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Socio-Economic Determinants of Malnutrition: An Empirical Study

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ABSTRACT

Health is a complex condition of physical, mental, and social well-being, and nutrition is one of the main determinants of the overall level of health and human development. This empirical research reviewed the available literature to analyze the relationship between nutritional status and child health outcomes with a special focus on malnutrition as a continuing global public health issue. The results of numerous studies have shown that poor nutrition, in particular, in early childhood, can severely affect physical development, cognitive development, and immunological functions, which often lead to a high level of morbidity and mortality. The review indicates that brain development is a critical factor in the first three years of a child to influence the cognitive and behavioral lifelong outcomes. The results of various studies indicate that malnutrition is one of the most widespread in developing countries, especially in South Asia where the rates of underweight children under five years of age are among the highest in the world. Among the key contributing factors, socioeconomic disparities, the nutrition status of the mother, inadequate feeding practices, infectious diseases, and inaccessibility of healthcare services are identified. Additionally, environmental and demographic factors including sanitation, household income, parental education, and immunization status have a significant impact on child nutritional outcomes. The intergenerational effects of malnutrition, in which poor maternal nutrition influences fetal development and birth rates, contributing to the cycles of malnutrition, are also highlighted in the study. In general, the results highlight the fact that child malnutrition is a health challenge, but also a socio-economic threat that impedes the development of the nation. The research concludes that to decrease malnutrition and increase human capital development, there is a strong need to improve the maternal and child nutrition through targeted interventions, improved access to healthcare, and improved socioeconomic status.

1. Introduction

Health refers to a complete state of social, mental, and physical well-being, and it is not only the lack of diseases. However, the health of a human is the basic human right that organizes the world as an important goal. Health also resembles an essential human property [1]. The basic component of health is nutrition, and without it, human health does not stabilize, and human health decreases to the worst situation that leads to inadequate growth and development of the body; therefore, nutrition seems highly essential. Nutrition is the basic and prime pillar of human life that starts from life. From the earliest stages of development, birth to infancy, childhood to adolescence, and adulthood, complete food and nutrition are essential for survival, physical and mental development, performance of activities, and general health. The nutrition and health of a child and mother are largely associated and closely dependent on care practices. However, unhealthy and malnourished children born to mothers largely die as infants, but fortunately, they survive with low growth and developmental damage in early life [2].

The development of a child's brain happens before reaching the age of three years. Historically, people cannot understand the cognitive and psychological functioning of the brain that it takes rapid growth and changes at the stage of the first three years of life. However, the first three years of the life of a child develop the abilities of learning, speaking, and

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thinking that lay the foundation for social behaviors as adults. In this stage, a child detects new things that are helpful to each waking moment. At birth, a child possesses more than 100 billion brain cells, and they are not connected to each other. These connections seem like wonders of the human body. Various experiences can affect the development of a young brain, but importantly, early nutrition and care are essential and vital for growth [3].

The current situation analyzes that children's nutritional status shows an unclear picture, while malnutrition among children seems to be a big issue at a worldwide level in both developed and underdeveloped nations [4]. Bellay defines in the study that the situation of malnutrition from 1995 to 2003, in developing countries, the rate of underweight among children who are at the ages of five years looks high in some regions. In South Asia, the situation of malnutrition is the highest among five-year-olds from the entire world. Malnutrition is 46% in South Asia, 29% in Sub-Saharan Africa, 17% in East Asia or the Pacific, 17% in the Middle East and North Africa, and 7% in Latin America and the Caribbean countries [5].

The study shows that improved feeding practices help in the prevention and treatment of malnutrition, which saves the lives of about 800000 in a year [6]. The mother's nutritional status before and during pregnancy can influence the development and growth of the fetus and its birth weight, which affects more chances of survival in delivery. Mother’s nutritional well-being is highly essential for keeping care and rearing of a child; that also helps in performing economic and household tasks as well as her subsequent recovery [2].

Child malnutrition is the most highlighted global issue, and it mostly happens in the poorest communities, leading to high mortality and morbidity. Various studies indicated the relationship between the nutritional status and the socioeconomic well-being of parents has unfavorable impacts on the health of children.

Moreover, malnutrition is the fundamental cause of huge diseases among both children and adults that continuously contributes to the disabilities. It is largely dominated in the less developed nations, which affects 1 out of every 3 preschool-age children [4]. A well-nourished child with adequate access to food intake, care, and health has well-weighted and -height measurements compared to the standard normal distribution of weight and height of healthy children of the same age. The well-nourished child associates with proper growth [2].

Additionally, malnutrition is an extensive problem for children—about 200 million, particularly in developing nations, who are at the age of five years are malnourished. The prevalence of malnutrition weakens the immune system, and rises of illness happen as leading shocking consequences; it results in more than half of all children's deaths [2]. Malnutrition among children is not only the cause of lack of access to food owing to inadequate feeding practices and devious infection. The frequent infections of diarrhea, measles, malaria, and pneumonia destabilize the nutritional status of children. The poor feeding practices of improper breastfeeding and giving insufficient qualities that do not ensure children are getting enough food contribute to childhood malnutrition [4].

Malnutrition has many impacts, and it mainly affects the physical well-being and the socio-economic condition of a nation. The cases of malnutrition are highly prevailing in developing countries owing to poverty, misuse of resources, and social isolation [7]. According to Khan [8], the health factor of malnutrition is associated with various factors such as no proper intake of diet and a reduction in the use of micro- and macronutrients.

Based on some existing research evidence, a few factors are at risk for causing malnutrition among one-month- to five-year-old children. The major factors are demographic, socioeconomic, dietary intake, environmental, immunization, and health care. However, the demographic factors are related to the sex of children, the number of children in a household, mothers’ age at birth of a first child, birth order, previous birth interval, age of the child, size of child at birth, and mothers’ bodies’ mass index [9]. The socio-economic factors are residential place, parental education, parental occupation, housing type, religious belief, household positions, and media exposure. The dietary factor consists of breastfeeding status. The environmental factors show drinking water methods and sources and toilet facilities. Finally, immunization and health care factors are largely associated with place of delivery, antenatal care, vaccination, and supplement of vitamins [10].

Nutrition assessments among children are an essential indicator of socio-economic growth of a community. Nutritional status is a highly important public health indicator that assists in measuring the general health situation of the masses. However, nutrition determines factors for both mental and physical development in childhood. No supply of sufficient food to a child seems to adjustment in its physical state according to availability of food that results inappropriate poor health and physical growth to a child [4]. The height and weight of children are measurable factors to examine their nutrition status. The body mass index (BMI) is also under consideration as a standard method for examining malnutrition as a symptom [11]. The existing study is mainly focusing on social and economic aspects and inequalities that result in more risk of malnutrition in children, pregnant women, and elders [10]. The nutrition level of children who belong to low socioeconomic status is compared to their counterparts of upper-class socioeconomic status [12]. Precisely, malnutrition has other various determinants such as poverty, conflicts, gender inequality and illiteracy.

Several major reasons emphasize the researcher's choice of the study of malnutrition and its core causes, such as the social factors of the parents and its effects on children's nourishment. The major aim of this study is to explain the social status of parents and its impacts on the malnutrition of children. However, malnutrition is the main highlighted social and medical problem that is counted on the red-alert list of the country's problems. The researcher has to explain the rationale to conduct the study while justifying all aspects of the research problems. Furthermore, every government has taken a major step to give relief to the population by the various nutritious-related supplies of items and also focuses to address the concerns of under-nutrition. In this aspect, the Pakistani government, with the collaboration of the provincial official setup, is giving more importance to the basic needs of the marginalized segments of the society. Therefore, some measures are taken with the association of local stockholders, civil society, and nonprofit organizations to intervene with the holistic approach of providing food supply, nutrition, and healthcare while the child healthcare and nutrition are primarily put under consideration. These measures are also mentioned as the main goals of the UN's sustainable development goals. The effects of malnutrition are further assigned importance to concentrate on the improper supply of nutrition to the human body that leads to various infections.

From the source of previous studies, some significant causes of malnutrition are associated with less income of a household, low education in mothers, the age of a child, low body mass index of a mother, poor health level, and no proper use of injections by a mother. Some of the studies define that female children are not highly deprived of nutrition compared to male children, but the cultural and socio-economic factors are largely contributing to the favor of male children over the female children in Pakistan. The higher chances of being malnourished are found among both female and male children, but more impacts have seemed to be in male children compared to female children. Precisely, the study highlights the relationships between the social status of parents and its impacts on the malnutrition of children [10].

2. Literature Review

2.1 Malnutrition Among Children A Global Perspective

According to the global hunger index report of 2022, undernourishment means lack of regular sufficient calories for people, and the report shows about 828 million people were affected by undernourishment in the year of 2021 [13]. The situation is worsening at a global level due to crises of conflicts; economic recession due to the covid-19 pandemic; and climate change, and these all are driving forces of hunger. However, the report highlights that the war in Ukraine is the major cause of food shortages, fertilizer prices, and increasing fuel prices globally, which also may create food shortages further [13].

The crisis develops various other factors like inequality, poverty, poor infrastructure, low productivity, and poor governance that lead to more hunger and vulnerability. At a worldwide level, the current food systems at regional or country levels are unable to address the challenges and to end the situation of hunger [13]. The report stated that African countries and Asian countries have high levels of hunger, and these regions are in vulnerable situations for upcoming crises and shocks. The progress against hunger has deteriorated in these regions, which is creating troubles for the need of improvement [13].

The Global Hunger Index indicates the reality that progress comes to an end after the reduction of global

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hunger in the last decades. The report gave a score of 18.2 for the world, which is moderate, and it shows a lower score from 2014, which was 19. 1. The study compares the previous period of 2000, when there was a score of 28.0 for the GHI for the world, and it became less in 2007, at 24. 3. A study pointed out four indicators of the undernourishment prevalence with reference to GHI scores during 2000 to 2007, but in 2021, as reported, 828 million people were facing the issue of undernourishment, which is going back compared to the progress of a decade [14].

The GHI indicators show results that the child wasting rate has festered in the current years at a global level, while the rates of stunting and child mortality are in the process of declining [15]. The study highlights facts and figures that undernourishment at a global level was 13% in the year of 2000 and it was 7.6% in the year of 2017. During this period the prevalence of undernourishment increased at a small level. However, from 2017 to 2021, the prevalence of undernourishment has increased at the global level by 7.6% to 9.8% [13]. The entire countries of the world face a series of acute crises that expose the vulnerability conditions in the food system. [16]. estimation that 46 countries in the world are about to fail to reach the target of low hunger in 2030. However, the study defines three key driving forces, such as climate, economic recessions, and violent conflicts, along with the pandemic covid-19, that are developing the worst situations. The war in Ukraine developed the complexity, food shortage, and disruption in the energy and fertilizer markets at global levels. The entire nations of the world are vulnerable already because of deep-rooted inequality, poverty, and weak governance and institutions, which bear the high burden of the catastrophes.

The current analysis shows that climate change is the major determinant that prevents the acquisition of the second goal of SDG at the global level of zero hunger by 2030 (WHO, 2021). Malnutrition. WHO Report. According to the report of the global hunger index of 2019 about climate change and hunger, human actions are solely responsible for the becoming more adverse situation of sustainable food and nourishment at the global level of the human population [17]. The report of 2020 explains the causes of inequalities with various factors such as injustice, unfairness, political exclusion, and imbalances in power. However, the causes of inequalities are seen as complex with various social determinates. The social injustice refers discrimination to any person or group on the basis of social norms and cultural values that lead them or treated unequal. This type of discrimination shows failure of policy to recognize the damage or effects of inequalities. It also explains a social position of individual in the society such as an infant and young children who are dependent to others, disable boys, low income or caste women, and they are treated unfairness across their lives and generations hence their health, nutrition and education are affected and no access of these basic necessities to them [18].

Child malnutrition is a big problem for public health at a global level with significance to individuals and societies. The study defines that 555 million children under the age of five years are residing in developing countries [19]. Malnutrition signifies various causes of mortality of children under the age of five years that trigger 35% to 50% of deaths among children of 0 to 5 years [20 & 21]. The study states that severe acute malnutrition is a less dominant form of malnutrition but has a high risk of mortality, which is the cause of about 1 to 2 million deaths in a year [22]. According to Black, Morris, and Bryce (2003), malnourished children have prolong consequences of physical and health in their lives. It blocks the cognitive and physical development as well as lower intellectual quotient, behavioural problems and low social skills among children [23]. A study conducted by De Onis, Blossner, borghi, Frongillo and Moriis in 2004 that a huge number of deaths due to malnutrition, and about half of childhood deaths happen in developing countries which are attributed to moderate and mild malnutrition. The study shows 45% of deaths are related measles and 61% of deaths are owing to diarrhea [24].

Siddiqi, Haque, and Goni conducted a study in 2011 in Bangladesh on malnutrition among children, and the study reveals that the prevalence of underweight and stunting among five-year-old children are 40% to 42%, respectively [25]. Edris was done studying the Gumbrit area of Ethiopia in 2006; malnutrition prevails among children in the forms of underweight, stunting, and wasting, and the ratio of the prevalence is 28.5%, 24%, and 17.7%, respectively [26]. A study was done by the National Institute of Statistics of Rwanda in 2005 that chronic malnutrition delays growth that affects about 45% of children under 5 years [27]. The report of the WHO (2008) narrated

malnutrition as the major public health issue mostly of the less developed nations of the world. The study narrated factors of malnutrition, which are no proper pure drinking water and lack of adequate sanitation and hygiene systems, and these factors leave direct effects of various infectious diseases, particularly diarrhea. The report states that malnutrition and all its forms develop the risk of various diseases and deaths [28].

2.2 Malnutrition Among Children in South Asia

A lot of research studies are evidence that the cases of malnutrition among children are largely found in the less developed nations. In this regard, Marcelline reported in their study of 2014 that 925 million people are facing the issue of being undernourished at a global level, while 98% of the cases of undernourishment are from developing countries. The study defines that about 20 million children are facing the situation of severe acute malnutrition, and the highest cases of them are from Sub-Saharan Africa and South Asia [29]. According to de Onis, Frongillo, and Blossner (2000), the burden of malnutrition is mostly seen in South Asia rather than in Africa and other countries. The study supports that the situation of stunting and underweight in South Asia is reported as 44% and 46%, respectively [30].

Regionally, South Asian and African countries have high levels of hunger, which are measured as 27.4% and 27% by the GHI of 2022. The hunger in these two regions is serious. The progress for declining hunger is widely stopped in both regions compared to 2014, while the scores were 28% and 28.1% in South Asia and Sub-Saharan Africa, and their progress is needed to achieve the second goal of zero hunger of SDG by 2030 [13]. The issue of food insecurity is also related to the undernutrition of children of five years in Bihar, India. It is because a large number of people's livelihoods depend on agriculture. In this way, frequent destructions happen due to floods and other calamities that affect the access and availability of supplementary food in terms of money as well; this leads to more stunting and food insecurity for the children [31]. The study shows that stunting rates are high among Afghanistan, Pakistan, and India, with 35% to 38%, while Afghanistan has the highest rate of stunting in the region. Afghanistan experienced the situation of drought, poverty, economic and political instability in 2022, and the consequences of rising food and fuel prices at the global level made the situation worse due to the war of Ukraine, which resulted in a high rate of stunting [32].

The study shows that Yemen has the highest hunger level in 2022. The undernourishment in West Asia and North Africa is high compared to 2010 to 2021 such as 6.1% to 8.6%. The report illustrates that prevalence of undernourishment in Jordan is seemed high as 6% in 2013-15 to 16.9% in the year of 2019-2021, while Prevalence of undernourishment in Lebanon, Yemen and Oman are observed as increasing [33]. However, various countries in the Southeast Asia are observed as the highest child stunting rates particularly in Indonesia as 30.8%, Timor-Leste as 46.7% and Lao PDR as 33.1%. Some countries in the same region also have the high or medium wasting rates among children such as Indonesia 10.2%, Malaysia 9.7% and Cambodia 9.5% [13].

Good health services, environment and proper sanitation and safe water are essential for growth and development of children. Unavailability of these factors have direct impact over the childhood diseases. The increasing of stunting, wasting and underweight is seen among children at Bihar, and the immediate causes were found that influences undernutrition which inclined to the prevalence of various childhood diseases and poor infant feeding practices. Diarrhoea is high among children at the area which cause to poor nutritional status to them. The breast-feeding practices seems poor. These poor practices and childhood diseases have effect to the nutritional status of children of five years ages at Bihar [31]. However, poor maternal nutritional status and poor caring practices for children result in poor nutritional status for the babies, respectively [31]. Moreover, no proper health service owing to inadequate and poor infrastructure and health manpower has a worse impact on general masses in the state. Precisely, the basic and main causes of undernutrition are poor attention to and investment in nutritional programs. Poor management and investment in the public health domain are mainly responsible for the impact of undernutrition [34].

According to a study, 77% of children are physically stunted at the age of one month to six years in Bangladesh [35]. The different types of malnutrition among children are investigated based on some specific demographic, dietary, socio-economic, health, and environmental aspects [35]. The study reveals that in Bangladesh the male cigarette smokers do not spend much on health, housing, clothing, and

education, but their expenditure is more on cigarettes [36]. It is hypothesized that people of less developed countries face income limitations for food, and the spending on tobacco products creates a shortage of food intake that can leave bad impacts on the nutritional status of their children. The study shows that cigarette purchasing reduces the food expenditure that leaves negative impacts on the nutrition of children [37].

Afghanistan is considered at high risk of acute malnutrition and the nutrition reports show that stunting reached the alert stage and also suggested quick intervention. The global experience indicates that the most vulnerable conditions of malnutrition are the suffering of children, pregnant women and elder people. The high rates of malnutrition have portrayed risks of low resistance to various diseases, high mortality, less cognitive abilities and affected physical activities. However, examiners have different views on the major causes of malnutrition in Afghanistan. Some of them argued that lack of access to healthcare services, no proper supply of drinking water quality and no diversity in the diet patterns caused high malnutrition cases occurred in the country. While some experts acknowledged the proposed and mentioned causes of malnutrition but yet they highly emphasized the low supply of caloric intake food [32]. Bangladesh is considered to suffer a high level of malnutrition and several problems are cited. In less developed nation countries, poverty and inequality are largely highlighted as the prominent driving force of malnutrition [38]. The deficiency of nutrition is widely connected with poverty in Bangladesh and India which highly affect the wealth. People have limited affordability of supply of food also among the middle class of society [39].

2.3 Malnutrition Among Children in the Case of Pakistan

In Pakistani society, women are not strong financially and the studies examined that if women are empowered economically, then they spend much money on food, medication and other necessities. The financially strong women are largely spending more amount the health, food and other necessities of children compared to those women who do not have enough economic empowerment. “The positive and significant association of mother’s employment status in male child model shows that the mothers belong to poor families, where their incomes are spent in meeting other household expenditures rather than on their children nutritional requirements.”[10]. The analysis illustrates that females possess no power of income and assets acquisitions to suffer more from malnutrition. The urban resident is mostly highlighting more cases of suffering from malnutrition in male children [40]. Higher birth order is the leading factors of malnutrition among female children. The studies conclude that both female and male children have more chances of malnutrition, but some effects are found higher among male children than female counterparts [10].

The mental and physical health status of children provides malnutrition status. Children who have adequate diet supply do not have to issue with repeated illness and develop a potential growth. Insufficient family earnings, large family size and maternal illiteracy are the substantial cause of the high rate of morbidity and mortality below the five years of age of children in Pakistan. Malnutrition is the main cause of developing a vicious cycle of poverty and deficiency of nutrition [10]. A boy child is always preferred by family members so his probability of being more consumption of nutritious food compared to a female counterpart child but yet why some historical statistics give a horrible picture that boys are suffering more from wasting, stunting and underweight rates than the girls [10].

The food intake process in Pakistan is frequently three times in a day such as breakfast, lunch and dinner. However, most of the people have no proper access of food but whatever is available to them to eat and no importance is highly given to the acquiring highly nutrient or caloric food. A research study portrays that the food habits of the masses depend on their agricultural products that they produce and also determined by their economic and social status. However, the major nutritional problems are low birth weight owing to adverse material nutrition and other micronutrient deficiencies. The adverse nutritional conditions can be examined with massive poverty and unequal distribution of income among the masses and at some extent other behavioural aspects are related to gender based attitudes [41]. The above discussion gives clear cut that need of improvement among nutritional status of the people in Pakistan, and numerous factors are required such as reduction of poverty by various programs, raise food supply, increase awareness of hygiene by community health

programs, make access of clean water, provision of health facilities and plan the universal education to wipe-out illiteracy [41].

Different researchers gave different causes of malnutrition such as population growth, unawareness, poverty, political instability, droughts and improper food stock, and some other important factors are also discussed but these above mentioned are generally seen by various articles. However, large family size and low family income are the main dynamics of malnutrition among children [42]. Malnutrition is the main public medical problem mostly in the less developed nations which results in a high mortality rate among children who are the age of fewer than five years. Malnutrition is also a widely prevailing and highlighted issue in Pakistan. A study prevails that the consequences of malnutrition are higher among young children who have aged 6 to 23 months than the older children from 2 to 5 years [43].

The proper supply of nutrition is vital for the early days of childhood which makes the immune system strong and also helps out in the development of physical and mental aspects of the body [43]. UN report narrates that at the flood battered areas in Pakistan one out of nine children who suffer from acute malnutrition, and they are admitted to health facility centers [44].In case of Sindh and Baluchistan, UNICEF warned about alarming situation of severe acute malnutrition to children who are at five years of ages. The two areas are abruptly worst hit regions of devastating floods. The health professionals screened about 22000 children at health facility centers of the hit regions, and more than 2600 of them were diagnosed by critical condition of malnutrition [44]. Severe acute malnutrition seems a life threating situation whereas children look very thin for their height that results weak immune systems [44].

The study reveals that about 25 million of children and women across Pakistan, and about 7 million of them are form flood hit-regions, need quick attention of providing essential nutrition services [44].The appropriate nutrition is important for children survival and growth as well as health. Well-nourished children need more equipped to learn and grow, and they respond well to tackle diseases. However, poor nutrition affect the education, health and wellbeing across generations [45]. Poor nutrition to mothers during their pregnancy lead to various reasons of malnutrition such as stunting and wasting among children. In Pakistan, nearly 10 million children affected from stunting. The wasting among children in Pakistan is high, and it considered to be emergency level. The case of Pakistan seems that 8 out of 10 children have not proper diet and quality based food to them [45]. A study conducted on the effects of malnutrition with reference to academic performance shows that underweight students have problems with writing and reading skills. The research explains that well-nourished students have adequate skills in both reading and writing [4].

The prime socio-economic problem exists in the developing countries like Pakistan is malnutrition. This issue caused by insufficient nourishment and lack of sanitation and hygiene facilities, and it associates with poor education and health outcomes that hinders in human and economic development [46]. The major nutritional problems in the country are stunting and wasting owing to poor maternal nutrition [4]. The author pays attention to the state responsibility to fight malnutrition and stunting by focusing the stakeholders and officials to work at the single platform as well as mobilize resources from domestic, national and international sources [46]. Stunting means inactivity of physical and mental growth owing to malnutrition, and it involves deficiency of nutrients that are essential for growth and development. Unfortunately, stunting is high among children in Pakistan, and it is reported about 38% children in the country are malnourished. However, huge segments of masses are at danger of the malnutrition due to less availability of nutrient and insufficient food [47]. A research study defines that about 4 out of 10 children are underweight in the country, and this situation shows a serious health concerns such as weak immune system, no proper physical growth, skin diseases, poor mental health and functional disabilities [47].

Ali (2020) reported that stunting among children in Pakistan is declined, and the reduction rate is slow. It is due to low attention for appropriate intervention programs, and the programs only address the issue but there is no use of multiple approach to highlight the determinants of stunting. It is essential to take effective initiative approaches to implement them in pre-conception for preventing the stunting and malnutrition among children in the country [48]. Malik (2016) reported that about a half children in Pakistan are stunted while 11% are wasted. The situation is largely contributing morbidity and

mortality among children of five years age, and it impacts the mental and physical growth of children that leads to economic impacts over the prosperity and development of the country [41].

The study indicates that maternal nutrition is chiefly important in developing countries like Pakistan. A significant part of women faces undernutrition, overweight and deficiency of micronutrient problem in the country. The facts and figures are mentioned in the study that about 177000 annual deaths are associated with maternal and child malnutrition in Pakistan. The issue if coupled with lack of food insecurity and no adequate sanitation and hygiene services that create intensification in female nutrition which prone to infectious diseases among women. The factors of maternal malnutrition have multifaceted in nature that is also include lack of access to good healthcare services, no food security and dietary diversification, early marriage, no proper childbearing norms, limitation to female educations and lack of employment accesses and availabilities. The study also defines that rural households in Pakistan are highly facing food insecurity that creates vulnerable situations of malnutrition among women and children [49]. The previous studies illustrate that mothers' working statuses and no ownership of having assets are originating and main contributors to the increasing malnutrition of children [10].

Malnutrition is mainly known for deficiency of nutrition or under-nutrition which accounted for most of the deaths of children at the global level [19]. The main cause of mortality and morbidity among infants is malnutrition [50]. Moreover, malnutrition mainly stands for the risk to children's health of mental and physical development that results in bad outcomes in later life achievements. Malnutrition leaves negative effects on socio-economic development and the future health of children [42 & 12].

3.4 Social Status of Parents and Malnutrition Among Children Column and Contest Debate

According to Abell, malnutrition is recognized with multiple causes, and clearer causes refer to insufficient intake of quality-based food, no availability of resources, and no capacity of purchasing power. These causes are still creating malnutrition at a global level, and the international organizations are struggling to correct the causes of malnutrition. However, there are other various causes that are associated with malnutrition, which are irrational but have deep effects on human lives [51]. Malnutrition is associated with causes and consequences to both individuals and their social environment. It is also called as hidden hunger [52]. Lack of minerals and vitamin are the major cause of this form of hunger hence it is called as hidden because individuals who are suffering from it has not any kind of information, and they are unknown its results or effects because the consequences seem invisible at initial [53]. Therefore, the whole population can be exaggerated by the hidden malnutrition.

The study defines that the deficiency of minerals leaves the effect of diseases and sufferings on over a billion people. Moreover, deficiency of minerals leads to malnutrition that imposes economic and social costs by obstructing human productivity and economic growth. The malnutrition has an economic rationale to control the illness and diseases that are caused by malnutrition. The economic notion refers to the fact that it is not un-wealthy people who are trapped by hunger but the hungry people who are poor people, so there is a kind of vicious circle of reinforcing hunger and poverty [54]. Ward and Sanders reported in their study of 1980 that high income has positive impacts on adequate food intakes, and better nutrition also increases the productivity of an individual. On the other hand, chronic malnutrition is seen as having negative effects on market-based wages, but Thomas framed a hypothesis that there is no such effect of income over health, but low-income settings portray a causal effect of health on both productivity and wages. In the case of developing countries with eruptive food shortages, a population effect is seen. [55].

Fogel defines in his study of 2004 that about 30% of growth is examined in the per capita income of British in the last 2 centuries because of better nutrition. A similar study was done by the World Bank in 1994 that showed deficiencies of iron, iodine, and vitamins are the cause of wastage of gross domestic products at 5%. However, the study of Fogel [56] shows a successful story that better nutrition leads to high income today and tomorrow for the new generations. "In as far as mineral malnutrition increases mortality, morbidity, and susceptibility to infectious diseases; reduces cognitive abilities and physical performance and earning potential; and disproportionately affects children and (young and pregnant) women." [54].

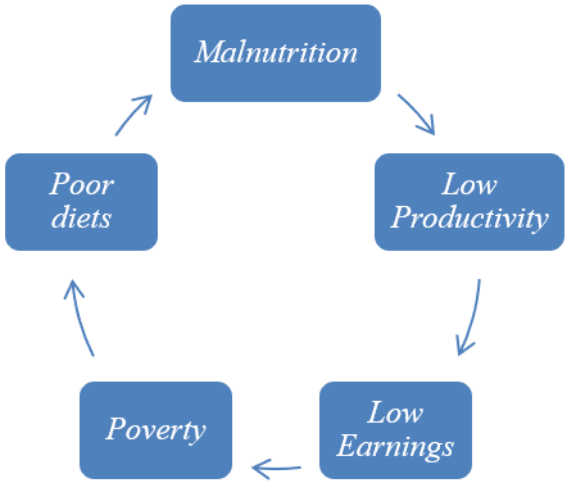

Fig.1 Malnutrition-Poverty Trap (Stein, 2006).

Hunger in general, as a result of food insecurity, has four main causes: (1) unavailability of food, (2) lack of access to food, and (3) its poor utilization (due to a person's inability to select, take in, and absorb the nutrients in the food). Moreover, these causes can be affected by the (4) vulnerability of an individual (i.e., by physical, environmental, economic, social, and health risks)" [54]. Particularly, loss of nutrients is another cause of hunger. The consequence of disasters at the regional level (both natural and man-made) creates unavailability of food and also reduces the food supply. The seasonal changes are also creating a shortage in food supply at the local level that contributes to hunger [57].

A study shows that there are about 20 essential elements for the human body to function adequately. If these elements do not properly intake an adequate amount, then the negative consequences happen to the health of those individuals who use a little amount. A study reports at a global level and emphasizes in less developed nations that the deficiencies of iron, zinc, and iodine are identified and leave bad impacts on public health [58]. A study conducted by De Benoist et al. in 2008 estimated that about 25 percent, which is 1.6 million, of the entire population suffers from the diseases of anemia; the report of the WHO of 2009 explains that about 2 million people at the world level are facing the issue of anemia. The study also portrays that deficiency of iron is largely a nutritional disorder at a global level, which affects both women and children in industrialized and developing nations. Similarly, Brown's study in 2004 estimates that 20% of the population is at risk of deficiency of zinc. However, various researchers explain that there is no exact data available about the deficiencies of micronutrients; hence, there is a need for a survey to fill the gaps [59].

The study shows that the children of educated parents have less malnutrition than the non-educated parents. The parents with low income whose professions are associated with labor work observed high malnutrition in their children. The mothers' education and wealth conditions have a relationship with stunting, and the stunting is seen to be higher in the children of poor families and households compared to the children of rich family backgrounds. The malnutrition proportion is higher for the children whose mothers have no education [29]. The study defines that low time for the child's breastfeeding practices leads to more malnutrition among children. The study also highlights that family resources have great effects on the malnutrition of children; that is, the parents who have income from businesses and monthly salaries and their children are less malnourished. The study also paid attention to the relationship between malnutrition and parents' conflicts. The conflicts lead to more malnutrition among the children.

Some literature defines that poor living standards of families, large family size, food insecurity, and low consumption levels are the causes of malnutrition among children. However, males are largely affected by malnutrition compared to females, and children from rural areas have more effects of malnutrition than urban children. The study also explains that age does not show any kind of difference, such as the situation of "malnutrition increases as the age of a child increases." The study highlights that the children of parents (with a low number of children) who have monthly salary-based income are less affected by malnutrition. The study also shows that uneducated parents have a large number of children with high malnutrition compared to the educated parents. The results of the study found that family size keeps mattering in the situation of malnutrition in the sense that more family members have high levels of malnutrition cases [29]. Gender discrimination has a correlation between social well-being and the development of women. According to a UN report of 2011, it explains that in various parts of Africa there is a huge difference existing, and women have low access to their rights of education, right of inheritance, and resources.

The trade policies at the global level have negative impacts; the unsustainable price hike in the world market obstructs opportunities for the farmers of Africa and others. The report of the UN defines that lack of employment opportunities leads to a high portion of unemployment, and about 300 million people have no such amount for survival, and they have less than one US dollar a day to sustain their lives [32]. The political exclusion and imbalance of power are one of the major inequalities for weak segments of the society. The marginalized class of people have no representatives across all institutions of economic and educational opportunities [60].

The most dangerous happening of malnutrition is during early childhood and pregnancy. Under-nourished children have weak immune systems; hence, they are more prone to illness and infections. Long-term improper nutrition supply can harm stunting that may largely affect cognitive development. The common childhood diseases and high levels of food scarcity can cause acute malnutrition that also leads to the death of infants [61]. The nutrition deficiencies among women and girls who reach the age of reproduction give birth to smaller babies of low weight and height, which happens, furthermore, to the next generations. Stunting leaves adverse consequences on education dramatically. The previous studies define that child stunting has impacts on the brain and other skills, and the stunted children have less education-oriented results in adult lives [61].

3. Discussion and Conclusion

The healthy children symbolize the health status of a country. Adequate nutrition is highly important for the promotion and development of health and prevention of diseases in the nation. However, it is the fundamental right of a child to remain healthy in his/her life; therefore, he/she needs good food, shelter, clothes, education, adequate health, love and affection, and entertainment. Every year, a huge number of children die in the entire world owing to malnutrition, but the number is high in the undeveloped and less developed countries, particularly in the South Asian countries. While the nutritional status of a child is based on numerous factors such as the care practices of the mother, health-related knowledge, feeding practices, mother's education, diseases, socio-economic status of parents, etc. However, socio-economic status is largely associated with determining the nutritional status of a child, especially at the age of growing, and can easily be affected by the lack of nutrition and malnutrition. Malnutrition seems to be responsible not only for the barrier to the development and growth of children but also for creating serious health concern complications that ultimately lead to deaths. The health of children in Pakistan is relatively connected to various factors from socio-cultural, geographical, economic, food availability, care practices, education, and climate, and these factors exist in the country. Malnutrition is largely a public health concern in Pakistan, and several nutritional problems largely disturb a huge segment of the population. However, malnutrition and undernutrition are main obstacles for the promotion and development of the nutritional status of many Pakistani people. The main cause of malnutrition is highly associated with lack of food security at the household level, poverty, unequal distribution of resources, lack of health facilities at the national and local levels, and illiteracy. Besides these major reasons, low levels of education and poor hygiene and sanitation situations are the basic complications for development in Pakistan. In our country, the nutritional status among rural women and children is an extremely alarming condition. In some areas, the wealthy families have standard nutrition status, and they intake proper and good nutrition; hence, they bear less of the burden and complications of malnutrition. Generally, children are largely dependent on mothers and their nutritional access and intake, and their access to good nutrition definitely has great effects on the children's development and growth. The prevalence of malnutrition develops high rates of deaths and diseases among children, and it also slows the mental and physical development and growth among children. The nutrition statuses of mothers and children are abruptly poor in Pakistan; this problem is largely determined in the less and disadvantaged poor. However, the situation varies from region to region and community to community as well as from individual to household. Children are largely affected by the lack of vitamin A, weak immunization, diarrhea, anemia, and goiter because of malnutrition. So, it needs attention to explain and find out the nutrition status among children and the socio-economic status of parents, and then the problem of malnutrition is an easy way to tackle. Hence, this study is selected for extensive research. The main purpose of this study is to examine the social status of parents

and malnutrition level, and the research will also illustrate how social aspects of parents affect the nutrition of children. Moreover, malnutrition has numerous effects on health due to an insufficient supply of nutritious food, age and birth interval, and parents' education and occupation as well as income. All these features of malnutrition will be vastly under consideration in this research. Further, malnutrition is the main issue in the subject of the lack of resources and public expenditure. The cost is calculated currently as developed countries largely utilize the malnutrition-related diseases compared to the less developed countries, whereas the problem is widely existing in the third-world countries. The developing countries are less sparse and spend the amount on public expenditure and are indebted to many causes that give way to various social and medical issues like malnutrition. The issue of improper utilization of public funds is also under debate in the health departments and among the general public to analyze the problem of corruption along with malnutrition.

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