to them had a higher risk of wasting and being underweight.

The top priorities for interventions aimed at enhancing the nutritional status of children with working mothers should be breastfeeding promotion, fostering flexible work environments, concentrating on households with low socioeconomic status, implementing feeding programs, and promoting the use of mosquito nets for both mothers and children (75).

As women in developing countries gain access to formal employment, understanding the potential impact on child nutrition becomes crucial. This study focuses on examining the

relationship between maternal employment status and minimum meal frequency (MMF) among children in Tanzania.

A questionnaire created from Tanzania's most recent Demographic and Health Survey (2015-2016) and extra questions designed for programmatic baseline measures were used during interviews with 5000 mothers of children aged 0-23 months. As a stand-in for kid nutrition, MMF was employed. To find correlations between work status, parenting styles, and MMF, logistic regression analyses were used. After correcting for confounding variables, carrying the kid along while working away from home, not having financial independence, and informal mother employment were all related adversely with MMF. On the other side, meeting MMF was positively correlated with receiving money in cash, bringing food for the kid, and leaving food at home for the child. The Tanzanian children's MMF was shown to be inversely correlated with informal mother work. However, actions like delivering or leaving cooked meals, having financial independence, and receiving money in cash showed considerable favorable connections. These results can direct future initiatives to reduce child stunting. (76).

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CHAPTER-III

METHODOLOGY

Study design:

The study done was cross-sectional . The collected data was used to check the nutritional status of children of employed and unemployed mothers.

Sample technique:

The type of sampling technique was convenient sampling.

Area of study:

The data was collected from allied school.

Sample size

70students was chosen for this study

Inclusion criteria:

Children of employed and unemployed mothers (7-12 years).

Exclusion Criteria:

1. Under age 7 years
2. Above age 12 years

Ethical Consideration:

First of all the permission from respective institute was taken. All data was collected with the permission of head volunteer. All the data was kept confidential.

Data collection:

The data was collected by self-designed questionnaire

Anthropometric measurement

Height:

The height was measured using a stadiometer. Each participant was asked to remove their shoes to get their height measured. Height was recorded to the nearest half inch(77)

Weight:

Weight machine was used to measure the weight of children in clothes to remain still(77)

Growth Charts:

To evaluate the nutritional status of children, anthropometric data was plotted on CDC growth charts (2000).

1. Stunting, or low height-for-age, and wasting, or low weight-for-height, are both forms of linear growth retardation that are brought on by insufficient dietary intake over an extended period of time and may be exacerbated by chronic disease. (78).
2. Low weight-to-height (wasting) Despite the fact that it might last for a very long time, it frequently signals recent and significant weight loss. When a person has not eaten enough food of sufficient quality and quantity or has experienced frequent or protracted sickness, it typically happens. (78).
3. Children with low weight for height were considered underweight(78)
4. Children with high weight for height were considered overweight or obese(78)
5. Children with high weight for height were considered overweight or obese(78)

Clinical Assessment:

The clinical evaluation involves looking for obvious nutritional deficiencies, such as hair loss, changes in eye color, skin condition, and loss of muscle and fat tissue (a indication of wasting, which is caused by inadequate calorie intake and/or nutrient loss via infection). When evaluating a child's nutritional status (7–12 years old), look for clinical symptoms of acute malnutrition such apparent wasting and bilateral pitting edema. (79).

Dietary Assessment:

For dietary assessment data was obtained from food frequency table. Malnutrition screening tool was used to assess malnutrition in participants by asking questions as mentioned in the following table.

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Malnutrition Screening Tool (MST)	
Question	Score
Have you lost weight recently without trying? 1. No 2. Unsure	0 2
If yes how much weight has you lost? 1. 1-5	1
2. 6-10	2
3. 11-15	3
4. >15	4
5. Unsure	2
Have you been eating poorly because of a decreased appetite? 1. No	0
2. Yes	1

Data Analysis:

Data was analyzed through SPSS version 25. The data was investigated by using frequency, graphs tables and applying chi-square test to find out the p-value.

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CHAPTER-IV

RESULTS

Frequency and Percentage of Gender in study population

Percentage of gender

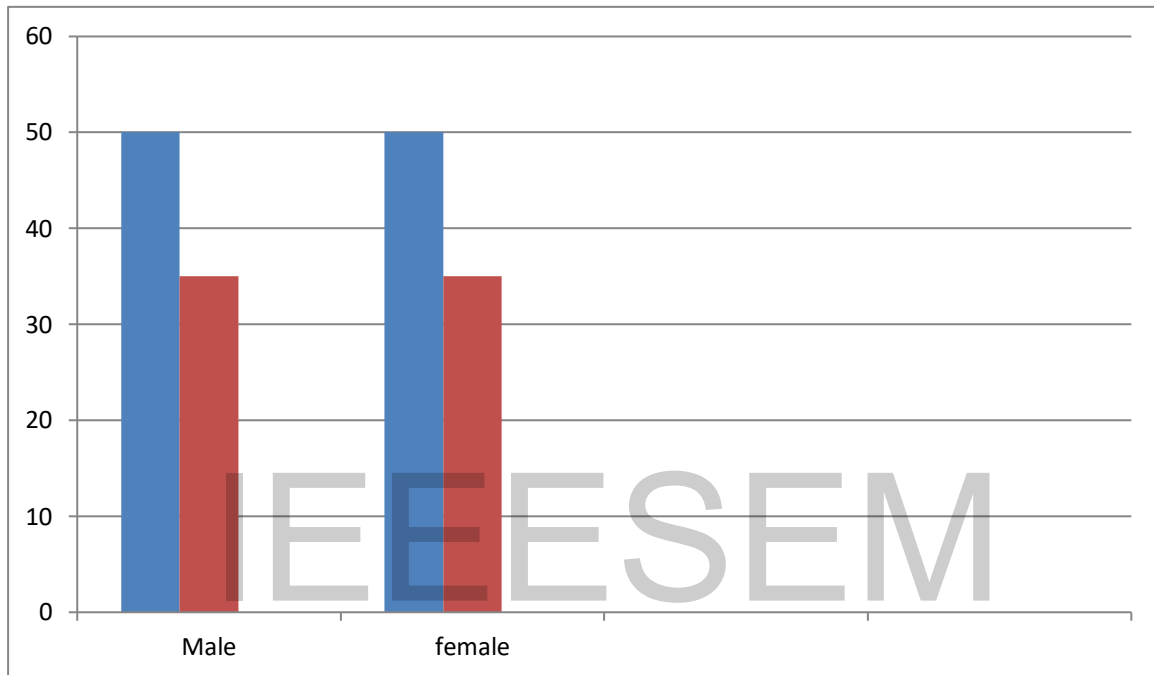


Figure 4.1: Percentage of gender and frequency

Figure 4.1 showed that the frequency of males was 35 and their percentage was 50 whereas the frequency of females was 35 and their percentage were 50.

Mean and standard deviation of age of study population

Table 4.2 Maximum, Minimum, Mean and Standard deviation of age of study population.

Age	Mean	Std. Deviation	Minimum	Maximum
7-12 Years	9.0143	1.24	2.00	12.00

Table 4.2 shows that mean age of study population was 9.0143 with standard deviation 1.24.

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Frequency and Percentage of Employed and Un-employed mothers

Table 4.3: Frequency and Percentage of employed and un-employed Mothers

Employed /un-employed	Frequency	Percentage
Working Mothers	47	67.1%
Non working Mothers	23	32.9%
Total	70	100

Table 4.3 showed that the frequency of children of employed mothers was 47 and their percentage was 67.1 whereas the frequency of un-employed mothers was 23 and their percentage was 32.9.

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Percentage of Employed and un-employed mothers

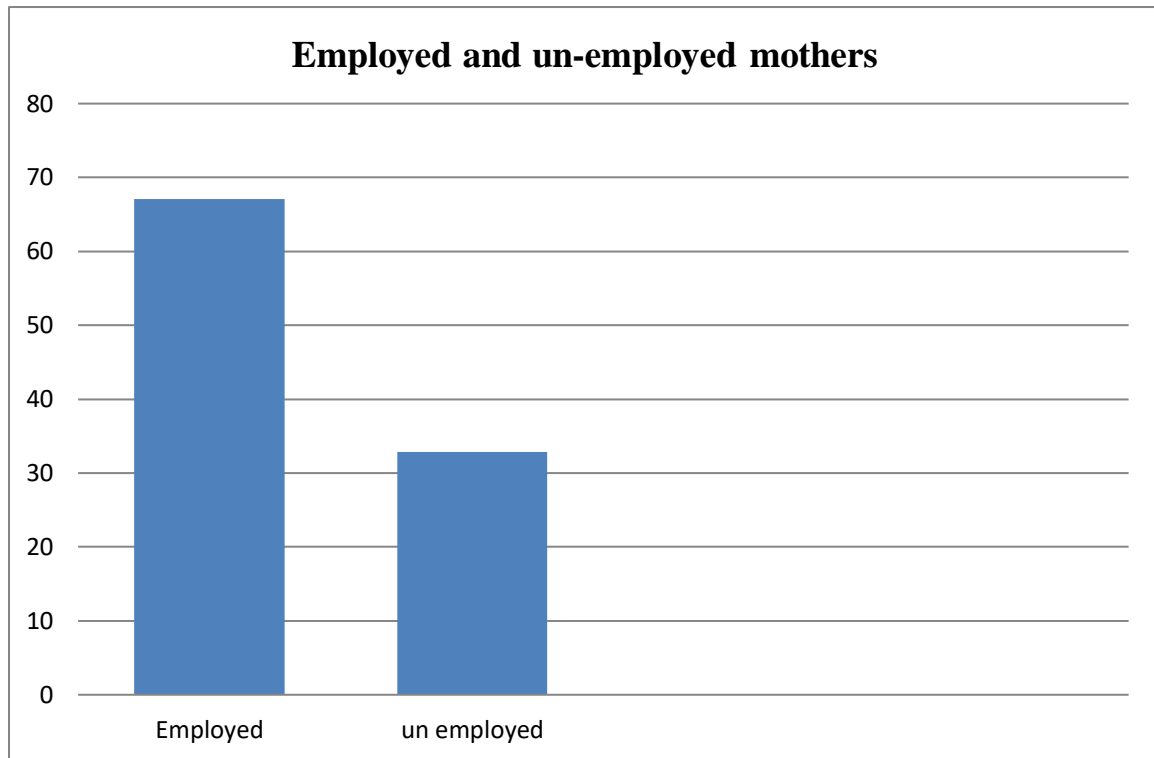


Figure 4.3.1 shows that the percentage of employed mothers were 67.1% or un-employed mothers were 32.9%.

Percentage distribution of skin color

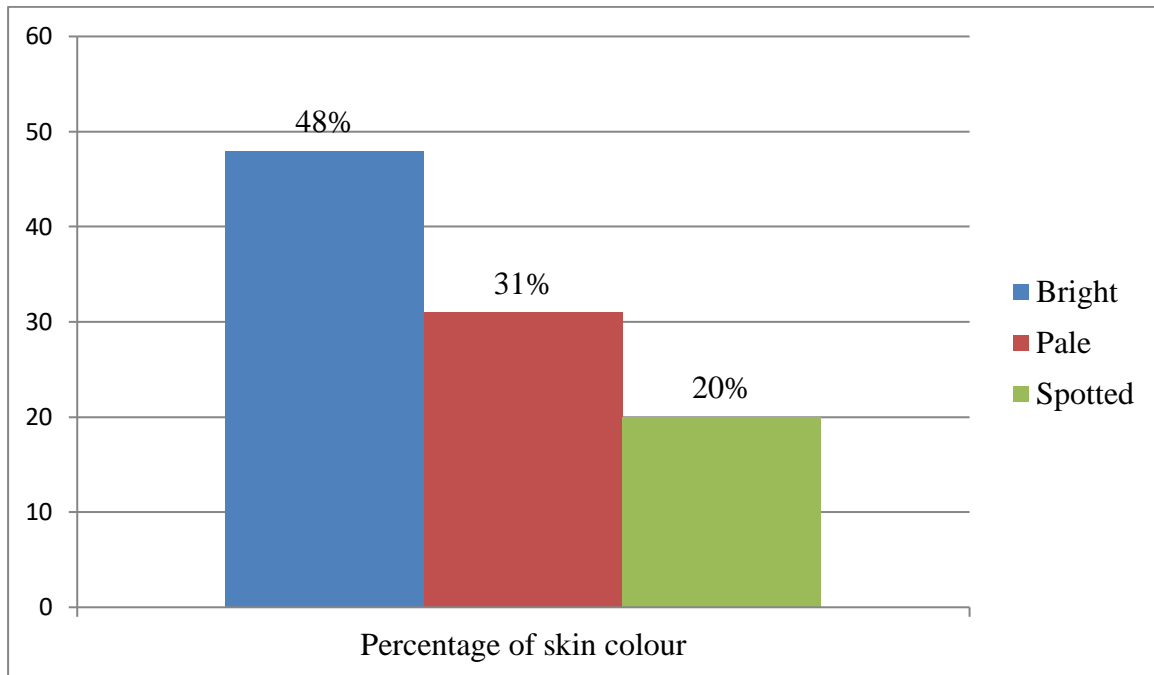


Figure 4.4 Percentage distribution of skin color

Figure 4.4 showed that the skin color of 70 children out of which 48% were pink 31% was pale and 20 were spotted skin.

Percentage distribution of Eye Color

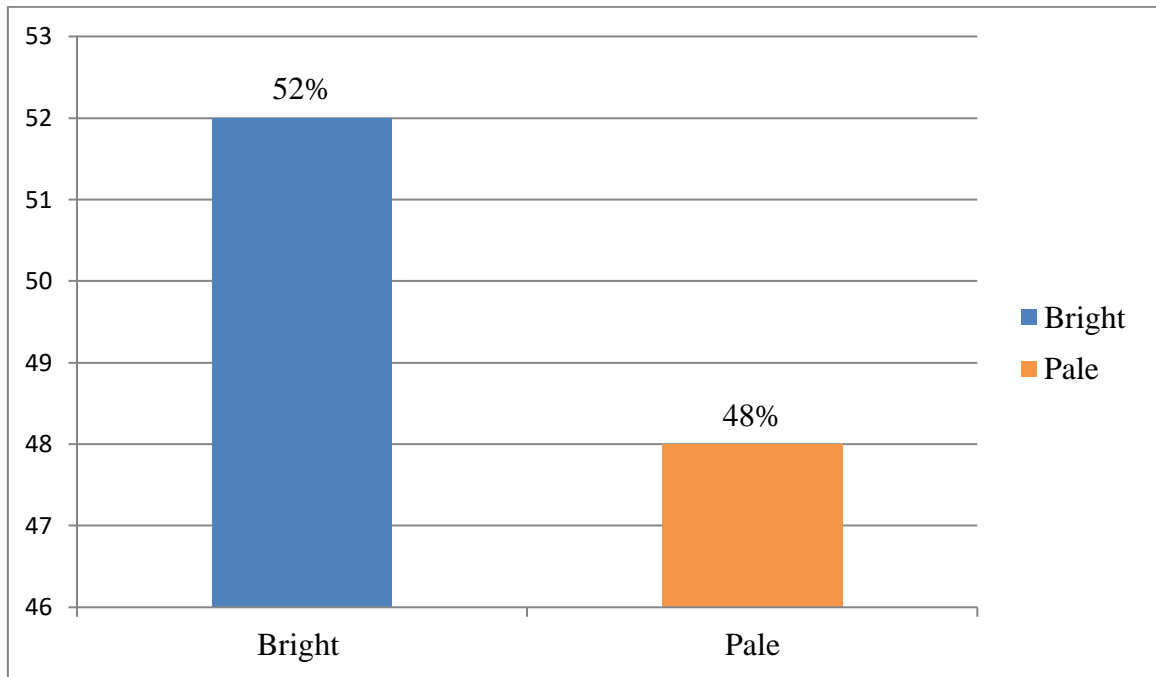


Figure 4.5: Percentage distribution of Eye Color

Figure 4.5 showed that the eye color of 70 children out of which 52% were bright and 48% had pale eyes.

Percentage distribution of nails

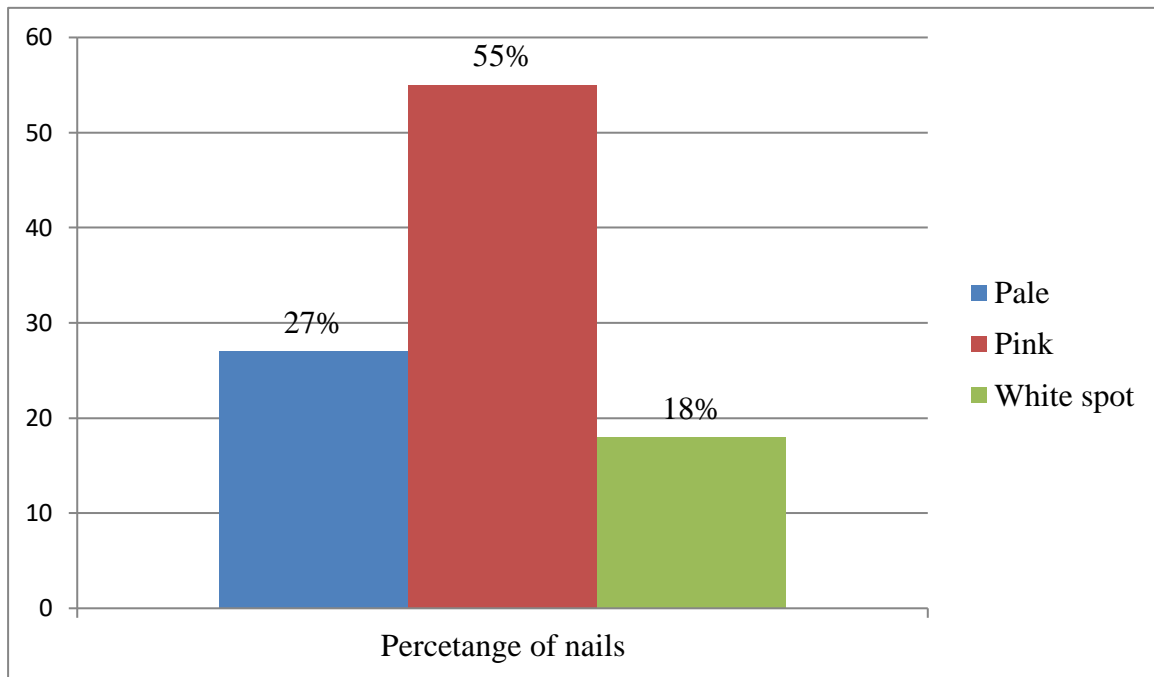


Figure 4.6: Percentage distribution of Nail

Figure 4.6 showed that 27% children had healthy nails, 55% children had brittle nails, whereas 18% children had white spots on their nails.

Percentage distribution of physical activity

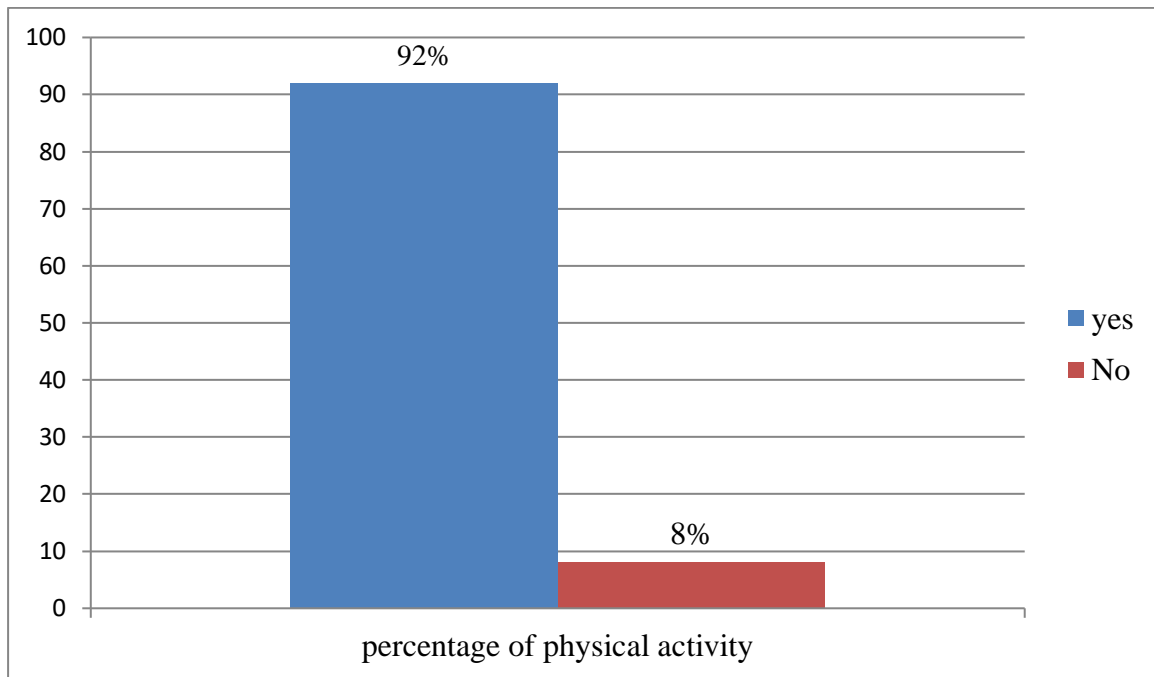


Figure 4.7: Percentage of physical activity

Figure 4.7 showed that 92% children do physical activity in their schools whereas 8% children did not do any kind of physical activity.

Frequency and Percentage of Nutritional Status of Children of Employed and Un-employed Mothers in Association with Mother Employment

Table 4.8 Frequency and Percentage of Nutritional status of Children of Employed and un-employed mothers in association with Mother Employment

Nutritional Status	Children of Employed and Un-employed Mothers			
	Employed mothers p-value 0.01		Un-employed Mothers p-value:0.01	
	Frequency	%	Frequency	%
Healthy	28	44.5	5	71.6
Malnourished	15	23.8	1	14.2
Stunting	5	7.9	1	14.2
Wasting	15	23.8	0	0
Total	63	100	7	100

(p –value < 0.05, i.e. .statistically significant).

Table 4.8 showed that children of employed mothers were 44.5% healthy, 23.8% malnourished, 7.6% has stunting and 23.8% has wasting. Children of un-employed mothers 71.6% were healthy 14.2% were malnourished, 14.2% were stunted, and 0% were wasted.

Frequency and Percentage of consumption of milk and dairy product

Table 4.9 Frequency and Percentage of consumption of milk and dairy product

Milk and dairy products	Children of employed mothers		Children of un employed mothers	
	Frequency	Percentage	Frequency	Percentage
	p-value -0.03			
Daily	41	87.4	13	54.6
1-2times/week	1	2.12	1	4.2
2-4times/week	3	6.3	1	4.2
4-6times/week	1	2.12	1	4.2
Occasionally	1	2.12	8	32.8
Total	47	100	23	100

There was no association between frequency in study sample (p -value > 0.05, i.e. statistically insignificant).

Table 4.9 showed that out of 47 children of employed mothers 87.2% milk and dairy products daily, 2.12% consumed 1-2 times /week, 2.12% consumed 2-4 times, 4-6 times/week 2.12% consumed occasionally. Out of 23 children of un-employed mothers consumed 54.6% consumed milk and dairy products daily, 4.2% consumed 1-2times/ week, and 4.2% consumed 2-4times/week, 4.2% consumed 4-6times/week, 32.8% consumed occasionally.

Frequency and Percentage of consumption of Roti

Table 4.10: Frequency and Percentage of consumption of roti

Cereals and grains	Children of employed mothers		Children of un-Employed mothers	
	Frequency	Percentage	Frequency	Percentage
Daily	1	8.6	2	21.2
1-2times/week	8	34.7	16	34
2-4times/week	9	39.1	21	42.8
4-6times/week	1	4.2	2	8.4
Occasionally	3	13.4	7	12.8
Total	47	100	23	100

There was association between employed un-employed and cereals in study sample (p –value < 0.05, i.e. statistically significant)

Table 4.10 showed that out of 47 children of employed mothers 8.6% consumed cereals and grains daily,34.7% consumed 1-2 times /week,39.1% consumed 2-4 times,4.2% consumed 4-6 times/ week 13.4% consumed occasionally. Out of 23 children of unemployed mothers consumed 12.8% consumed cereals and grains daily, 30.4% consumed 1-2times/ week, and 13.0% consumed 2-4times/week, and 13.4% consumed occasionally.

Frequency and Percentage of consumption of fruits

Table 4.11 Frequency and Percentage of consumption of fruits.

Fruits	Children of employed Mothers		Children of Un-employed mothers	
	Frequency	Percentage	Frequency	Percentage
	p-value 0.03			
Daily	16	34.1	7	13.9
1-2times/week	5	10.6	8	30.5
2-4times/week	23	48.9	5	8.6
Occasionally	3	6.4	3	47
Total	47	100	23	100

There was no association between frequency in study sample (p -value > 0.05 , i.e. .statistically insignificant).

Table 4.11 showed that out of 47 children of employed mothers 34.1% consumed fruits daily, 10.6% consumed 1-2 times /week, 48.9% consumed 2-4 times, 6.4% consumed occasionally. Out of 23 un-employed mothers children consumed 13.9% consumed fruits daily, 30.5% consumed 1-2times/ week, and 8.6% consumed 2-4times/week, and 47% consumed occasionally.

Frequency and Percentage of consumption of vegetables

Table 4.12 Frequency and Percentage of consumption of vegetables.

Vegetables	employed Mothers		Un-employed Mothers	
	Frequency	Percentage	Frequency	Percentage
Daily	8	34.7	13	27.6
1-2times/week	6	26.3	10	21.1
2-4times/week	2	8.6	16	34.1
Occasionally	7	30.4	8	17.2
Total	47	100	23	100

There was no association between frequency in study sample (p –value > 0.05, i.e. .statistically insignificant)

Table 4.12 showed that out of 23 children of unemployed mothers 27.6% consumed vegetables daily,21.1% consumed 1-2 times /week, 34.1% consumed 2-4 times,17.2% consumed occasionally. Out of 47 children of employed mothers 34.7%consumed daily 26.3% consumed 1-2times/ week, and 8.6% consumed 2-4times/week, 30.4% consumed occasionally.

Frequency and Percentage of consumption of fast food/Processed food

Table 4.13 Frequency and Percentage of consumption of fast food and processed food.

Fast food/Processed food	Children of employed mothers		Children of un-employed mothers	
	Frequency	Percentage	Frequency	Percentage
	p-value 0.04			
Daily	11	23.4	7	30.4
1-2times/week	11	23.4	7	30.4
2-4times/week	10	21.3	5	21.8
Occasionally	15	31.9	4	17.4
Total	47	100	23	100

There was association between employed, un-employed and fast food/processed food in study sample (p-value >0.05, i.e. statistically significant)

Table 4.13 showed that out of 47 children of employed mothers 23.4% consumed fast food daily, 23.4% consumed 1-2 times /week, 21.3% consumed 2-4 times, 31.9% consumed occasionally. Out of 23 children of un-employed mothers 30.4% consumed fast food, daily 30.4% consumed 1-2times/ week, and 21.8% consumed 2-4times/week, 17.4% consumed occasionally.

Frequency and Percentage of consumption of Egg, meat and meat products

Table 4.14 Frequency and Percentage of consumption of egg meat and meat products.

Egg, Meat and Meat product	Children of employed mothers		Children of un-employed mothers	
	Frequency	Percentage	Frequency	Percentage
Daily	13	27.3	4	17.3
1-2times/week	12	25.5	9	39.3
2-4times/week	17	36.6	5	21.7
Occasionally	5	10.6	5	21.7
Total	47	100	23	100

There was no association between frequency in study sample (p -value > 0.05, i.e. statistically insignificant).

Table 4.14 showed that out of 47 children of employed mothers 27.3% consumed egg meat and meat products daily, 25.5% consumed 1-2 times /week, 36.1% consumed 2-4 times, 10.6% occasionally. Out of 23 children of un-employed mothers children consumed 17. 3% consumed egg meat and meat products daily, 39.3% consumed 1-2times/ week, and 21.7% consumed 2-4times/week, 21.7%consumed occasionally.

Frequency and Percentage of consumption of Fats/Oils

Table 4.15 Frequency and Percentage of consumption of fats/oils.

Fats/oils	Children of employed mothers		Children of un-employed mothers	
	Frequency	Percentage	Frequency	Percentage
	p-value 0.03			
Daily	4	8.5	1	4.3
1-2times/week	15	31.9	6	26
2-4times/week	17	36.1	9	39
4-6times/week	8	17.0	4	17.3
Occasionally	3	6.5	3	13.4
Total	47	100	23	100

There was association between employed, un-employed and fats/oil. In study sample (p value >0.05, ie. statistically significant)

Table 4.15 showed that out of 47 children of employed mothers 8.5% consumed fats and oils daily, 31.9% consumed 1-2 times /week, 36.1% consumed 2-4 times, 17.0% consumed 4-6 times/ week, 6.5% consumed occasionally. Out of 23 children of un-employed mothers 4.3% consumed fats and oils products daily, 26% consumed 1-2times/week, and 39% consumed 2-4times/week, 17.3% consumed 4-6 times/ week, 13.4% consumed occasional

CHAPTER-V

DISCUSSION

Nutrition plays a paramount role in regulating the health of not only the mother and the children, but of the continuing lineage. Now, considering the fact that we're amidst an economic crisis, it has become hard to make ends meet. During the preschool stage, children require heightened attention due to their fast growth and development. This phase makes them exceptionally prone to malnutrition, which can have far-reaching consequences for their future and severely impact their physical and mental well-being. Malnutrition has three different types of causes: overt, covert, and fundamental. Infectious infections and an insufficient or improper nutrition are the immediate culprits. Some of the root problems include a lack of access to food, childcare, water supply, and clean environments. The primary components include women's position in society, as well as societal, religious, economic, and social institutions. Developmental psychologists and scholars from other professions have studied the association between a mother's job throughout the initial year of a child's life and later child development in great detail. The effect of first-year mother work on child outcomes is still a subject of much debate. The main hypotheses, conclusions, and open-ended questions are highlighted in this review article, which looks at current theories and earlier research on the relationship between first-year mother work and infant development. The review examines issues including connection, parenting, the home environment, time allocation, role tension, stress in the family, investment, human capital, specialization, and selection, drawing on developmental psychology, sociology, and economics. Additionally, the study combines empirical data from other fields, including demography, public health, and public policy. Women's employment has the potential to increase household income, leading to enhanced status and empowerment for women. This, in turn, may result in women prioritizing spending their earnings on health and nutrition.

Children from low-income homes and those whose parents have less education have a far higher likelihood of becoming overweight. Researchers and public health authorities are concerned about the growing problem of childhood obesity. On a purely physiological level, the cause of this rise in childhood overweight status is clear: weight gain happens when calorie intake exceeds energy expenditure. What is yet unknown, though, are the elements that during the past 30 years have upset the balance between energy consumption and

expenditure. It is crucial to look at the reasons of obesity in kids, including any potential environmental influences on calorie intake or expenditure. Some experts have emphasized elements including the availability and consumption of fast food that is rich in calories, rising television viewing, and declining physical exercise. This theory, however, begs the issue of why these behaviors have altered despite the fact that fast food and television have been there for a while.

Resultantly, both men and women have instigated to find sources of income. One of the reasons for this trend is the rapid increase in maternal employment, driven by the need for increased household income due to rising food prices. According to research, children of working moms are more likely to experience wasting, which is frequently a sign of severe malnutrition and foretells child death. Previous studies have emphasized how cultural norms, expectations, and work markets that could not easily accommodate maternity affect women's choices. Our findings may be explained by variations in women's preferences for parenthood and employment, as well as in their capacity to carry out those desires.

The health of the mother and the child is affected by maternal work. Factors like income level and child care methods have an impact on the relationship between mother work and children's nutrition. The contribution of women's income to household food and health budgets is critical. On the other side, a job that necessitates the mother's disappearance may result in breastfeeding ceasing or partial weaning, making it difficult to constantly monitor the child's nutrition and care.

According to rumors, parents are more concerned about their children's future health than other caregivers or the children themselves. This concern may lead to increased TV time, reduced outdoor activities, and more consumption of unhealthy snacks. Researcher argued on that schools contribute to the problem by providing students with easier access to junk food and soda, which leads to weight gain. However, Bianchi's analysis of time use data suggests that moms who work cut back on their personal time instead of giving up time with their kids.

Recently, a survey was held, amongst children of 7-12 years of age, in order to ascertain whether the children of working women were doing as well as the others. This survey was based on, Healthy eating index, Scores, Total food energy intake, and intake of other nutrients. Previous research conducted in Pakistan in 2011 showed that maternal work conditions affected children's nutritional status through the interaction of mother time, income, education, and occupational position. It is obvious that childhood malnutrition

persists. Due to disparities in working hours, pay, education, and working circumstances, there are noticeable discrepancies between moms who work for themselves and mothers who are employed, although these variances did not have a substantial impact on the children's overall nutritional status. The study demonstrates that moms who are educated, nutritionally fit, and in charge of family resources can care for their children more skillfully, which is reflected in the children's improved nutritional status. Previous research found that children with moms who had completed their secondary school had a lower ratio of stunting and underweight than children with mothers who had not completed their education. In addition, compared to kids with low birth weight, kids with normal birth weight had decreased chances of stunting, wasting, and being underweight. In addition, children whose moms worked in physical labor or agriculture had a higher risk of stunting, but children whose mothers worked for people who weren't related to them had a higher risk of wasting and being underweight.

This study emphasizes the need of raising the status of mothers in low-income environments, since doing so will assist raise the nutritional status of their children. whereas this studies shows that , 8.8% children of government job mothers were 8.8% stunted, 19% wasted, 9% were malnourished and 16% were healthy, 7.1% of private job mothers children were stunted, 39% were wasted, 22.2% were malnourished and 39.2% were healthy where as personal business mothers children 0% stunted, 0% wasted, 0% malnourished and 100% were healthy and 14.2% of unemployed mothers children were stunted, 0% were wasted, 14.2% were malnourished and 71.6% were healthy. Which shows that maternal employment effects nutritional status of children specially those who were employed on government job. Prevalence of wasting and malnutrition were more in employed mothers because they do not have time to look after dietary habits of there children and second point is increase in income increase there pocket money and they prefers to eat junk foods and unhealthy things from outside. Whereas prevalence of stunting is more in unemployed mothers because of less recourses in this expensive era.

In previous studies conducted in Uganda in 2019, maternal employment has play a major affect on the children nutrition status and health status. There are some other factors which are mother age, mother literacy and mother region, also for child such as age and birth weight . Children are more in danger where mother have low socioeconomic status and also are too young and also have low literacy.

Mediations to increment maternal workforce support ought to advocate for adaptable plans for getting work done so that moms can either go home prior or report later to include in childcare. This probably encourages exclusive and continued breastfeeding, which will make it easier for women to stay employed. Northern Uganda should be the focus of efforts to alleviate the war's tangible effects by focusing on nutrition and socioeconomic improvement. The study emphasizes the significance of education in enhancing individuals' and their families' lives. In ANC and skilled delivery initiatives, a greater emphasis should be placed on prenatal and postnatal nutrition education to educate women about the benefits and nutritional makeup of proper maternity and newborn feeding, as well as the usage of mosquito nets to prevent malaria.

Many nations and jurisdictions have passed legislation enabling mothers to take paid or unpaid leave after giving birth in an effort to increase the amount and quality the amount of time women spend with their kids. These assessments are predicated on the knowledge that a child's cognitive and emotional development depends greatly on the early years of life.

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CHAPTER-VI

CONCLUSION

The study concluded that frequency of children of employed mothers was forty seven and their percentage was sixty seven point one. The maximum age of this study was twelve and the minimum age was seven. The study's subjects were nine years old on average.

This study emphasizes the need of raising the status of mothers in low-income environments, since doing so will assist raise the nutritional status of their children. whereas this studies shows that , 8.8% children of government job mothers were 8.8%stunted,19% wasted,9% were malnourished and 16% were healthy, 7.1% of private job mothers children were stunted, 39% were wasted, 22.2% were malnourished and 39.2% were healthy where as personal business mothers children 0% stunted, 0% wasted,0% malnourished and 100% were healthy and 14.2% of unemployed mothers children were stunted, 0% were wasted,14.2% were malnourished and 71.6% were healthy. It demonstrates how a mother's occupation affects her children's nutritional status, particularly if she works for the government. Prevalence of wasting and malnutrition were more in employed mothers because they do not have time to look after dietary habits of there children and second point is increase in income increase there pocket money and they prefers to eat junk foods and unhealthy things from outside. Whereas prevalence of stunting is more in unemployed mothers because of less recourses in this expensive era.

This study also concluded that there is a strong relationship between physical activity and child's overall health children who are more physically active and take part in extracurricular activities like sports in their school are healthy and fit as compared to those children who eats more junk food and physically in active.

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QUESTIONARE

EFFECT OF MATERNAL EMPLOYMENT ON THE NUTRITIONAL STATUS OF CHILDREN AGED BETWEEN 2 TO 12

PERSONAL INFORMATION:

Name: _____ Age: _____

Class/year: _____ Parent/Guardian name: _____

Parent's occupation: _____

No. of siblings: _____

Maternal Employment: _____

Private Job Government Job

Personal Business Un- Employment

20,000 -25,000 35,000-55,000

25,000-30,000 Non

Anthropometric measurements:

Height: _____

Weight: _____

Malnutrition Screening Tool (MST)

Question	Score
Have you lost weight recently without trying?	
Yes	0
No	2
If yes how much weight have you lost?	
1-5	1
6-10	2
11-15	3
>15	4
Unsure	2
My appetite is :	
Very poor	0
Poor	1
Average	2
Very good	3
Fluid intake :	
Less than 3 cups	0
3-5 cups	1
More than 5 cups	2
Normally I ate :	

Less than one meal a day	0
One meal a day	1
Two meals a day	2
Physical active ?	
No	0
Yes	1
I feel hungry ?	
Some of time	0
Most of time	1
I feel sick nauseated when I eat ?	
Most of time	0
Sometimes	1
Never	2
Food taste ?	
bad	0
good	1

IEEESEM

Clinical Assessment:

Skin Colour?

Pale

Pink

Spotted

Eye Colour?

Bright

Pale

Nails?

Healthy

Brittle

White spots

Do you have any physical activities in School?

Yes

No

IEEESEM

Frequency Table

Food items	Daily	1-2 days /week	2-4 days/weeks	4-6 days/ weeks	occasionally	Never
Milk and dairy products						
Cereals and grains						
Fruits						
Vegetables						
Fast food /Processed food						
Egg, Meat and meat products						
Fats/Oils Nuts, Creams						

IEEE SEM