



Socio-cultural and Economic Factors Effects Child Malnutrition and Mental Development: Evidence from Pakistan Demographic Health Survey 2018

Muhammad Khuzaifa¹ & Muhammad Aasim²

Abstract

The purpose of the study was to statistically measure the socio-economic and cultural taboos and practices that affect child malnutrition. Secondly, how does child malnutrition affect mental growth of child? The quantitative data was analyzed from the Pakistan Demographic Health Survey 2018. The result found that socio-economic level also influences child malnutrition and cultural taboos and practices. Moreover, mental growth and child psychological development are decreasing due to malnutrition. The research recommended that micronutrient insufficiency, mental growth, and psychological factors are either overlooked or have received little attention as a contributing factor to malnutrition among children. Immediate implementation of both short-term and long-term strategies is essential to address the pervasive deficit among children, which manifests as various forms of malnutrition.

Article History

Received 12 January 2025
Revised 17 January 2025
Accepted 22 January 2025
Published 24 January 2025

OPEN ACCESS

Keywords

Socio-economic, Cultural;
Psychological; Child
Malnutrition; Mental Growth

Introduction

Malnutrition is very common among children of Pakistan. Pakistan is ranked among top five countries with high rate of malnourished children, specially falling under the age bracket of 1-5 years³ and country's own survey reports are indicative of the fact that situation may become worse if immediate response is not given to the phenomenon of malnutrition. The latest Pakistan demographic health survey (2018) reveals some alarming facts about malnourished children all over the country and the stunting growth (Ali, 2021).

The imbalance that exists between the sources of nourishment and energy that are available to the body and the requirements that the body has for them in order to maintain growth, preservation, and certain functions (Ullah et al., 2022). Food distribution is not fair and all the society people are not taking food aid on time (Nazirullah, Ullah, et al., 2023). It is directly related to child growth and development. For a newborn baby, malnourishment starts from the period of pre-birth as most of Pakistani women are badly malnourished due to various reasons. This in turn leads to premature births, children born with multidimensional deficiencies, impairments confronted with lack of required nutrients necessary for growth and thus results in various categories of malnutrition e-g, under or over malnourished, stunted, and wasted (Nazirullah, Rahman, et al., 2023; Nazirullah & Ullah, 2025).

This research paper is an endeavor to understand the nature and prevalence of malnutrition among Pakistani children. Various factors that contribute to this phenomenon are analyzed from Pakistan demographic health survey (PDHS-2018). Child malnutrition is predominantly physical condition but the variables that affect this lack of nutrition among children of Pakistan are not only physical but also socio-economic, cultural and psychological. In depth study of all available secondary data on the subject reveals that the efforts carried out to address this menace are not sufficient in

¹The author is a Doctor at Ayub Medical Collage Abbottabad, Khyber PakhtunKhwa, Pakistan. He is corresponding author and can be reached at Gmail: Khu81298zaifa@gamil.com

²The author is a Doctor at Khyber Collage of Dentistry Peshawar, Khyber PakhtunKhwa, Pakistan. He can be reached at Gmail: aasimkhan59927@gmail.com

Pakistan. The magnitude of the problem is on the higher side and remedial path requires more vigorous attempts to save our future generation. Recommendations at the end of this study are developed with the thought that if considered by the implementing authorities, they will serve as mature steps to safeguard the humanity living in this part of the world.

Study Objectives

1. To analyze socio-cultural taboos and practices which affect child malnutrition.
2. To know the influence of child malnutrition effect on mental growth.
3. To measure statistically the malnutrition effect on psychology of children.
4. To know how socio-economic level differences affect child malnutrition.

Problem Statement

There are a significant number of children in Pakistan who are considered to be malnourished, making Pakistan one of the top nations in the world in this regard. An investigation into nutrition policies for Pakistan has been made public by the International Food Policy Research Institute (IFPRI Pakistan), and according to the results of this investigation, Pakistan is classified as the second most underweight country in Asia. It has been claimed that Pakistan has the highest level of frequency of malnutrition when compared to other developing nations. In the most recent survey, it is reported that the sustainable development goals (SDGs) are more focused on save the children. The number of Pakistan is 184th out of 172 nations in world. There is dare need to handle this situation of children who reside in these nations who fall into the subcategories of under or over-malnutrition, for the most part, do not complete the age of five is the primary emphasis of this study (Hashmi et al., 2021; Ullah et al., 2022).

Based on the findings of the most recent National Nutritional Survey, which was carried out in 2018 by UNICEF Pakistan and the Federal Health Ministry, it has been determined that in Pakistan, four out of ten children under the age of five have stunted growth and 17.7% of children develop wasting. With nearly one in three children being underweight (28.9%) and a high prevalence of overweight (9.5%) in the same age group, the added weight of malnutrition is growing ever more visible. This is because one in three children are underweight. Since 2011, the percentage of children under the age of five who are overweight has almost quadrupled, going from 5% to 9.5%. This is a significant increase over the previous seven years (Anees et al., 2020; Nazirullah, Rahman, et al., 2023).

Literature Review

Child malnutrition is a big problem in various global countries. This research focuses on the effect of psychological, mental growth, and socio-economic toward children malnutrition at country level.

Social and Cultural Taboos and Practices Effects Child Malnutrition

The composition of Pakistani society is based on the principles of some very deep rooted cultural practices and many taboos, myths, cultural norms; values travel from generation to generation (Sharma et al., 2021). For instance, it is very common all parts of Pakistan that when a child is born, given honey or anything sweet as first diet, normally this ritual is performed by the elders of the family by using finger or spoon (Ghani et al., 2022). Now according to medical science, there is no need for such practice as this may take some bacteria, a virus to the stomach of the baby which may cause any disease to take a start from the first day of his arrival in this world. The world is convinced that mother's milk is all the baby needs as it contains all necessary nutrients for the growth (Nazirullah & Ullah, 2025).

Malnutrition Effects Child Psychology

Scientific substantiation has reflected that further than the age of 2-3 years, the effects of persistent malnutrition are irretrievable. This means that to shatter the intergenerational diffusion of

poverty and undernourishment, children at peril must be reached during their first two years of life (Headey et al., 2016). Children under-fives are more prone to intense mortality ratio as greater chances to get infected and slow recovery from illness are caused by malnutrition. Children who fall short of reaching their optimal stature elevation or constant occurrence of bouts of weight loss during early days are affected in the long term in plentiful ways. Reduced immunity levels bring increase in occurrence and severity of transmittable diseases and this is mainly caused by Vitamin A deficiency (Hassan, 2016).

Child Malnutrition Decrease Mental Growth

Malnourished children do not reach their finest size when fully grown, they remain with damaged brain development (consequential of inferior IQs) and the risk of all kinds of infections is much higher in them (which causes many child mortalities in their early lives). Child malnutrition has a very bad impact on attainment of education throughout the lives of the suffering individuals. The scale of cognitive impairments is straightforwardly related to the sternness of stunting and Iron insufficiency. Studies are evident of the fact that children suffering from stunted growth have weaker aptitude towards cognitive examination scores in the early periods of their lives, overdue enrolment, higher malingering and more class recurrence is found in comparison with healthy children.

Socio-economic Level and Child Malnutrition

There are a number of impoverished and low-income countries that have a higher occurrence of health characteristics, such as a lack of connection to water and sanitary conditions, education, gender inequalities, and a lack of appropriate food intake. Due to the fact that purchasing power is a primary factor in determining whether or not an individual is able to afford nutritious food, individuals with lower socio-economic positions are the most susceptible to food insecurity (Sathar et al., 2013).

Research Design

The current study analyzed data of Pakistan demographic health survey (PDHS-2028) which is secondary sources and research design was quantitative in nature. For factors were analyzed in response to child malnutrition. The variables were added based on the PDHS statistical measure and investigate the inter relationship among psychological factors, mental growth of child, socio-economic level, socio-cultural taboos and practices and child malnutrition. Similarly, each factor total and selected cases score are figured out in Table 1. The PDHS total sample and population is shown in Table 1.

Table 1

Five Factors Total Scores and Countered Numbers for Each Variables

Child Malnutrition	Psychological Factors	Mental Growth of Child	Socio-economic Level	Socio-cultural Taboos and Practices
4809	3414	3416	3377	3232
7555	8950	8948	8987	8987

Tools and Statistical Tests for Data Analysis

The researcher recode different factors into one variables and showed their each numbers. The tool was Statistical Packages for Social Sciences (SPSS) version 21 and Excel 2024 software. First, we administered and structured all the data and logically measured the total and selected sample size. The data were analyzed in the form of frequency and percentages to measure the each variables responses regarding child malnutrition and related factors (see Figure 1 for more details).

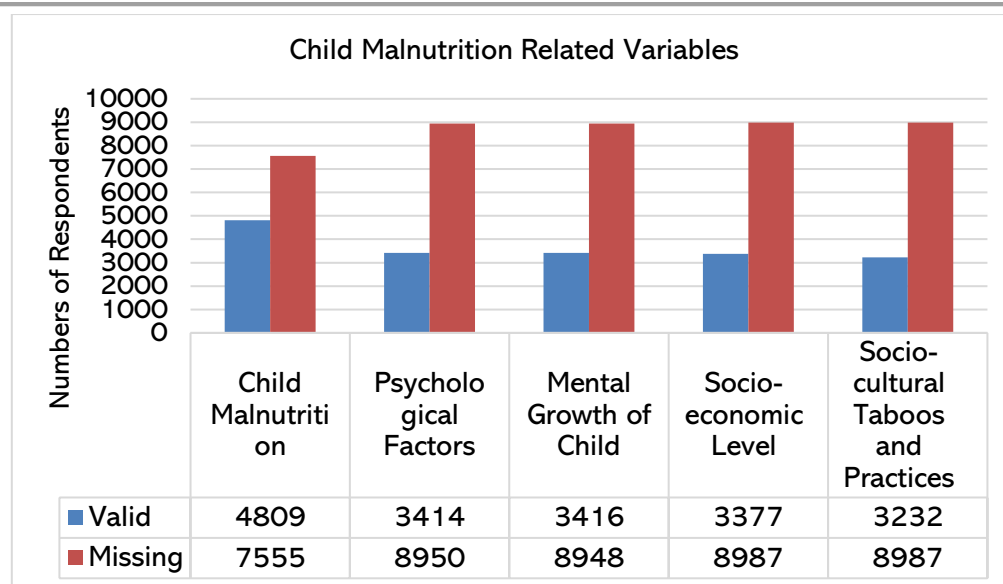


Figure 1: Child Malnutrition Related Variables

Statistical Data Analysis and Key Findings

Data was analyzed with the SPSS software and draw figures from the output of Excel. The study investigated that malnutrition of children were exist. For example, 414 (3.4%) children were malnourished and 4394(35.5%) were non-malnourished and total score 4809 (38.9%). The findings concluded that the percentage of malnutrition were present among children from all over Pakistan (see Figure 2).

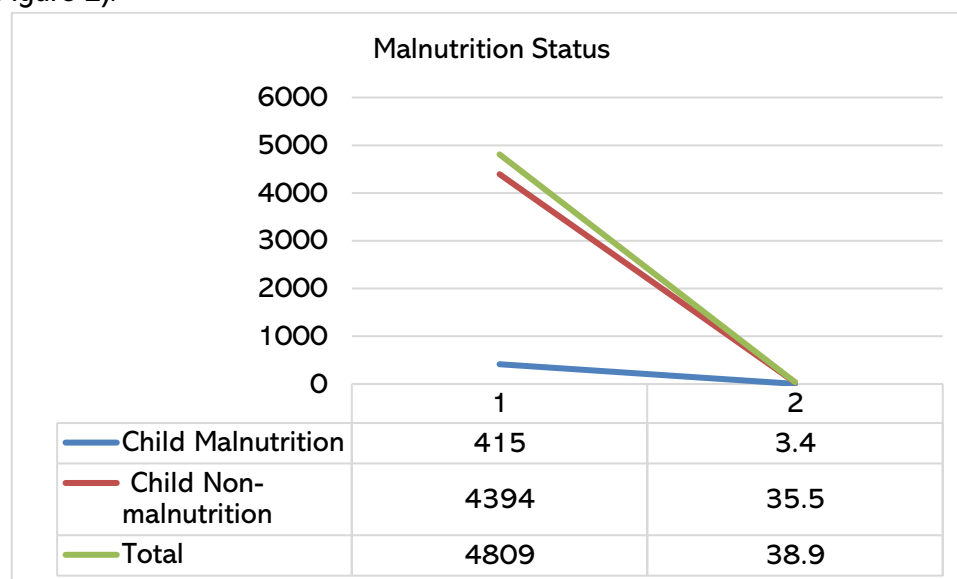


Figure 2: Child Non and Malnutrition Frequency

Secondly, the study measured that psychological factors also make children malnutrition. Such as, 192 (1.6%) respondents replied that psychological factors are involved in child malnutrition and 3222(26.1%) were replied and they described that psychological factors are not involved. The total score was 3414 (27.6%). The findings concluded that psychological factors are the possible reason for malnutrition among children (see Figure 3).

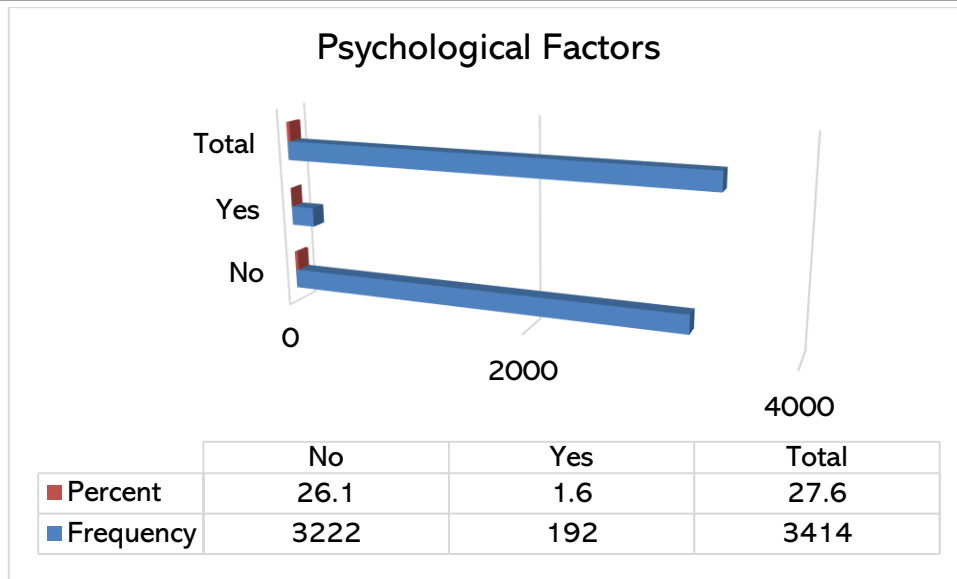


Figure 3: Psychological Factors

The factor of mental growth of child was measured and it was also one interrelated factor which happened due to child malnutrition. For instance, 123 (1.0%) respondents replied that mental growth of children happened when he or she is malnourished. As a result, 3293 (26.6%) children who were not malnourished have good mental growth. The PDHS numbered a total of 3416 (27.6%) respondents in this field. The findings concluded that mental growth is not boosting due to child malnutrition (see Figure 4).

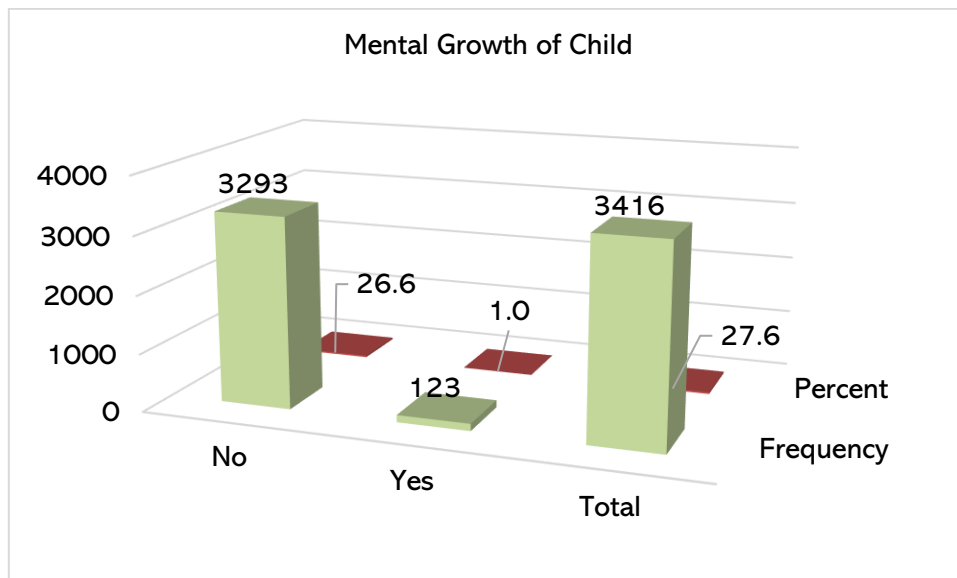


Figure 4: Mental Growth of Child

The study frequently measured the socio-economic level of respondents and 155 (1.3%) respondents were fallen into low socio-economic level which are a competent reason for child malnutrition. Moreover, 3222 (26.1%) children were not malnourished and have good socio-economic level in society. The PDHS numbered a total of 3377 (27.3%) respondents were responses regarding socio-economic factors. The findings concluded that socio-economic factors are also a hinder for child malnutrition (see Figure 5).

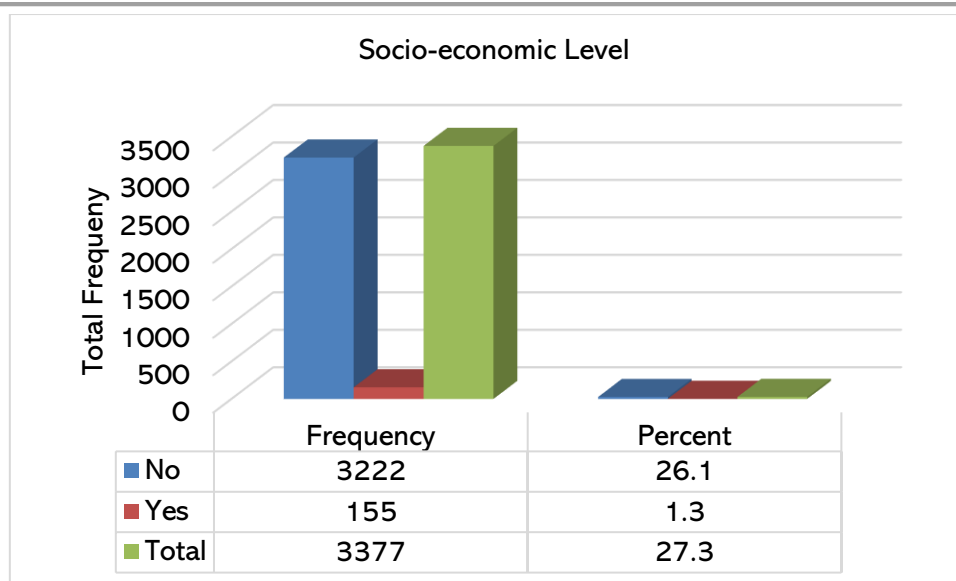


Figure 5: Socio-economic Level

The study frequently measured the factor of socio-cultural taboos and practices and 159 (1.5%) respondents were fallen into low socio-cultural taboos and practices which are a competent reason for child malnutrition. Moreover, 3124(25.3%) children were not malnourished and have good socio-cultural taboos and practices in society. The PDHS numbered a total of 3232 (27.3%) respondents were responses regarding socio-cultural taboos and practices. The findings concluded that socio-cultural taboos and practices are also a stumbling block for child malnutrition (see Figure 6).

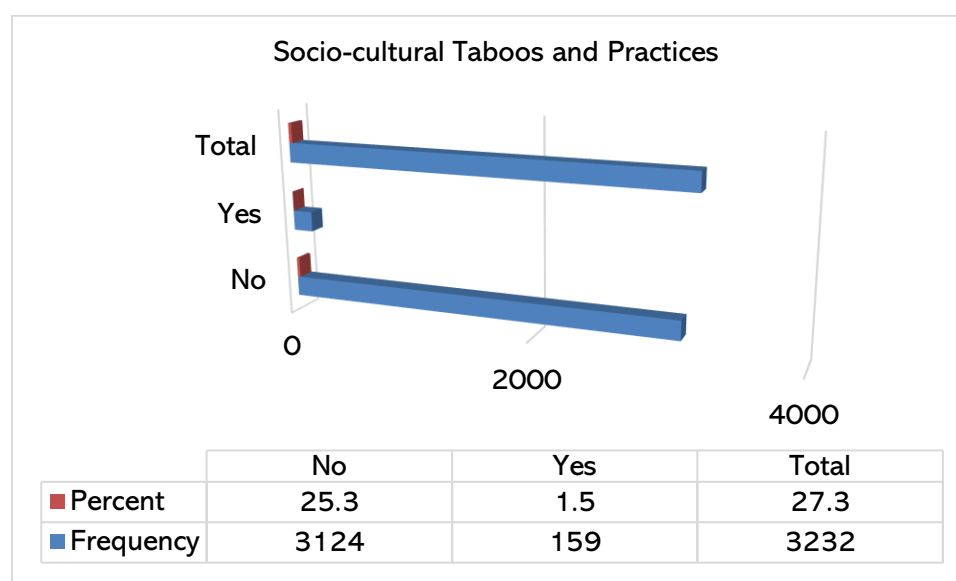


Figure 6: Factor of Socio-cultural Taboos and Practices

Discussion

The primary factors contributing to undernutrition are maternal nutrition and inadequate nutritional intake, which influence low birth weight. The circumstances vary from province to province in Pakistan. Punjab has seen a notable reduction in stunting while stunting rates in Sindh remain unchanged. Another concern is that only slightly over one-third (38 percent) of infants under 6 months are exclusively breastfed (Nazirullah, Rahman, et al., 2023). The current study revealed that mental growth, socio-economic, and cultural factors are more severe in the Sindh province regarding child malnutrition. In the 2013 PDHS report, the province of Punjab is leading the nation in improving the nutritional condition of children. The province uniquely allocates billions of rupees to its citizens to

feed their children. As a result, the initiative provides clean drinking water according to water, sanitation, and hygiene (WASH) standards (Ullah et al., 2022).

The Sindh Government has allocated funds for a few districts and developed nutrition-specific activities for the whole province. A new initiative funded by the European Union has been launched to combat malnutrition using both nutrition-sensitive and nutrition-specific strategies in Sindh province (Baxter, 2021). The Khyber Pakhtunkhwa (KP) Government proclaimed a malnutrition health emergency. Similarly, the provincial health agency was instructed to promptly address the problem and create strategies to combat malnutrition abruptly. However, the initiative to mitigate child malnutrition in KP is nearby (Idris, 2021).

The prevalence of all forms of malnutrition is very high in Balochistan. This is due to political instability, persistent socio-economic level, and socio-cultural circumstances that do not execute any health planning for children. Inadequate service delivery within the health sector is closely associated with persistent political involvement and frequent reassignment of healthcare professionals. Moreover, this is operational to combat acute malnutrition in children and among pregnant and lactating mothers (Nandy, 2023).

Conclusion

Poverty is mostly seen as a rural issue in Pakistan. The dietary consumption of all family members is secured since the rural population mostly achieves self-sufficiency in food production despite a significant portion lacking ownership of agricultural property. Pakistani socio-economic, culture is profoundly rooted in social assistance, with several government and civil society initiatives aiding impoverished families and improve their food. The effect of socio-economic, culture, mental growth and psychological factors are tenuous child malnutrition. As a result, impoverished conditions in the populations are more susceptible and it is connected to low-income nuclear families without social support. Young children are likely to experience malnourishment in their provinces.

Recommendations

- Socio-economic and cultural practices influence children's nutrition and must be examined in depth by both governmental and non-governmental agencies, which have failed to mitigate the persistent and escalating problem of malnutrition.
- Micronutrient insufficiency, mental growth, and psychological factors are either overlooked or have received little attention as a contributing factors to malnutrition among children in Pakistan. Immediate implementation of both short-term and long-term strategies is essential to address the pervasive deficit in Pakistani society, which manifests as various forms of malnutrition.
- Based on the principal results, a malnutrition emergency should be proclaimed nationwide, and all necessary steps should be implemented without delay.

Author Contributions:

The Conception and design: Muhammad Khuzaifa. Collection and assembly of data: Muhammad Khuzaifa. Statistical Analysis and interpretation of the data: Muhammad Aasim. Drafting and Critical revision of the article for important intellectual content: Muhammad Aasim.

Muhammad Khuzaifa. Corresponding Author Email: Khu81298zaifa@gamil.com

Conflict of Interest: None declared.

Source of Funding: None disclosed.

References

- Ali, A. (2021). Current status of malnutrition and stunting in Pakistani children: what needs to be done? *Journal of the American College of Nutrition*, 40(2), 180-192. <https://doi.org/10.1080/07315724.2020.1750504>
- Anees, M., Ur-Rehman, A., Ahmad, A., Bukhari, S., Siddique, M., Farooq, U., Sultan, A., Murtaza, I., & Anis, R. (2020). Persistent inadequacies in infant and young child feeding practices and their determinants. *Journal of Food and Nutrition Research*, 8(7), 347-354. <https://doi.org/10.12691/jfnr-8-7-6>
- Baxter, J.-A. B. (2021). *Characterizing Social Determinants of Nutrition among Late Adolescent Girls in Rural Pakistan* University of Toronto (Canada)]. <https://www.proquest.com/docview/2555920694?pq-origsite=gscholar&fromopenview=true>
- Ghani, A., bin Hj Hassan, Z., & Carlo, D. P. (2022). Cultural Beliefs And Practices Regarding Maternal Health: A Case Study of Rural Areas of Punjab. *Pakistan Journal of Social Research*, 4(03), 1208-1219. <https://pjsr.com.pk/wp-content/uploads/2023/08/124>
- Hashmi, S., Safdar, N. F., Zaheer, S., & Shafique, K. (2021). Association between dietary diversity and food insecurity in urban households: A cross-sectional survey of various ethnic populations of Karachi, Pakistan. *Risk Management and Healthcare Policy*, 14(3), 3025-3035. <https://doi.org/10.2147/RMHP.S284513#d1e153>
- Hassan, A. (2016). *Food security and child malnutrition: The impact on health, growth, and well-being*. CRC Press.
- Headey, D., Hoddinott, J., & Park, S. (2016). Drivers of nutritional change in four South Asian countries: a dynamic observational analysis. *Maternal & child nutrition*, 12(3), 210-218. <https://doi.org/10.1111/mcn.12274>
- Idris, I. (2021). *Areas and population groups in Pakistan most exposed to combined effects of climate change, food insecurity and COVID-19*. <https://opendocs.ids.ac.uk/articles/report/>
- Nandy, D. (2023). The tribes of Pakistan: Quest for socio-economic inclusiveness. In *Inclusive developments through socio-economic indicators: New theoretical and empirical insights* (pp. 115-125). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80455-554-520231009>
- Nazirullah, Rahman, S., & Imran, M., M. (2023). The Role of Social Factors in Childhood Stunting in Pakistan with Special Focus on Parental Aspects. *Qlantic Journal of Social Sciences*, 4(3), 279-290. <https://doi.org/10.55737/qjss.609917362>
- Nazirullah, & Ullah, F. (2025). Social and Cultural Practices Regarding Sequence of Adolescence Female Pregnancy at Schools and Collages: A Qualitative Ethnographic Case Studies. *Journal of Social Sciences Research & Policy (JSSRP)*, 3(1), 117-125. <https://jssrp.org.pk/index.php/jssrp/article/view/89/62>
- Nazirullah, Ullah, F., & Mustafa, M. (2023). Challenges of Food Distribution Process for Internally Displaced Persons in Non-governmental Organizations: An Ethnographic Study. *Progressive Research Journal of Arts & Humanities (PRJAH)*, 5(2), 126-141. <https://doi.org/10.51872/prjah.vol5.iss2.292>
- Sathar, Z., Royan, R., & Bongaarts, J. (2013). *Capturing the demographic dividend in Pakistan* (Special Edition ed.). Population Council. <https://doi.org/10.31899/pgy5.1012>
- Sharma, M. B., Khooharo, Y. N., Mehmood, M. M., & Asif, B. (2021). Food Taboos and Cultural Beliefs among Pregnant Mothers in Rural Sindh. *Journal of Liaquat University of Medical & Health Sciences*, 20(5), 300-304. <http://ojs.lumhs.edu.pk/index.php/jlumhs/article/view/540>
- Ullah, R., Saleem, M. A., & Ahmad, N. (2022). Factors Affecting Stunting Growth of Children in Pakistan: Evidence from Pakistan Demographic Health Survey 2017-18. *Human Nature Journal of Social Sciences*, 3(3), 395-411. <https://doi.org/10.71016/hnjss/2mdyfv85>