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Factors Contributes Malnutrition among Children under Five Years Old in Hodan District, Mogdishu-Somalia

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ABSTRACT

Aim of the Study: This study aims to evaluate the factors associated with under-five malnutrition in the Hodan district of Mogadishu, Somalia.

Methodology: Quantitative methods and a study carried out in Mogadishu, Somalia's Hodan district were utilized to gather data. Data collection was done through a questionnaire. The study population comprised of mothers and Health workers. The participants of the study were 60 health workers and40 mothers.

Finding: The result of the study shows that the malnutrition is common in children under five years old in Hodan district, Mogadishu Somalia. So the study revealed that 95% were agree and strongly agree that malnutrition is common among the children under five years old and lead to poor physical work capacity and consequently impairs human performance on learning abilities, as well as Diseases, early weaning and food taboos are underlying causes of malnutrition on children under five years old, so that the study illustrated almost about 48.75% respondents were strongly agree and 39% respondents stated agreed that the Diseases, early weaning and food taboos are underlying causes of malnutrition so that early weaning and poor breastfeeding can lead under nutrition while best breast feeding prevent infections and malnutrition.

Conclusion: The study discovered that malnutrition was common among children under the age of five in the Hodan district. Malnutrition is caused by a variety of factors that surround children under the age of five, including poor dietary intake, early weaning, socioeconomic and cultural behavior, poor breast feeding practice, a lack of nutritional education for parents, and maternal-related factors, which have direct and indirect effects on the health and nutritional status of under-five children.

Keywords: Factors, Malnutrition, Children, Somaila.

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Introduction

Background of the Study

When the body lacks the vitamins, minerals, and other nutrients necessary to keep healthy tissues and organ functions, malnutrition results (UNICEF, 2012). Malnutrition causes cells to become unable to meet their physical needs because they are unable to take in and utilize the necessary amounts of energy and nutrients (Waterlow, Insel, 1995). Early childhood nutrition is crucial for the full development of each child's potential. According to Ali et al. (2006), there is a "critical window" between birth and two years of age that supports children's optimal growth, health, and overall survival. Eating a balanced diet is crucial for overall health. Infants that receive adequate nourishment in their first two years of life have a higher probability of maintaining their health throughout their childhood (UNICEF, 2006). The best nutrition for a baby is breast milk exclusively during the first six months of their lives. In addition to immunological components that guard against frequent childhood illnesses and malnutrition, it has all the nutrients required for healthy growth (Ashworth, 2002). One of the most crucial things for ensuring young children's health, development, and survival is providing them with the best nutrition possible (UNICEF, 2007). After six months, mother's milk is no longer enough to sustain ideal growth. The rationale for this is that an infant's dietary needs grow after six months of age. As a result, breast milk is insufficient for healthy growth. Thus, supplementary meals ought to be served. Children who receive insufficient breast milk may grow more slowly. This circumstance has been observed when breastfeeding was discontinued too soon as a result of societal or financial pressure (Nabarro D, 1984).

Malnutrition is the leading cause of sickness and death in the world, accounting for over half of all child fatalities (UNICEF, 2015). Malnutrition is the primary cause of the global disease burden, which is an increasing concern worldwide, particularly in poorer nations (WHO, 2002). According to estimates, severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) account for 1.7 to 3.6 million of the annual deaths of children from low- and middle-income countries (Ashraf H., 2012). Undernutrition is still a major public health concern in many of these nations. Malnutrition continues to be one of the leading causes of morbidity and death worldwide for children under the age of five (UNICEF, 2006). Around 5.6 million children under the age of five die each year in the developing world as a result of malnutrition, according to UNICEF (2006). Additionally, 146 million children under the age of five are underweight, which raises their risk of early death, illness, and disability. Malnutrition, especially in young children, is a widespread issue in the majority of poor nations. More than ten million children under five years old have severe protein-energy malnutrition, which is typically deadly if left untreated. More than one hundred million children under five years old suffer from protein-energy malnutrition (WHO, 1981).

Nonetheless, the likelihood of death for infants born in sub-Saharan Africa was found to be 1.9 times more than that of South Asian children, 6.3 times higher than that of Latin American children, and 24 times higher than that of children born in wealthy nations (UNICEF, 2012). Many African nations now have an abundance of natural resources, especially human resources, which is beneficial for agricultural output, especially in Sub-Saharan Africa. Nonetheless, one of the primary issues and the largest health burden facing emerging nations continues to be hunger in sub-Saharan Africa (WHO, 2000). In Sub-Saharan Africa, it is a major cause of morbidity and mortality among children under five. Malnutrition is the leading cause of death for children under five worldwide, accounting for 2.2 million deaths (UNICEF, 2006). It is also the most important socioeconomic and health issue. Although there is still a significant rate of malnutrition in developing nations worldwide (Sunil, 2009), those who live in these nations now struggle on a daily basis due to the issue.

One of the highest rates of undernutrition among children in Africa is found in Somalia. For people in Somalia, the current malnutrition issues become challenges in their daily lives. With an estimated 200 deaths for every 1,000 live births, Somalia has one of the highest rates of under-five child mortality worldwide. Neonatal deaths, which happen in the first month of life, account for about one third of these

(who, 2012). In addition to lacking access to basic essentials, mothers in Somalia sadly abandon their infants and newly arrived bone babies for hours at a time in search of food (UNICEF, 2014). Droughts and conflicts have resulted in huge population displacement from regions into the Mogadishu city and settle different districts in Mogadishu. Hodon district are one of the highest dwells for these people and exists malnutrition among children. Therefore, this study highlighting factors contributes malnutrition among children fewer than five years in Hodon district and could assist to tell the Somalis government to developed coherent strategies to promote and prevent for this effects of malnutrition.

Problem Statement

The most frequent nutritional condition in developing nations, malnutrition is the leading cause of morbidity and mortality among children globally. Children who are fed well do better academically, mature into healthy adults, and ultimately provide themselves with a better start in life (UNICEF, 2006). Nonetheless, malnutrition is the most prevalent nutritional condition in underdeveloped nations, with child deaths and illnesses being the main causes of it globally (UNICEF, 2005). According to WHO estimations, three out of ten young toddlers are undernourished. Approximately two out of every ten newborns pass away before their fifth birthday (WHO, 2004). The first years of life is critical window for children to get improved nutrition so if they did not get well nutrition during the first years of life can lead to stunting and wasting and result reduced mental and physical ability later in life (WHO, 2002). In Somalia, malnutrition exists as the other regions in Africa. Current problems of malnutrition became daily life difficulties for people in Somalia and malnutrition severely started when central government fall down (WHO, 2004). Determining the impact of malnutrition among Somalian children under five years old is crucial. Numerous organizations have attempted to reduce Somalia's malnutrition problem, but it still persists. The WHO (2017) found that the main factors associated with malnutrition among children under five were inadequate food intake, unsanitary environments, and mother's education. Malnutrition was on the rise in Somalia. If malnutrition is not treated, it results in a high death toll and reduced mobility in children under five. For the last two decades, the nutritional conditions of Somali children have been the worst in the world. The undernourishment in Somalia was many-sided effect of mothers, infants, young children, youths and women. The condition of malnutrition in Somalia is very dire because of the continued effects of warfare, displacement, and drought. An estimated 4.6 million individuals, 2.5 million of them are children, still require immediate assistance. Over 954,000 children under five are expected to be malnourished over the next few months, making the nutrition situation still dire (UNICEF, 2018). Additionally, the purpose of this research is to investigate the factors that lead to malnutrition in children under five in Mogdishu, Somalia's Hodan area.

Significant of the Study

Information that may be utilized for nutritional surveillance and targeting programs that would concentrate on populations at risk, especially children under five, was provided to the researcher. Everyone who works on health-related issues, including local and international authorities, Since a healthy diet generally improves a kid's health status before the age of five, this research aims to uncover the factors that contribute to child malnutrition and collect vital data from study areas that are of interest.

Purpose of the Study

The purpose of the study was to reduce the factors contributes malnutrition among children aged below five years old in Hodan district Mogadishu Somalia.

Objectives of the Study

1. The general objective of this study was to assess the factors contributes malnutrition among children aged below five years old in Hodan district Mogadishu, Somalia.
2. To determine underlying causes of malnutrition among children under five years old.
3. To find out how the educational level of parents relates malnutrition among children under five

years in Hodan district.

Research Questions

1. What are the underlying causes of malnutrition among children under five years old in Hodan district?
2. How the educational level of parents relates to malnutrition among children less than five years?

Literature Review

Underlying Cause of Malnutrition

Every year, more than seven million newborns die in impoverished nations. According to Mora and Nestle (2000), inadequate prenatal care and nutrition for women are contributing factors to death. Inadequate health care and hygiene, together with mothers' emotional distress and stress, are often the cause of death and early births in underdeveloped nations (Allen and Gillespie, 2001). Malnourished moms give birth to seven million underweight kids annually (WFP 2004). Pregnant women who are underweight are more likely than normal pregnant women to give birth to a baby early or with a low birth weight (Steketee, 2003). Preterm births and reduced nutritional storage in the mother are caused by multiple births and short interval pregnancies (Kramer and Michaelsen et al, 2003).

Goldenberg and Negger (2003) Referenced research that linked low micronutrient consumption and low pregnant body mass index in malnourished moms to low birth weight in infants. Low maternal body mass index is thought to be the cause of roughly 17% of neonatal fatalities in Southeast Asia (UNS/SCN, 2004). In Asia, low birth weight babies are more frequently the product of maternal undernutrition causing intrauterine development retardation (UNS/SCN, 2004).

Every year, more than 14 million newborns are born with low birth weight due to intrauterine development retardation, according to Allen and Gillespie's 2001 research. High infant death rates, illnesses, and long-term effects like delayed physical and cognitive development are all caused by premature birth (Allen and Gillespie, 2001). Premature mortality and dangers to health and development are associated with low birth weight (Allen and Gillespie, 2001). Because they have a lower capacity for resistance, babies with low birth weights are more likely to suffer from malnutrition (Mora and Nestle, 2000). Research has indicated that increased mother education is associated with improved child survival and nutrition (Mora and nestel, 2000). Undernourishment associated with low female literacy.

Cultural Factors

A study on malnutrition in Niger demonstrates that the primary cause of malnutrition was insufficient eating practices. People think that a child without teeth doesn't need to eat enough. Teeth often erupt slowly, delaying food intake and leading to a calorie deficit. The consumption of meals high in protein is also impacted by taboos surrounding food. Fish is said to be a prisoner's diet, meat is thought to cause discomfort, and eggs are thought to stop a child from talking or turn him into a robber (Poix, 1973).

Complex socio-cultural factors that affect food behavior, such as customary family food sharing systems, cultural attitudes toward different foods, food preparation techniques, and childrearing practices, continue to have a significant impact on food utilization in developing nations (maletnema, 1978). Cultural norms, taboos, and beliefs within the community all play a part in the malnutrition of children. For instance, many newborn babies are not given colostrum; instead, they are fed water with sugar or water with milk during their first few days of life, which stunts their growth and development. (2) Depleting or reducing the resources available for the most vulnerable family members. For instance, in some parts of West Africa, meals are served to men before to women, and men are given the largest share of the family's food. These issues affect the susceptible groups within the family, and malnutrition results (UNICEF, 1990).

Family Size and Number of Children

There is a favorable correlation between family size and the nutritional status of children under five.On the other hand, there was a negative correlation between nutritional status and the number of children under five in a household. When a family has more than three kids, the kids are average Compared to parents with fewer than three children, those with four or even more are more likely to be underweight, stunted, and wasted (Hien and Kam, 2008).

According to a study, the likelihood of being stunted increased by 3.7% for every ten percent rise in the number of children under five in the family. Numerous research showed that households with fewer children are more likely to consume enough energy. The food intake of young children, particularly female youngsters, is not supported by the overcrowded home food distribution system (Garrett and Ruel, 1999).

Mother's Body-Mass-Index

According to the study, there is a substantial correlation between the nutritional condition of children and the mother's body mass index (BMI). Compared to children of well-nourished moms, underweight children are more likely to be born to malnourished mothers. The explanation for this is that mothers who are undernourished may find it difficult to produce enough breast milk as a result of their low food consumption. Malnutrition in mothers can impede the growth and development of their offspring (Rayhan and Khan, 2006).

Mothers' Age at Birth

Malnutrition in children under five years old is correlated with the mother's age at birth. For instance, research conducted in Bangladesh revealed that children whose mothers were under 20 years old at the time of birth were 1.22 times more likely to be stunted, wasted, and underweight than children whose mothers were 20 years old or older (Nure., Nuruzzaman and Goni,, 2011). Bachou (2000) Several common risk factors for protein energy malnutrition have been identified, including low birth weight and limited access to breastfeeding, which is crucial for the development of critically malnourished newborns, particularly in young mothers.

According to a number of studies, one of the key factors influencing malnutrition in children under five is the mother's age at birth. Research indicates that younger mothers—especially those under 24—are more vulnerable because they may not be prepared to care for their child and provide them the full attention they need. In a similar vein, children under five who have mothers who give birth after the age of 35 are more likely to suffer from malnutrition. Low birth weight babies are typically born at this age (Shrimpton et al., 2001).

Socio-economic Status

The availability of improved water sources, the usage of health services, access to adequate food supplies, and sanitary facilities are all influenced by a household's economic position and are major factors in determining the nutritional status of both mothers and children (UNICEF, 1990). All the vitamins and minerals the body needs for effective operation can be obtained from a balanced diet that includes a variety of foods. Malnutrition won't happen unless a person's diet is restricted, makes poor dietary choices, or runs out of some vital vitamins (Beaver, 2002).

Malnutrition in children is a complex issue. Numerous factors affect children's nutritional status. The two most significant immediate factors contributing to undernutrition in children are inadequate food intake and inappropriate medical treatment. However, the socioeconomic position of the household is strongly correlated with both factors. The primary determinants of a child's nutritional condition are the resources allocated by the household toward food and medical care. Research revealed that children from wealthier households tend to be better fed (Bhuiya et al., 2001).

Beaver et al. (2002) state that every nation or region has created a unique local diet. Accessible foods that are influenced by environment, agricultural practices, and societal variables including religion, culture, class, and lifestyle have evolved into diets. Every diet includes the right amount of each necessary vitamin. Children who are undernourished frequently come from low-income households with crowded homes and inadequate cleanliness, which increases their exposure to diseases. It is more likely for microbes to enter and grow in the child's body. A youngster who is malnourished has a weaker immune system than a child who is well-nourished (Morley & Moodland, 1992).

Significant correlations have been found between three indicators of malnutrition and other factors related to income, food supply, environment, and social and health status, according to a 1987 World Food Program (WFP) survey done in Ghana. A child's nutritional status is influenced by the high socioeconomic status of the household. The primary cause of malnutrition in children is the degree of food insecurity in the home, which also impacts the children's nutritional status. For meals eaten at home, the parents and caregivers make the majority of the food selections. These decisions are influenced by availability, time constraints, cost, culture, and beliefs (Kelly & Patterson 2006).

While there are other ways to quantify poverty, wealth is the single factor that contributes most to variations in food intake. Malnutrition is caused by a wide range of other social and environmental variables, many of which are intimately related to national and individual poverty levels (Lipton & De-Kadt, 1998).

A person's nutritional status is mostly influenced by the amount and quality of food that is available on the market, the household's purchasing power, which determines how easily food is accessed, and how food is distributed within the household. Food consumption affects one's nutritional status, but it is not the only important element that causes malnutrition, especially in young children (under five years old). Although dietary inadequacy is undoubtedly the primary cause of malnutrition in preschool-aged children, other factors such as living principles, access to water and sanitation, birth weight, intervals between births, and weaning practices have also been linked to the incidence of malnutrition (Raheela, 1994).

Research revealed that for Tanzanian children under five, the development of home wealth was a significant factor in determining their weight (Alderman et al., 2006). Research by Saaka and Osman (2013) revealed that homes with a high socioeconomic position are positively correlated with better food access and dietary diversity, both of which are critical for enhancing children's nutritional health. Studies by Fentaw et al. (2013) indicate that children in households headed by women are more likely to be undernourished because these households have less access to resources and health care, and they frequently experience financial difficulties as a result of losing a partner to divorce or death (Schiller, 1996).

Due to a lack of access to basic requirements, mothers in Somalia frequently leave their infants and newly arrived bone babies alone for extended periods of time as they forage for food (UNICEF, 2014). Children who have access to health services about their nutritional status are in a better position than those who do not, and the latter group is more likely to be malnourished or to exhibit weight loss as a result of untreated diarrhea and other infectious disorders (Degefe and Nega, 2000).

Parent's Knowledge in Child Nutrition

According to a study by Kumar et al., (2006), illiterate mothers had greater percentages of undernourished children than literate mothers. Lack of information and low literacy lead to bad eating decisions, which in turn hinder growth and development, lowering income levels and the range of foods that may be purchased. Lack of understanding of the nutrients needed for growth also leads to a child's poor nutritional status, therefore education plays a significant role in raising people's income levels and encouraging them to make better and healthier food choices (Unnevehn, Thompson et al, 2007).

Food and agricultural agency FAO (2005) states that due to poverty and inadequate nutritional education, people are not eating healthily in many nations. In an effort to lower malnutrition and ensure successful programs, Nutrition Education Programs (NEP) ought to incorporate the following (DoH et al., 2003).

- ❖ Maintaining good hygiene is important because germs and bacteria can make you sick and cause malnutrition.
- ❖ Having a basic understanding of dietary types, daily requirements, and sources helps you make the right decisions. Malnutrition is caused by a number of underlying conditions, including inadequate food quality and quantity.
- ❖ Immunization protects against diseases and illnesses that can be detrimental to a child's health throughout their formative years. One of the main causes of malnutrition is a lack of access to health care.
- ❖ Sufficient eating practices A youngster can grow to their full potential and have a healthy body by being encouraged to eat well. Malnutrition is directly caused by inadequate food consumption.

According to (DoH, 2003) suggests that a NEP can also be made more effective through the flowing points:

- ➢ Proper training for workers and helpers
- ➢ Emphasis on the benefits of breastfeeding and immunization
- ➢ The involvement of people within the community, who must understand and communicate to the information given.

Methodology

The study was employed a quantitative research design to investigate Factors Contributes Malnutrition among Children Less Than Five Years Old in Hodan district. Stratified random sampling procedure used to select a sample that represents the entire population. To obtain a representative sample size, I used a formula proposed by Kothari (2004) and the sample size was thus 80. Questionnaires, interview schedules and observation was used to collect required data in the study area. Interview is an important tool that assist the research to get more information on a particular area of interest in the study. The data was collected via questionnaires and then entered into a computer statistical software for analysis (SPSS version 16). The results was then present in tables.

Data Interpretation and Analysis

Table 1: *What is your gender?*

Gender	***f***	**%**
Male	15	19%
Female	65	81%
Total	**80**	**100%**

The table above shows the gender distribution of the study's respondents: 65 were female and 15 were male, giving an 81% female to 19% male ratio.

Table 2: *What is your age?*

Age	***f***	**%**
18-20	10	12.5%
21-30	50	62.5%
31-40	15	19%
41 and above	5	6%
Total	**80**	**100%**

The table above shows that the majority of respondents 50 (62.5%) were between the ages of 21 and 30, followed by 15 (19%) participants between the ages of 31 and 40, 10 (12%) participants between the ages of 18 and 20, and the remaining 5 (6.25%) were 41 and older.

Table 3: *What is your educational level?*

Educational level	**f**	**%**
Primary level	5	6.25%
Secondary level	5	6.25%
Bachelor level	37	46.25%
Master level	5	6.25%
Informal	28	35%
Total	**80**	**100%**

The table above indicates Educational levels of respondents those whose 37 out 80 of the respondent were Bachelor level and 28 out 80 of the respondents where illiterate and 5 out 80 of respondents were primary level and 5 out 80 of participants were secondary level and 5 out 80 were master level. This means 46.25% were bachelor level and 35% were illiterate and 6.25% were primary level and 6.25% were secondary level and the rest 6.25% were master.

Table 4: *What is your marital status?*

Marital status	***f***	**%**
Single	27	34%
Married	39	49%
Widow	9	11%
Divorce	5	6%
Total	**80**	**100%**

The table above demonstrates the marital status of the homes; approximately 39 were married, 27 were single, 9 were widowed, and 5 were divorced mothers. This means that 49% of the participants were married, 34% were single, and the remaining 11% and 6.3% were divorced or widowed, respectively.

Table 5: *What is your Occupation?*

Responses	***f***	**%**
Health worker	45	56%
Mother	35	44%
Total	**80**	**100%**

The table above shows the occupation of the respondents. From the collected data, 56% respondents were health workers while 44% were mothers.

Table 6: *What is your socio-economic status?*

Socioeconomic Status	***f***	**%**
Low	37	46.25%
High	6	7.5%
Normal	37	46.25%
Total	**80**	**100%**

The table above illustrates the socioeconomic position of participants in this study: 37 out of 80 were low-income, 37 out of 80 were normal socioeconomic, and 6 out of 80 were high socioeconomic. As a result, 46.25% of the participants had a low income, followed by 46.25% who had a regular income, and 7.5% with high income. .

Table 7: *Malnutrition is common in children under five years old.*

Responses	***f***	**%**
Agree	55	68.75%
strongly agree	21	26.25%
Disagree	2	2.5%
strongly disagree	2	2.5%
Total	**80**	**100%**

This table above demonstrates that malnutrition is common in children under five years old, so that almost responses approximately 55(68.75%) were agree, followed by 21(26.25%) participants who strongly agreed, 2(2.5%) participants disagree, and 2(2.5%) participants strongly disagree.

Table 8: *Diseases, early weaning and food taboos are underlying causes of malnutrition.*

Responses	***f***	**%**
Agree	31	38.75%
strongly agree	39	48.75%
Disagree	9	11.25%
strongly disagree	1	1.25%
Total	**80**	**100%**

According to the table above, approximately 39 (48.75%) respondents strongly agree that diseases, early weaning, and food taboos are underlying causes of malnutrition in children under the age of five, while 31 (38.75%) respondents agreed, 9 (11.25%) chose disagree, and 1 (1.25%) participants of the study strongly disagreed.

Table 9: *The low level of family income is responsible for malnutrition.*

Responses	**Frequency**	**Percent%**
Agree	26	32.5%
strongly agree	41	51.25%
Disagree	12	15%

The table above indicates that low household income leads to malnutrition. So, 41 of survey respondents strongly agreed, followed by 26 percent who agreed, 12 who disagreed, and 1 percent who strongly disagreed. It means that 51.25% of people highly agree, 32.5% agree, 15% disagree, and 1.25% strongly disagree.

Table 10: *A cultural believes of the family encourages malnutrition among children.*

Responses	***f***	**%**
Agree	39	48.75%
strongly agree	30	37.5%
Disagree	10	12.5%
strongly disagree	1	1.25%
Total	**80**	**100%**

The table above shows that the cultural beliefs of the family encourages malnutrition among children under five years old, so the majority of participants in this study 39(48.75%) were agree, 30(37.5%) were strongly agree, 10(12.5%) were disagree, and the rest 1(1.25%) were strongly disagree.

Table 11: *Households with high socio-economic status positively associate the nutritional status of child.*

Responses	***f***	**%**
Agree	38	47.5%
strongly agree	28	35%
Disagree	11	13.75%
strongly disagree	2	2.5%
don't know	1	1.25%
Total	**80**	**100%**

The table above shows that households with a high socioeconomic status have a positive association with the nutritional status of children under the age of five. The majority of respondents 38 (47.5%) agreed, followed by 28 (35%) participants who strongly agreed, 11 (13.75%) who disagreed, 2 (2.5%) who strongly disagreed, and 1 (1.25%) who said don't know.

Table 12: *Households with a small number of children have more chance to consume adequate energy than overcrowd households.*

Responses	***f***	**%**
Agree	32	40%
strongly agree	36	45%
Disagree	8	10%
strongly disagree	3	3.75%
don't know	1	1.25%
Total	**80**	**100%**

According to the table above indicates that households with a small number of children have a better chance of consuming adequate energy than overcrowded households; thus, a large number of respondents (36%) were selected strongly agreed, 32(40%) were agreed, 8(10%) disagreed, 3(3.8%) disagreed, and the remaining 1(1.25%) said don't know.

Table 13: *Illiteracy of parents responsible for malnutrition.*

Reponses	***f***	**%**
Agree	47	58.75%
strongly agree	26	32.5%
Disagree	3	3.75%
don't know	4	5%
Total	**80**	**100%**

The table above describes the illiteracy of parents who are responsible for malnutrition, hence the majority of respondents (47.8%) agreed, followed by 26(32.5%) who strongly agreed, 4(5%) who claimed they didn't know, and 3(3.8%) who disagreed.

Table 14: *The lack of knowledge of nutrients required for growth contributes poor Nutritional status of a child.*

Responses	**Frequency**	**Percent%**
Agree	52	65%
strongly agree	22	27.5%
Disagree	4	5%
strongly disagree	2	2.5%
Total	**80**	**100%**

According to the table above shows that a lack of knowledge about nutrients needed for growth contributes to poor nutritional status in children under the age of five, with more than half of respondents

agreed 52 out of 80, 22 out of 80 strongly agreed, 4 out of 80 disagreed, and 2 out of 80 strongly disagreed. It means that 65% agreed, 27.5% strongly agreed, and 5% disagreed, with 2.5% strongly disagreeing.

Table 15: *Nutritional education of parents promotes healthier and better food choices.*

Responses	***f***	**%**
Agree	29	36.25%
strongly agree	44	55%
Disagree	4	5%
strongly disagree	1	1.25%
don't know	2	2.5%
Total	**80**	**100%**

The table above reveals nutritional education of parents promotes healthier and better dietary choices, such that the replies more than half, approximately 44 (55%) participants were strongly agree, followed by 29(36.25%) participants who were agree, 4(5%) respondents who were disagree, 2(2.5%) who claimed don't know, and the rest of the respondents were 1(1.25) who were strongly disagreed.

Table 16: *Undernourished children mostly from illiterate parent compared to literate parent.*

Responses	***f***	**%**
Agree	45	56.25%
strongly agree	25	31.25%
Disagree	10	12.5%
Total	**80**	**100%**

The table above demonstrates that undernourished children are more likely to have illiterate parents than literate parents, with 45 out of 80 respondents agreed, 25 out of 80 strongly agreed, and 10 out of 80 disagreed. It indicates that 56.25% agreed, 31.25% strongly agreed, and 12.5% disagreed.

Table 17: *Parent's knowledge encourages nutritional level of a child.*

Responses	***f***	**%**
Agree	42	52.5%
strongly agree	32	40%
Disagree	5	6.25%
strongly disagree	1	1.25%
Total	**80**	**100%**

According to the table above, parent knowledge supports children's nutritional levels. Approximately 42 respondents agreed, 32 strongly agreed, 5 disagreed, and 1 strongly disagreed. This means that 52.5% of the participants agreed, followed by 40% who strongly agreed, and 6.3% and 1.25% who disagreed.

Table 18: *Underweight mothers may not be able to give sufficient breast milk to child and lead to occur malnutrition.*

Responses	***f***	**%**
Agree	42	52.5%
strongly agree	36	45%
Disagree	1	1.25%
strongly disagree	1	1.25%
Total	**80**	**100%**

According to the table above, an underweight mother may be unable to provide sufficient breast milk to her child, resulting in malnutrition. As a result, approximately 42 out of 80 participants agreed, 36 out of 80 strongly agreed, and 1 out of 80 respondents disagreed, with the remaining 1 out of 80 strongly

disagreed. This means that 52.5% agreed, 45% strongly disagreed, 1.25% disagreed, and the remaining strongly disagreed.

Table 19: *Birth interval is a significant determinant of child nutritional status.*

Responses	***f***	**%**
Agree	44	55%
strongly agree	24	30%
Disagree	11	13.75%

The table above disclose birth interval is a significant determinant of child nutritional status, so 44 out of 80 respondents agreed, 24 out of 80 strongly agreed, 11 out of 80 disagreed, and the remaining participants, approximately 1 out of 80, said they didn't know. This means that 55% of respondents agreed, 30% strongly agreed, and 13.75% disagreed and 1.25 percent replied didn't know.

Discussion

The study discovered that malnutrition was common among children under the age of five in the Hodan district. Malnutrition is caused by a variety of factors that surround children under the age of five, including poor dietary intake, early weaning, socioeconomic and cultural behavior, poor breast feeding practice, a lack of nutritional education for parents, and maternal-related factors, which have direct and indirect effects on the health and nutritional status of under-five children.

Infections, cultural food taboos, and a low level of income are underlying causes of malnutrition in children under the age of five, according to the study, which found that nearly 88% of respondents agreed or strongly agreed that these factors contribute to undernutrition, whereas a high household income, optimal breast feeding, and nutritional education for parents prevent infections and malnutrition. During the study, the researcher discovered that underweight pregnant mothers are at a high risk of having premature or low birth weight babies, so that the majority of respondents, approximately 92.5%, agreed and strongly agreed that mothers who are underweight will give birth to underweight babies, and also the participants in Hodan district, 97.5%, agreed that malnourished mothers may not give sufficient breast milk to child and lead to occur malnutrition. The study also discovered that the vast majority of respondents (85%) agreed and strongly agreed that households with small number of children are more likely to distribute food for consumption than overcrowded households. Family's nutritional status based on the number of children in the household.

Conclusion

Malnutrition among children under five years old in the Hodan District is a multifaceted issue influenced by a variety of factors. These factors can be include underlying such as including poor dietary intake, early weaning, socioeconomic and cultural behavior, poor breast feeding practice, a lack of nutritional education for parents, and maternal-related factors, which have direct and indirect effects on the health and nutritional status of under-five children. High prevalence of infectious diseases such as diarrhea, malaria, and respiratory infections exacerbate malnutrition by reducing appetite and nutrient absorption. Also Economic constraints limit families' ability to purchase nutritious food. In many households, staple foods with limited nutritional value dominate diets, leading to deficiencies in essential vitamins and minerals.

Recommendations

- Improve access to clean water and sanitation facilities, and promote good hygiene practices to reduce the incidence of diarrheal diseases and other infections.
- The technical officers in the district should give the mothers orientation about disadvantage cultural food taboos that encourage malnutrition.

- The researcher suggests educating women in the district how to prepare high-protein, energy-rich weaning foods.
- Implement comprehensive nutrition programs that include the distribution of nutrient-rich foods and supplements, particularly targeting vulnerable groups such as pregnant women, lactating mothers, and children under five.
- Strengthen healthcare infrastructure to provide better access to medical services, including regular health check-ups, immunizations, and treatment for common childhood illnesses.
- Develop and Provide farmers with resources such as seeds, tools, and training to increase local food support to mitigate the impact of drought and conflict on food availability.
- Conduct community-based education campaigns to improve maternal knowledge on nutrition, breastfeeding practices, and hygiene. Empowering mothers with information can significantly reduce malnutrition rates.
- Implement adult literacy programs to empower mothers with basic education, indirectly improving their ability to care for their children.

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Reference

Alderman, H., Hoddinott, J., & Kinsey, B. (2006). *Determinants of child malnutrition.* Northern Ethiopia: AsegedechHagos.

Ali M.,Weobong, C. (2006). *nutritional status of children of pre-school children;* Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

Allen and Gillespie (2001) mora and nestel,(2001). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

Allen and Gillespie (2001). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

Ashraf, H. (2012). *Assessment of nutritional status of underfive children and its determinants* . Sri Lanka : Md. Nazmul Haque.

Ashworth (2002). *Nutritional status of children of pre-school children.* in Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

Bachou (2000). *Determinants of malnutrition among under five children* . in Nakasongola and Nakaseke districts, Uganda: Habaasa Gilbert.

Beaver (2002). *Nutritional status of children of pre-school children;*. in Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

Beaver (2002). *nutritional status of children of pre-school children.* in savelugu/nanton district in the northern region of Ghana: Alhassan.

Bhuiya A., Chowdhury M., Ahmed F. and Adams A. M. (2001). An Intervention Study of Factors Underlying Increasing Equity in Child Survival." . *Challenging inequities in health* , 227-239.

Degefe and Nega. (2000). *Determinants of child malnutrition.* Central zone of tigray Northern Ethiopia: AsegedechHagos.

DoH et al. (2003). *Impact of a nutrition education programme on nutrition knowledge and food choices of primary school children in Boipatong.* Boipatong: Delia oosthuizen.

DoH. (2003). Guidelines for nutrition interventions at health facilities to manage and prevent child malnutrition. *Department of Health South Africa* , 11-20.

Duggan and Golden. (2005). *prevalence of malnutrition among children under five years old.* Hargeisa: Mukhtar A Abdi.

FAO. (2005). *Food and agriculture organization (FAO), (2005), Better nutrition education helps reduce malnutrition.* . Rome: FAO Newsroom.

Fentaw et al. (2013). *Determinants of child malnutrition,* . northern Ethiopia: AsegedechHagos.

Food and agriculture organization FAO. (2005). *Better nutrition education helps reduce malnutrition.* Rome : FAO Newsroom.

Garrett J. L. and Ruel M. T. (1999). *determinants of rural and urban food security and nutritional status.* Mozambique: International Food Policy Research Institute.

Glass & Hopkins (1984). *The Association for Educational Communications and Technology.* North Stonelake: AECT.

Hien N. N. and Kam, S. (2008). Nutritional status and the characteristics related to malnutrition in Children underfive years of age in Nghean, Vietnam. . *Journal of Preventive Medicine and Public Health* , 41(4): 232-240.

Igbogboja, S. I. (1992). Some factors contributing to protein-energy malnutrition in the middle belt of Nigeria. *East Africa Medical* , Vol 69(10) pp 566-71.

Kramer and Michaelsen (2003). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj .

Kumar D., Goel N. K. and Misra P. (2006). (2006). "Influence of Infant-feeding Practices on Nutritional Status of Underfive Children. *Indian Journal of Pediatrics* , 73(5): 417-421.

Lipton and De-Kadt (1998). *nutritional status of children of pre-school children* . in Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

maletnema. (1978). *Importance of Nutrition in socio-economic Development.* Brazzaville: WHO.

Mora and Nestle . (2000). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

Morley D. Moodland M. (1992). Monitoring child growth for appropriate health care in developing countries. *SEE HOW THEY GROWTH* , 211-213.

Nabarro D. (1984). Social, economic, health, and environmental determinants of nutritional status. *Food and Nutrition Bulletin* , 6(1).

Negger and Goldenberg. (2003). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

Nguyen, N.H., and Kam S. (2008). Nutritional status and the characteristics related to malnutrition in children under five years of age. *Journal of preventive medicine and puplic health* , pp 232-240.

Nure., Nuruzzaman and Goni (2011). *Determinants of malnutrition among under five children* . Nakaseke and Nakasongola districts,Uganda: Habaasa Gilbert.

Poix J. (1973). Causes of Malnutrition in Niger. *In Children in the Tropics* , No. 90, pp. 4-5.

Raheela M. (1994). *Nutritional status of children of pre-school children* . in Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

Rayhan M. I. and Khan M. S. H. (2006). Factors causing malnutrition among underfive children in Bangladesh. *Pakistan Journal of Nutrition* , 5(6): 558-562.

Saaka and Osman, (2013). *Determinants of child malnutrition.* Northern Ethiopia: AsegedechHagos..

Salah. (2006). *Factors Affecting Prevalence Malnutrition among Children under three years of age in Botswana.* Gaborone,Botswana: University of Botswana.

Schiller (1996). *Determinants of child malnutrition.* Central zone of tigray Northern Ethiopia: AsegedechHagos.

Shrimpton (2001). Worldwide Timing of growth faltering. *Implications for nutritional interventions*, 75-81.

Steketee (2003). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

Sunil. (2009). *Prevalence of malnutrition among children under five years old.* Hargeisa: Mukhtar A Abd.

Torún, B. (2006). *socio-cultural determinants of malnutrition among children aged below 5 years.* Gaissa sub county; Kenya: Maryam Ahmed Abdulrahim.

UNICEF (2014, 4/ 14/). Retrieved 7/ 17/, 2018, from Progress for children report card on Nutrition: https://www.unicef.org/nutrition/index_role.html.

UNICEF (1990). *Strategies of improving nutrition of children and women in developing countries.* . new york: unicef.

UNICEF (2006). *Determinants of Child Malnutrition.* Northern Ethiopia: AsegedechHagos.

UNICEF (2006). *Nutritional status of children of pre-school children.* in Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

UNICEF (2007). *Nutritional status of children of pre-school children.* in Savelugu/ Nanton District in the Northern Region of Ghana: Alhassan.

UNICEF (2012, April 4). *UNICEF*. Retrieved May 23, 2018, from Millennium development goals reduce child mortality : http://www.unicef.org/mdg/childmortality.html

Unnevehn, Thompson et al. (2007). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

UNS/SCN. (2004). *Nutritional status of under five years old Burmese refugee children.* Thailand: Fancy Faraj.

Waterlow, Insel. (1995). *Perspective in Nutrition 3rd edition.* New York : Mosby.

WHO. (1981). Complementary feeding , Family foods for breastfed Children. *World Health Organization* , 8-16..

WHO. (2004). *Low birth weight: Country, regional and global estimates.* New York: Marie Steffensen Lerseth.

WHO. (2004). *World Health Organization & United Nation Low birth weight: Country, regional and global estimates.* New York: Marie Steffensen Lerseth.

WHO. (2017). *prevalence-of-malnutrition-amonng-children-under-5-old,.* Hargeisa: Mukhtar abdi .

World Food Program (1987). *Nutritional status of children of pre-school children.* Savelugu-Nanton district: lukaya alhassan.