

Food Habits and Nutritional Crisis in Pakistan: Impact on Performance and Future Health

Laeq Ur Rehman¹

Mr. Shabidullah Wazir²

KJPP

Citation:

Ur Rehman, L. (2023). Food habits and nutritional crisis in Pakistan: Impact on performance and future health. Khyber Journal of Public Policy, 2(2), Summer

Article Info:

Received: 1/04/2023

Revised: 14/04/2023

Accepted: 2/05/2022


Published: 30/06/2023

Disclaimer:

The opinions expressed in this publication do not implicitly or explicitly reflect the opinions or views of the editors, members, employees, or the organization. The mention of individuals or entities and the materials presented in this publication do not imply any opinion by the editors or employees regarding the legal status of any opinion, area, territory, institution, or individual, nor do they guarantee the accuracy, completeness, or suitability of any content or references.

Copy Right Statement:

© 2022 Khyber Journal of Public Policy

 This work is licensed under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract:

Pakistan is grappling with a severe nutritional crisis driven by poor food habits, insufficient awareness, and pervasive poverty. This crisis is exacerbated by rising rates of malnutrition, stunted growth, and micronutrient deficiencies. This research investigates the link between food habits and the nutritional crisis in Pakistan and assesses its impact on individual performance and future population health. Utilizing a mixed-method approach, the study combines qualitative and quantitative data to analyze Pakistani food habits and their effects on nutritional status. Findings reveal that unhealthy food choices, such as the consumption of fast and junk food, are major contributors to the crisis. The repercussions include diminished cognitive function, compromised immune systems, and higher vulnerability to chronic diseases. The paper advocates for comprehensive strategies, including awareness campaigns, educational programs, and policy interventions, to improve food habits and address the nutritional challenges facing Pakistan.

Key words:

Nutritional crisis, Food habits, Malnutrition, Health impact, Policy interventions

¹ Belongs to Section Officer, Finance Division (Military), Rawalpindi

² Faculty Advisor

Introduction

Pakistan is a developing country with a population of approximately 220 million people. Despite significant progress in various sectors, including health and education, Pakistan faces a severe nutritional crisis. Malnutrition affects a large portion of the population, especially children and women. According to the World Food Program, almost 37% of children in Pakistan are underweight, and 45% of children under the age of five are stunted. Furthermore, around 26% of the population suffers from food insecurity, which means they do not have access to sufficient and safe food to maintain a healthy and active life.

Analyzing dietary patterns and linking them directly to health outcomes has numerous benefits, especially when looking at the diet as a whole rather than individual vitamins or foods. This approach can effectively combine the complex and interrelated factors of various dietary exposures, as the foods people usually consume contain both nutrients and non-nutrients. By adopting new, healthier behaviors, it may be possible to avoid serious health issues, including diabetes and obesity. In Pakistani households, food preparation by females takes into account the family members' "likes and dislikes." During the pandemic, sedentary habits, anxiety, and boredom associated with being stuck at home could negatively affect lifestyle choices, reduce the quality of diets, and lead to overconsumption. A healthy diet and regular exercise can help with weight loss and boost energy levels.

Healthy eating can improve physical and mental health, increase the likelihood of seeking out and enjoying social activities, and become a regular part of daily life over time. Proper nutrition and the inclusion of superfoods can enhance learning potential, while unhealthy eating habits can lead to weight gain, obesity, and chronic diseases that increase the risk of at least 13 different types of cancer. In Pakistan, most working men and women do not consume fruits as part of their diet, and fast food is a significant component of the overall diet. Analysis of the eating patterns of 50 day scholars and 50 hostel residents showed that various unhealthy eating behaviors had been adopted, including consuming sugar-sweetened beverages and highly processed foods. Cultural, health, social, environmental, lifestyle, and economic factors can influence a person's food preferences and should be considered in Pakistani individual food intake and dietary pattern research.

Undernutrition can lead to underweight, poor academic performance, poor general health, difficult pregnancies and births, and lower economic production. Malnutrition causes extreme weight loss, decreased body mass index (BMI), and several vitamin and mineral deficiencies. According to Pakistan's National Nutrition Survey, 17.7% of children under the age of five are wasted, and four out of ten have stunted growth. Malnutrition during pregnancy is one of the leading causes of malnutrition in children, leading to stunting. Malnourished children have weakened immune systems and are therefore more susceptible to diseases and infections. Stunting can result from chronically inadequate nutritional intake and recurrent infections, and its consequences on delayed motor and cognitive development are irreversible. Stunting during the first 1000 days of birth is linked to poor school performance, as malnutrition can disrupt brain development and make children more susceptible to illness and absenteeism.

According to the 2018 National Nutrition Survey, nearly one in eight adolescent girls and one in five teenage boys in Pakistan are underweight. Overweight or obese teenagers in both rural and urban areas of Pakistan experience similar health problems. Eating foods high in trans fats, salt, and sugar can lead to increased cholesterol, diabetes, osteoporosis, and high blood pressure. Iron deficiency affects 18.2% of women of reproductive age in Pakistan, with a higher prevalence in rural areas. Pakistan is currently facing a triple burden of malnutrition, including undernutrition, overweight or obesity, and several micronutrient deficiencies. Crucial nutritional complications include protein-energy malnutrition, vitamin deficiencies, iron deficiency anemia, and iodine disorders. Anemia, caused by iron deficiency, is a common nutritional issue. Political will and coordinated action are needed to address the root causes of malnutrition, which include poverty, ignorance, population growth, political unrest, poor harvests leading to food shortages, and natural disasters.

Problem Statement

Pakistan is facing a severe nutritional crisis due to poor food habits, lack of awareness, and poverty. The issue is becoming more critical with the increasing number of people suffering from malnutrition, stunted growth, and micronutrient deficiencies. The poor food habits of the Pakistani population, including the consumption of unhealthy food, fast food, and junk food, are contributing to the nutritional crisis. The impact of this crisis on the performance of individuals and the future health of the population is

significant, as poor nutrition leads to decreased cognitive ability, weakened immune systems, and increased susceptibility to chronic diseases. Therefore, it is crucial to investigate the relationship between food habits and the nutritional crisis in Pakistan and to understand the impact of this crisis on the performance of individuals and the future health of the population to devise effective strategies for addressing this critical issue.

Significance and Scope of Study

Malnutrition is a serious problem that requires immediate and proper redress, as malnutrition during early childhood or pregnancy can have long-lasting negative effects on a child's growth, development, and overall well-being. Malnutrition can also affect brain growth and is linked to lower academic achievement. To prevent or manage malnutrition and maintain good nutrition, healthy eating habits, physical activity, and government regulations are encouraged.

In order to address malnutrition in Pakistan, it is important to recognize that different provinces have varying policy priorities and levels of development and implementation of multi-sector nutrition action plans. Therefore, coordination with national policy development activities is essential.

Pakistan's ruling class has neglected nutrition, resulting in high rates of malnutrition among women and children compared to other emerging countries. Low household income, urban life, and the mother's educational level are the main risk factors for poor nutrition. According to NNS 2018, 14.4% of people are underweight, 24% are overweight, and 13.8% are obese. Sindh has the highest rate of iron deficiency anemia, followed closely by Baluchistan and Punjab. According to WHO, 50% of children under five years of age have stunted growth, 40% of children are underweight, and 9% are wasted. Fifty-four percent of people in Pakistan suffer from vitamin A deficiency, while 40% of the population suffers from vitamin D deficiency. Furthermore, 61% of children have iron deficiency anemia. Lack of awareness sessions regarding healthy eating and lifestyle habits is a significant issue in Pakistan. The main risk factors for women's poor nutritional status are similar to those for men, and attention should be paid to disadvantaged homes to improve the nutritional status of women and children.

Nutrition issues have persisted in developing countries, including Pakistan, due to low-income households that cannot afford diverse and healthy foods. Sindh and Baluchistan exhibit a similar nutrition trend, whereas Khyber Pakhtunkhwa and Punjab have a comparable pattern based on income elasticities. Therefore, each province must establish nutritional regulations, and individuals should choose nutrient-dense food commodities wisely.

Since this nutritional crisis hints at serious ramifications, the scope of this study spans the following:

- To analyze how the nutrition crisis affects the health of people living in developing countries, including Pakistan.
- To determine the food habits that influence the performance of people.
- To derive interventions that can control the nutrition crisis and promote healthy food habits.

Review of the Literature

According to the National Nutrition Survey conducted in 2018, the prevalence of stunting (low height-for-age) among children under five was 38.4%, while the prevalence of wasting (low weight-for-height) was 17.7%. Anemia is also a significant health issue in Pakistan, with a prevalence of 53% among women of reproductive age, according to a study published in the *Journal of Nutrition*. Poor food habits are one of the major contributors to the nutritional crisis in Pakistan. A study published in the *Journal of Public Health Nutrition* found that dietary diversity was low among Pakistani households, with only 30% of households meeting the minimum dietary diversity score. Another study published in *BMC Public Health* found that children from households with poor dietary diversity were more likely to be stunted.

Limited access to nutritious foods is also a significant issue in Pakistan. According to a study published in the *Journal of Nutrition*, the cost of a nutritious diet was high compared to the average income of Pakistani households. This makes it challenging for individuals to afford nutritious foods, leading to reliance on less nutritious and less expensive options.

The nutritional crisis in Pakistan has a significant impact on performance and future health. Malnutrition and undernutrition can lead to poor physical and cognitive development in children, which can negatively impact their academic performance and future employment prospects. A study published in the *Journal of Nutrition* found that stunted children in Pakistan had lower cognitive scores than non-stunted children. Malnutrition and undernutrition also increase the risk of chronic diseases later in life, such as diabetes and heart disease.

Literature suggests that traditional Pakistani diets are rich in carbohydrates and fats, with a focus on rice, chapati, meat, lentils, and vegetables. However, in recent years, there has been a shift towards a more Westernized diet, characterized by high-calorie, high-fat, and low-fiber foods. This shift in diet has been attributed to factors such as globalization, urbanization, and changing lifestyles. Relevant literature also highlights the severity of the nutritional crisis in Pakistan, with high levels of malnutrition and undernourishment. The Global Hunger Index (GHI) 2021 ranks Pakistan 92

out of 107 countries, with a score of 28.4, indicating a serious level of hunger. The literature also suggests that the nutritional crisis in Pakistan is driven by poverty, lack of education, and limited access to nutritious foods.

Most of the information on food habits and associated factors comes from epidemiological research conducted in wealthy countries, while studies on food habits in developing countries, particularly in South Asia, are scarce. The relationship between food patterns and lifestyle traits among South Asian communities is also not well understood. Differences in genetic makeup, environmental exposures, and food consumption between Western and non-Western countries make it difficult to generalize the results of studies on dietary patterns of Western populations to developing countries.

Few studies have been conducted on Pakistani eating habits, and the ones that have been done relied on small and unrepresentative samples and were limited to specific diseases. As a result, there is still a knowledge gap regarding the characteristics and variations of Pakistani dietary habits. This study aims to identify different eating patterns and explore their relationship with sociodemographic, anthropometric, and lifestyle factors in a sample of low-income urban residents in Pakistan.

Cereals are the main food source for daily nutritional requirements, providing more than two-thirds of all energy and half of all nutrients consumed during COVID-19. On the other hand, fruits and vegetables accounted for 40% and 30% less of the energy consumed by households, respectively. A study published in the *Journal of Nutrition* showed that worsening dietary diversity and intake regarding energy efficiency were negatively correlated with rising monthly income. Wage earners were 0.15 and 0.28 times more likely to experience a loss in dietary diversity compared to farmers and workers in paid positions, respectively. Additionally, medium and large households were 1.95 and 2.64 times more likely to have decreased diverse food consumption compared to small homes.

Research methodology

A mixed-methods approach will be used to examine the impact of food habits and the nutritional crisis on performance and future health in Pakistan. The study will consist of both quantitative and qualitative analyses. The data will be analyzed using descriptive and inferential statistics. Descriptive statistics, such as frequencies and percentages, will be used to summarize the data. Inferential statistics will be used to examine the relationships between food habits, nutritional status, and performance.

Situational Analysis

Pakistan's population comprises five primary ethnic subgroups that originate from different regions of Central and South Asia: Urdu-speakers, Punjabis, Sindhis, Baluchis, and Pashtuns. Despite living in the same region, these groups may face food insecurity and dietary limitations due to pronounced disparities in cultural practices, dietary preferences, health beliefs, and behavioral patterns. The unique sociocultural and dietary patterns of each ethnic group may either safeguard or undermine food security, which could be attributed to the absence of mingling between these groups. Despite significant efforts over the past six decades, Pakistan's malnutrition indicators have not shown significant improvement. The trend of "convenience" is a key emerging factor influencing food choices.

A majority of study participants reported eating three meals a day and enjoying "Traditional Pakistani Cuisine." They prefer their children to develop the same habit of consuming home-cooked meals that require minimal preparation and cooking time. Convenience was translated by Pakistani households into sub-themes of "Time," "Availability," and "Familiarity." In Pakistani households, the responsibility of food preparation falls on females who consider the likes and dislikes of family members. The participating housewives select daily meals for their families, primarily taking into account the preferences of the family head, children, and other members. The meals are frequently prepared at home and enjoyed by all family members. Worldwide, there is a particular preference for meat, and chicken and red meat consumption have not significantly changed.

Research into individual food intake and dietary patterns reveals how cultural, health, social, environmental, lifestyle, and economic factors impact a person's food preferences. While there are differences in the eating habits of working women and men, the majority usually eat breakfast, although some only do so occasionally. Breakfast typically consists of cereal, toast, eggs, jam, and sometimes paratha. Most people consume two main meals a day, lunch and dinner, although some only eat dinner. These meals often include rice, bread, and/or curry. Women usually have a combination of meat and vegetables in their main meals. Fruit is not a common part of the diet for most working men and women. Fast food is also commonly consumed.

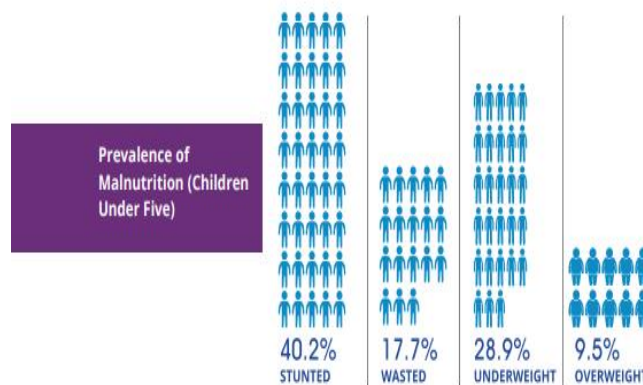
A study of the eating habits of 50 day scholars and 50 hostel residents found that undesirable eating behaviors had been adopted by many of them. Hostel residents were more likely to consume multiple meals each day as a percentage. Of the students studied, 10% of hostel residents were underweight, while 32% of day students were normal weight, 5% were overweight, and 3% were obese. The proportion of underweight students was

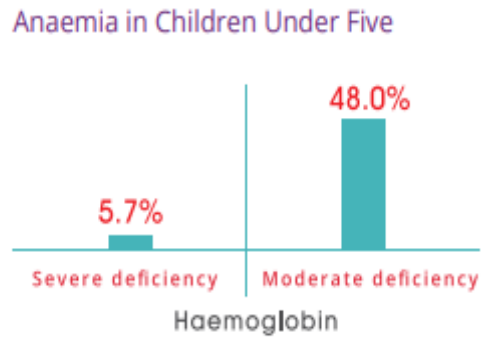
the same for hostel residents and day students, but there were more normal-weight and overweight day students and more obese day students than hostel residents.

During the pandemic, it became apparent that sedentary behaviors, anxiety, and boredom caused by staying indoors could lead to lifestyle changes, poorer diets, and increased overeating. The study involved predominantly female participants (82.1%) between the ages of 18 and 29, of which 90.3% were students. The prevalence of overweight individuals increased from 16.0% before the pandemic to 20.0% during the pandemic. Most participants reported consuming more food during the outbreak. Before the pandemic, 47.9% of respondents reported engaging in physical activity for 0.5–2 hours, but post-pandemic physical activity decreased while food intake increased by 50.6%. The majority of participants (89.7%) reported an increase in screen time during the pandemic, which was positively associated with increased food consumption. Prior to the pandemic, 48.8% of participants reported 4 hours of screen time.

Nutritional Status of Children Under Five Years of Age in Pakistan

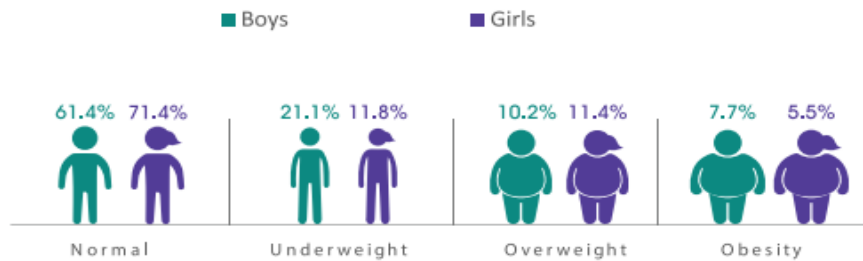
Pakistan's National Nutrition Survey reveals that malnutrition is a prevalent issue among children under the age of five. The survey found that 17.7% of children under five years old are wasted, and four out of ten children in the same age range have stunted growth. Additionally, there is a double burden of malnutrition, as overweight is prevalent among 9.5% of children under five, while nearly one-third of them are underweight (28.9%). Over the past seven years, the percentage of overweight children under five has increased from 5% in 2011 to 9.5% in 2018. This upward trend highlights the need for immediate attention and action to address the issue of malnutrition in Pakistan.





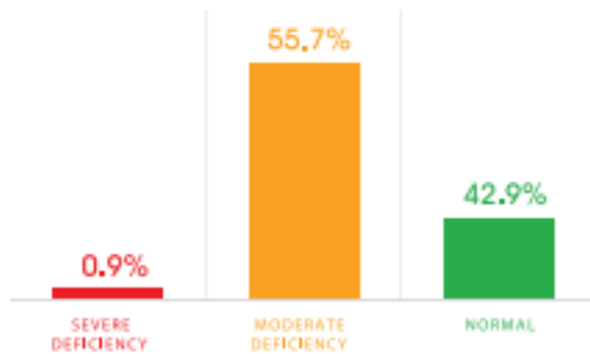
ADOLESCENTS NUTRITION (10-19 YEARS)

Nutritional Status of Adolescent Girls and Boys



Based on NNS 2018, approximately one in eight adolescent girls in Pakistan are underweight, while one in five teenage boys suffer from the same condition, which affects them more significantly than girls. Overweight is more prevalent among adolescent girls, with a rate of 11.4%, compared to 10.2% for boys. Obesity is a public health concern, with a rate of 5.5% among adolescent girls and 7.7% among adolescent boys in Pakistan. Regardless of whether they live in rural or urban areas, overweight or obese teenagers in Pakistan face similar health problems.

Haemoglobin Status Among Adolescent Girls



Nutritional Status of Women of Reproductive Age (WRA) (15-49 years)

Women of Reproductive Age (WRA), aged 15 to 49, in Pakistan suffer from a dual burden of malnutrition. Undernutrition affects one in seven people (14.4%), a decline from 18% in 2011, while overweight and obesity are on the rise. By 2018, 37.8% of people were found to be overweight or obese, an increase from 28% in the National Nutrition Survey (NNS) conducted in 2011. Disparities between urban and rural areas are apparent: urban women are more likely to be overweight and obese, while women in rural areas are more likely to be undernourished.

Iron Deficiency Anemia in WRA (15-49 Years)

18.2% of Women of Reproductive Age (WRA) suffer from iron deficiency. This is particularly noticeable among women living in rural (18.7%) as opposed to urban (17.4%) environments. Sindh has the highest rate of iron deficiency anemia, with roughly a quarter (23.8%) of all WRA sufferers, closely followed by Baluchistan (19.0%) and Punjab (18.7%).

Legal Analysis

The Constitution of Pakistan guarantees the right to food and adequate nutrition to all citizens. However, there is a lack of effective implementation of the legal framework and policies related to food security and nutrition. The National Nutrition Policy was launched in 2018 to address the nutritional crisis in Pakistan, but it has yet to be fully implemented.

Several legal challenges hinder the improvement of food habits and the addressing of the nutritional crisis in Pakistan. One major challenge is the lack of regulation of the food industry, which contributes to the availability of unhealthy and nutritionally inadequate food options. The government must develop and implement policies to regulate the food industry and ensure that all food products meet minimum nutritional standards.

Another legal challenge is the lack of access to justice for individuals affected by the nutritional crisis. There is a need to develop legal mechanisms to hold the government and private actors accountable for violations of the right to food and adequate nutrition. This can be achieved through the development of legal aid services, the establishment of specialized courts to handle food-related issues, and the promotion of public interest litigation related to food security and nutrition.

The legal analysis of the nutritional crisis in Pakistan highlights the need for a rights-based approach to addressing the issue. The government must fulfill its obligations to ensure the right to food and adequate nutrition for all citizens, including through the development and implementation of effective policies and regulations. The legal framework must also provide for access to justice for individuals affected by the nutritional crisis to ensure that their rights are protected and that they can hold the government and private actors accountable.

Pakistani Dietary Guidelines for Better Nutrition

In 2019, the United Nations' Food and Agricultural Organization and Pakistan's Ministry of Planning, Development, and Reform released guidelines for proper nutrition, which include the following recommendations:

- Maintain a healthy body weight by consuming foods from all dietary groups and engaging in regular physical activity.
- Aim for half of your daily cereal consumption to come from whole grains.
- Eat five portions of fresh fruits and vegetables every day.
- Consume two to three portions of milk and milk-based products each day.
- Eat fish, eggs, and meat products in moderation.
- Promote the consumption of pulses for wholesome growth.
- Consume enriched cereals, wheat, and other items.
- Use less edible oil and fat when cooking.
- Limit salt in cooking and always use iodized salt.
- Limit consumption of fatty foods, highly processed foods, soft drinks, confections, bakery goods, bottled fruit juices, and sugar.
- Transition from a sedentary to an active lifestyle.

- Breastfeed infants for at least two years and continue to nurse in addition to supplemental food after the first six months.
- Women should increase their daily consumption of all food groups, especially those high in iron, and exercise caution while pregnant and nursing.
- Drink plenty of water.
- Review the nutrition information on packaged food items.

Following these guidelines can help ensure a balanced and healthy diet.

Universal Salt Iodization in Pakistan

Iodine is essential for thyroid function as well as for the growth and development of both the body and mind. The most straightforward way to address iodine deficiency issues is to ensure adequate daily consumption of iodized salt. Approximately 80% of families in Pakistan use iodized salt, with a higher percentage in urban households compared to those in rural areas. However, according to the National Nutrition Survey of Pakistan, only 31.6% of individuals in KP-NMD consume iodized salt regularly. In contrast, the usage of iodized salt exceeds 85% in ICT, Punjab, AJK, and GB.

Institutional Analysis

Nutrition Wing of the Ministry of National Health Services Regulations and Coordination (GOP)

The Ministry of Health (MOH) is the primary government agency responsible for ensuring the provision of high-quality health services and promoting healthy lifestyles and environmental practices. The mission focuses on improving access to and availability of high-quality healthcare for rural residents, impoverished communities, women, and children. The focus includes ensuring access to water, sanitation, hygiene, and essential public health services such as nutrition, immunization, and healthcare for women and children.

Their objectives are to:

- Enhance the delivery of comprehensive health services
- Strengthen stewardship management functions
- Improve human resources management

Ministry of National Food Security and Research

The Ministry of National Food Security and Research is responsible for ensuring food security and promoting agriculture in Pakistan. The ministry's

role is critical in addressing the nutritional crisis in the country by ensuring the availability of nutritious food and promoting healthy food habits.

The ministry has launched several initiatives to address the nutritional crisis in Pakistan, including the National Nutrition Strategy and the National Zero Hunger Program. The National Nutrition Strategy aims to improve nutrition outcomes by promoting awareness of healthy diets, increasing access to nutritious foods, and improving the quality of health services. The National Zero Hunger Program is a multi-sectoral initiative that aims to reduce hunger and malnutrition in Pakistan.

However, the ministry faces several institutional challenges in implementing these initiatives effectively. One major challenge is the lack of coordination between different departments within the ministry and with other government agencies. This lack of coordination results in a fragmented approach to addressing the nutritional crisis, with little synergy between different initiatives.

Another challenge is the limited capacity of the ministry to implement and monitor nutrition programs effectively. There is a need for capacity building within the ministry, including staff training and the development of monitoring and evaluation systems to ensure the effective implementation of nutrition programs.

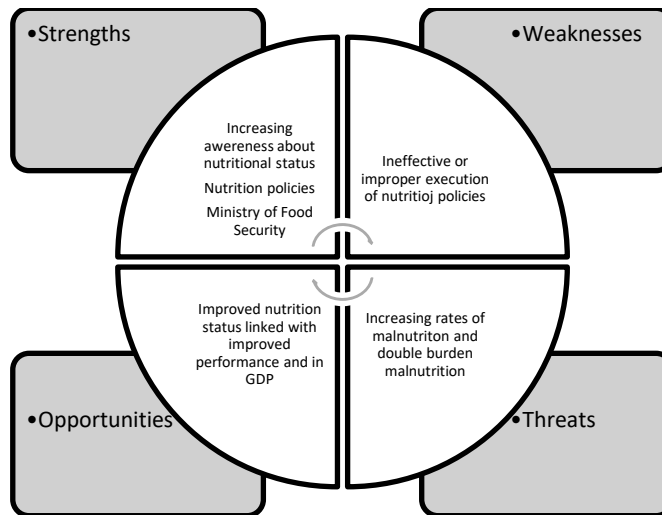
Moreover, the institutional analysis of the nutritional crisis in Pakistan highlights the need for a multi-sectoral approach to addressing the issue. The Ministry of National Food Security and Research must work in collaboration with other government agencies, civil society organizations, and the private sector to address the root causes of the nutritional crisis, including poverty, limited access to nutritious food, and poor food habits. The institutional challenges faced by the ministry must be addressed through capacity building and institutional reforms to ensure effective implementation of nutrition programs and policies.

Gap Analysis

One of the main challenges in addressing malnutrition in Pakistan is the complexity of policy frameworks following devolution. There has been limited cross-sectoral engagement because nutrition has been viewed as a technical issue that primarily falls under the purview of the health sector. Each province has different policy priorities and varying levels of development and implementation of multi-sector nutrition action plans, with no coordination with national policy efforts. The Ministry of Planning, Development, and Reform's Nutrition Section's National Scaling Up Nutrition (SUN) Secretariat suggests that the FNG approach may help people

better understand provincial malnutrition situations and improve coordination across sectors and stakeholders at the federal, provincial, and local levels. Despite the existence of nutrition guidelines, they are not widely promoted, and a small percentage of the population is aware of them, further exacerbated by being offered only in English. The health ministry prioritizes medical or hospital initiatives, and limited access to resources is attributed to poor governance.

SWOT Analysis



Findings

Pakistan is facing a severe nutritional crisis that is impacting the performance and future health of its population. Poor food habits, limited access to nutritious food, and inadequate awareness about the importance of a balanced diet are the main causes of this crisis. Major issues and challenges regarding food habits and nutritional crises are highlighted as follows:

The majority of people in Pakistan lack awareness about the importance of a balanced diet and healthy food habits. As a result, they do not know which foods are nutritious and which are harmful to their health. This lack of knowledge leads to the consumption of unhealthy and unbalanced diets, causing malnutrition and other health problems. The majority of the population lives in poverty and cannot afford to buy nutritious food. Moreover, many rural areas lack access to clean water and electricity, making it difficult to store and prepare healthy food. This limited access to nutritious food leads to malnutrition and other health problems, especially in children.

There is a significant challenge in terms of food security. The country's population is rapidly increasing, and food production is not keeping up with

demand. Additionally, climate change, droughts, and floods are affecting the agricultural sector, leading to food shortages and rising food prices. Pakistan has one of the highest rates of malnutrition in the world. According to the Pakistan Demographic and Health Survey 2017-18, 36.9% of children under the age of five are stunted, 17.7% are wasted, and 28.9% are underweight. Malnutrition not only affects the physical growth and development of children but also impacts their cognitive development, leading to poor performance in school.

While Pakistan has a rich and diverse culinary heritage, many traditional dishes are high in calories, salt, and fats. Moreover, the consumption of fast food and sugary drinks has increased in recent years, leading to a rise in obesity and other health problems. Despite the severity of the nutritional crisis in Pakistan, the government has not taken sufficient action to address the issue. There is a lack of investment in the agricultural sector, and effective policies to promote healthy food habits and improve access to nutritious food have not been implemented.

The study also found that food habits in Pakistan are heavily influenced by cultural and socioeconomic factors. People tend to consume more rice, wheat, and meat-based dishes, which are high in carbohydrates and protein but low in essential nutrients such as vitamins and minerals. Furthermore, the lack of knowledge about healthy eating habits and the importance of a balanced diet leads to poor food choices. The study also revealed that the food distribution system in Pakistan is inadequate, leading to unequal access to nutrient-rich foods.

The study highlighted the potential impact of poor nutrition on performance and future health. Malnourished individuals are more susceptible to diseases, infections, and chronic health conditions such as diabetes and hypertension. Poor nutrition can also impact cognitive development, leading to poor academic performance and reduced earning potential in the future.

Conclusion

In conclusion, the nutritional crisis in Pakistan is a complex issue that requires a multi-faceted approach to address. A comprehensive approach is needed to tackle the challenges related to food habits and access to nutritious food. Increased awareness, investment in the agricultural sector, and effective government policies are essential to ensure the future health and performance of Pakistan's population.

The study also recommends increasing access to nutrient-rich foods through a more efficient and equitable food distribution system. It suggests promoting nutrition education programs to raise awareness about healthy eating habits

and the importance of a balanced diet. Finally, the study underscores the need for policymakers to prioritize the nutritional needs of the population to ensure future health and well-being.

Recommendations

To increase awareness and promote good nutrition, nutrition guidelines and rules should be widely publicized at all levels, including through banner ads, public service announcements on news channels, and social media. These guidelines should be available in local languages to ensure that the general public can easily understand them. Apart from this, the following are a few recommendations to address the nutritional crisis in Pakistan:

- **Increase access to clean drinking water:** Waterborne diseases and poor sanitation can lead to malnutrition and stunted growth, especially in children. Therefore, it is essential to improve access to clean drinking water and promote safe hygiene practices to prevent disease.
- **Promote nutrient-rich food choices:** Encourage the consumption of nutrient-rich foods such as fruits, vegetables, whole grains, and lean protein sources. These foods should be affordable and accessible to all, especially those living in low-income areas.
- **Implement fortification programs:** Implement food fortification programs to address micronutrient deficiencies. For example, fortifying wheat flour with iron and folic acid has been successful in reducing the prevalence of anemia in Pakistan.
- **Enhance food safety:** Improve food safety standards and practices to reduce the risk of foodborne illnesses, which can affect nutritional status and performance. This can be achieved through public health interventions, such as food safety education campaigns and regulation enforcement.
- **Increase agricultural productivity and diversity:** Promote sustainable agricultural practices that increase productivity and diversity of crops. This can improve food security and increase access to nutrient-rich foods, especially in rural areas.
- **Address cultural and social barriers:** Address cultural and social barriers that may prevent individuals from adopting healthy food habits. For example, addressing gender inequalities can improve women's access to education, income, and decision-making power, which can positively impact food choices and nutrition.

References

1. Ahmad, A. (2020). Eating habits and food choices at work among working women in the banking sector in Islamabad, Pakistan. *Rawal Medical Journal*, 45(3), 698–701.
2. Batool, M., Hassan, J., Shahzad, R., Iqbal, S., Butt, M. S., & Haider, S. (2023). A crisis within a crisis: Role of the COVID-19 pandemic in poor compliance with community-based management of severe acute malnutrition among children younger than five years in Pakistan. *Avicenna*, 2023(1), 2.
3. Geng, J., Haq, S. U., Abbas, J., Ye, H., Shahbaz, P., Abbas, A., & Cai, Y. (2022). Survival in pandemic times: Managing energy efficiency, food diversity, and sustainable practices of nutrient intake amid the COVID-19 crisis. *Frontiers in Environmental Science*, 10, 988998. <https://doi.org/10.3389/fenvs.2022.988998>
4. Government of Pakistan (GOP). (2018). *National nutrition survey of Pakistan 2017-18*. Ministry of Health and Government of Pakistan, Islamabad, Pakistan.
5. Irfan, M., Jabbar, M., & Hameed, S. (2019). Dietary habits and prevalence of underweight/obesity in students of University of Gujrat, Pakistan. *Journal of Liaquat University of Medical & Health Sciences*, 18(3), 175–180.
6. Khan, S., Zaheer, S., & Safdar, N. F. (2019). Determinants of stunting, underweight, and wasting among children under five years of age: Evidence from the 2012–2013 Pakistan Demographic and Health Survey. *BMC Public Health*, 19(1), 358. <https://doi.org/10.1186/s12889-019-6688-2>
7. Na, M., Aguayo, V. M., Arimond, M., & Stewart, C. P. (2017). Risk factors of poor complementary feeding practices in Pakistani children aged 6–23 months: A multilevel analysis of the Demographic and Health Survey 2012–2013. *Journal of Maternal & Child Nutrition*, 13(1), e12463. <https://doi.org/10.1111/jmncn.12463>
8. Safdar, N. F., Bertone-Johnson, E., Cordeiro, L., Jafar, T. H., & Cohen, N. L. (n.d.). Dietary patterns of Pakistani adults and their associations with sociodemographic, anthropometric, and lifestyle factors. *Journal of Nutritional Science*, 7, 1–11. <https://doi.org/10.1017/jns.2022.5>
9. Sayed, S. A. (2012). A cross-sectional study on eating habits and food-related beliefs and knowledge in university students of Karachi, Pakistan. *Pakistan Journal of Public Health*, 2, 36–42.
10. Yasmin, F., Asghar, M. S., Sahito, A. M., Savul, S., Afridi, M. S. I., Ahmed, M. J., ... & Ullah, I. (2022). Dietary and lifestyle changes among Pakistani adults during the COVID-19 pandemic: A nationwide cross-sectional analysis. *Journal of Family Medicine and Primary Care*, 11(6), 3209–3216. https://doi.org/10.4103/jfmpc.jfmpc_1355_21
11. Zaheer, M., Kamran, H., Hareem, M., Babar, N., Ijaz, M., & Abdul-Rauf, M. (2023). Assessment of lifestyle and dietary habits and their effect on

psychological health among university students: Effects of lifestyle and dietary habits among university students. *Pakistan BioMedical Journal*, 02(08), 51-59. <https://doi.org/10.47366/pbmj.2023.08.05>