

Gallup Pakistan Health Cyber Letter

Edition 15 | Malnutrition in Pakistan's Children:
A Critical Health Crisis



Editor's Note

Welcome to the **15th edition of the Gallup Pakistan Health Cyber Letter**. This issue highlights the alarming state of malnutrition among children in Pakistan, as captured by the **2018 Pakistan National Nutrition Survey (NNS)**¹, conducted by the Ministry of National Services Regulation and Coordination (MoNHSR&C) in collaboration with UNICEF Pakistan. It underscores the pressing challenges of stunting, wasting, underweight and overweight children, with significant disparities found across urban and rural populations, provinces, and income levels.

The analysis reveals that factors such as poverty, inadequate healthcare infrastructure, and climate change-induced disasters exacerbate malnutrition. Provinces like Sindh and Balochistan are particularly hard-hit, while rural areas experience more pronounced challenges compared to urban centers.

These data points offer crucial insights for policymakers, health professionals, and humanitarian organizations working to alleviate malnutrition in Pakistan. The cyber letter also explores the socioeconomic factors and healthcare shortcomings that exacerbate the crisis, and discusses potential interventions for reversing the trend.

As malnutrition remains a major public health challenge, addressing this problem requires multi-sectoral collaboration and urgent action to ensure healthier futures for Pakistan's children.

Ayman Fuad

¹ <https://www.unicef.org/pakistan/national-nutrition-survey-2018>

Gallup Pakistan Health Cyber Letter

Malnutrition in Pakistan's Children: A Critical Health Crisis

Pakistan's average of stunting among children under five is 40.2%. The South Asian average is 31%. The global rate of stunting in 2022 was 22.3%.



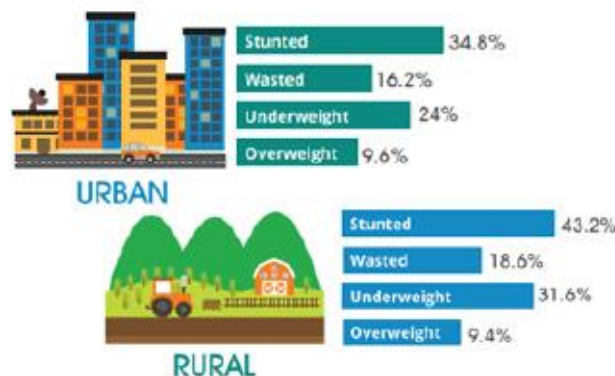
28.9% of children in Pakistan are underweight.



9.5% of children in Pakistan are overweight.



Severe wasting among Pakistani children has been recorded at **6%** in 2024.



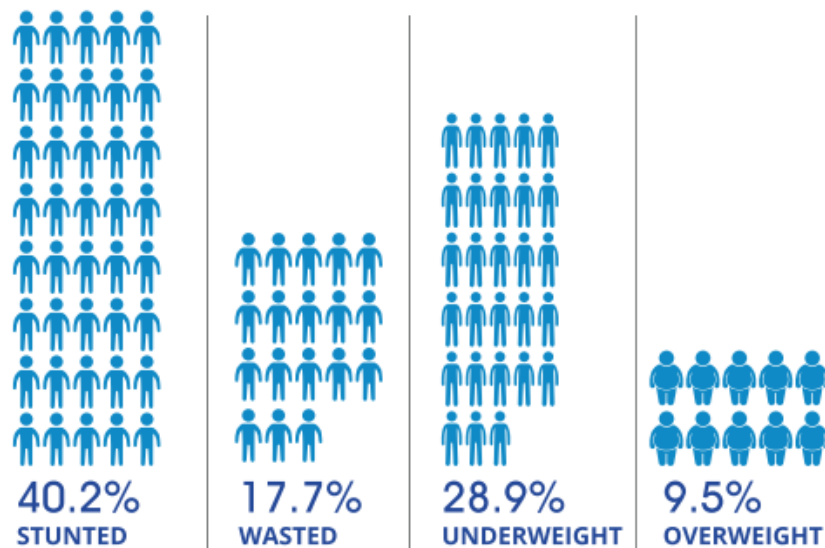
The Ministry of National Services Regulation and Coordination (MoNHSR&C), Government of Pakistan, in collaboration with UNICEF², and the United Kingdom’s Department for International Development (DFID), developed and carried out the National Nutrition Survey (NNS) 2018³. A report with its findings was produced, and used as the main data source for this cyber letter.

1. Malnutrition Among Children in Pakistan

Malnutrition among children leads to various complications such as stunting and wasting, and either being underweight or overweight. As a country categorized as having lower-middle income status, Pakistan experiences high levels of malnutrition. Poverty exacerbates levels of malnutrition as low-income earners find themselves unable to afford nutritional foods which are typically found at higher price points. A lack of proper healthcare infrastructure that serves all citizens equally, regardless of their income levels, compounds the issue of malnourishment. Natural disasters exacerbated by climate change, e.g. flooding, droughts, and locust attacks further add to this problem⁴.

Figure 1 shows the prevalence of malnutrition in children under the age of five in Pakistan, with stunted children having the highest percentage at 40.2%, followed by underweight children at 28.9%, then wasted children at 17.7% and overweight children being 9.5%.

Fig 1. Prevalence of malnutrition in children under five



Source: UNICEF and Government of Pakistan. [Key Findings Report](#), National Nutrition Survey (2018)

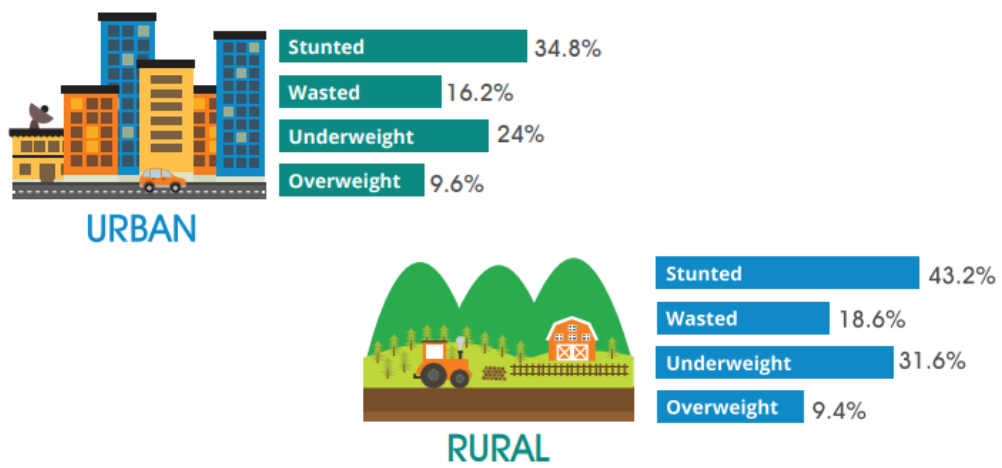
The rural-urban breakdown in Figure 2 shows that malnutrition indicators are higher in rural areas except for the overweight indicator, which is 0.2% higher in urban areas. In comparison with urban areas, rural areas have 8.4% more stunted children, 2.4% more wasted children, and 7.6% more underweight children. Rural areas of Pakistan have lower levels of infrastructure development and a higher proportion of lower-income residents, meaning that less people have access to proper healthcare.

² <https://www.unicef.org/pakistan/>

³ <https://www.unicef.org/pakistan/national-nutrition-survey-2018>

⁴ <https://blogs.worldbank.org/en/endpovertyinsouthasia/addressing-pakistans-high-level-stunting-now>

Fig 2. Urban-rural breakdown of malnutrition indicators



Source: UNICEF and Government of Pakistan. [Key Findings Report](#), National Nutrition Survey (2018)

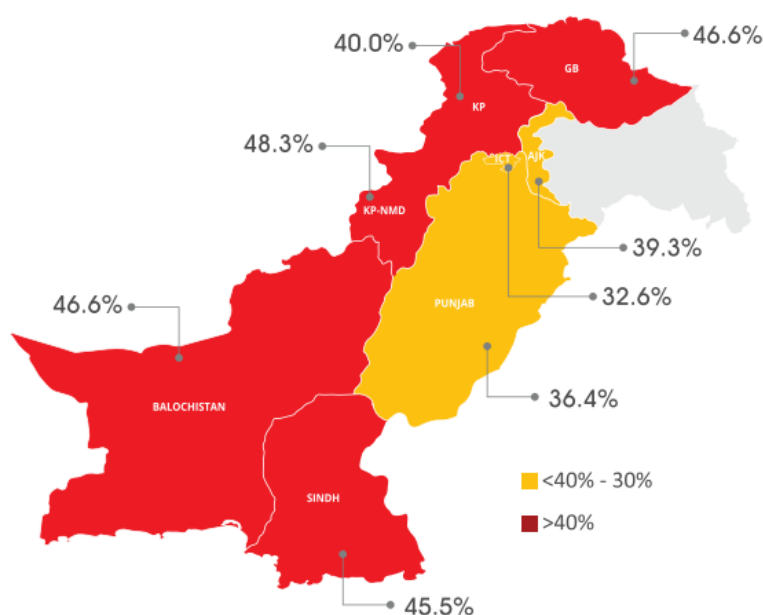
2. Stunting Indicator

Stunting is defined as “the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psychosocial stimulation.”⁵ It is also referred to as ‘chronic malnourishment’. The World Health Organization (WHO) has devised Child Growth Standards which define the median height of children (for their age); children are considered stunted if their height-for-age is more than two standard deviations below this median. Put simply, children who are too short for their height are considered stunted.

Pakistan has an extremely high average of stunting among children; over 40% of children under the age of five are stunted⁶. This is in comparison with the South Asian average of 31%. The global rate of stunting in 2022 was 22.3%⁷. Stunting is usually caused by malnutrition or repeated infections/diseases which lead to low levels of nutrient intake⁸.

As seen in Figure 3, provincial disparities prevail among the levels of stunting across the country. Among the four provinces, Balochistan has the highest level of stunting at 46.6%, followed by Sindh at 45.5%, Khyber Pakhtunkhwa at 40%, and Punjab at 36.4%. As Punjab is considered the most relatively prosperous province, its relatively lower levels of stunting are not surprising.

Fig 3: Prevalence of stunting in Pakistan by province/region



Source: UNICEF and Government of Pakistan. [Key Findings Report](#), National Nutrition Survey (2018)

Figure 4 shows stunting by wealth quintiles among children under the age of five for the years 2013 and 2018. As the quintiles increase, the stunting rate decreases. At the bottom of the figure we see the first quintile, which is for the lowest level of income earners with the highest level of stunting (57% in 2018). The fifth quintile, for the richest in the country, had a stunting rate of 22% in 2018. There is a significant difference of 35% between the richest and poorest quintile, existent because low-income earners suffer from a lack of access to nutritional food groups and healthcare systems.

⁵ <https://www.who.int/news/item/19-11-2015-stunting-in-a-nutshell>

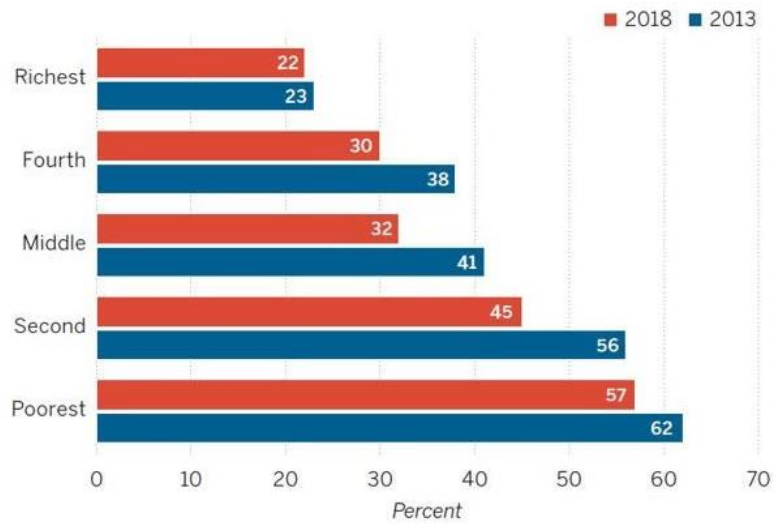
⁶ <https://blogs.worldbank.org/en/endpovertyinsouthasia/addressing-pakistans-high-level-stunting-now>

⁷ <https://data.who.int/indicators/i/A5A7413/5F8A486>

⁸ <https://www.who.int/news/item/19-11-2015-stunting-in-a-nutshell>

Stunting has overall decreased in these five years, while the second, third and fourth quintiles have shown significant improvement between 2013 and 2018.

Fig 4. Stunting by wealth quintiles among children under five in Pakistan



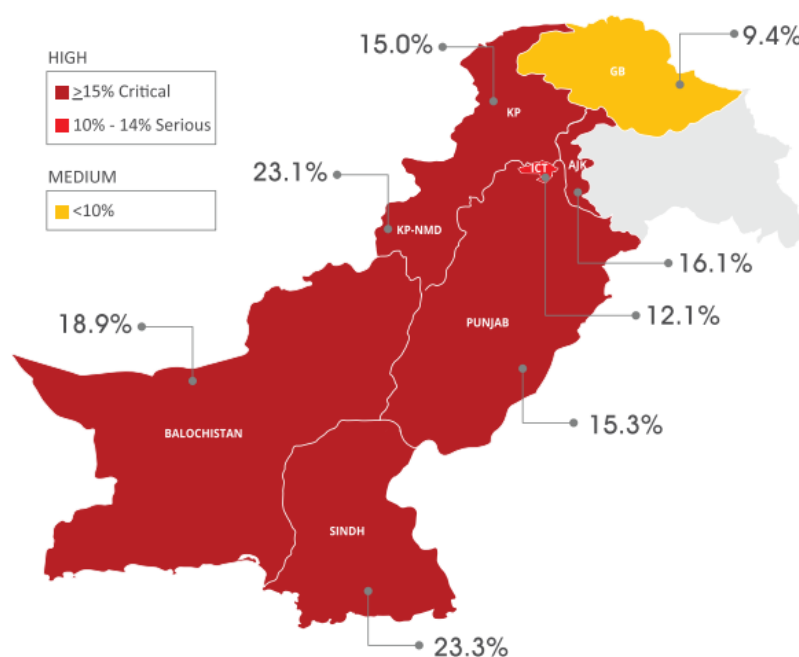
Source: [World Bank](#) (2022)

3. Wasting Indicator

Wasting refers to “low weight-for-height” or acute malnourishment, and can indicate severe weight loss⁹. 17.7% of children under five years are affected by wasting in 2018. Severe wasting has been recorded at 6% in 2024¹⁰. The trend for the wasting rate has been on the rise since 1997, when the rate was 8.6%¹¹. A rate of more than 15% is considered critical, while 10-14% is considered serious. This categorization highlights how dire the situation in Pakistan is currently.

Figure 5 shows the prevalence of wasting by provinces and regions of Pakistan. Among the four provinces, Sindh has the highest rate (23.3%), followed by Balochistan (18.9%), Punjab (15.3%), and Khyber Pakhtunkhwa (15%).

Fig 5. Prevalence of wasting by province/region



Source: UNICEF and Government of Pakistan. [Key Findings Report](#), National Nutrition Survey (2018)

⁹ https://www.who.int/health-topics/malnutrition#tab=tab_1

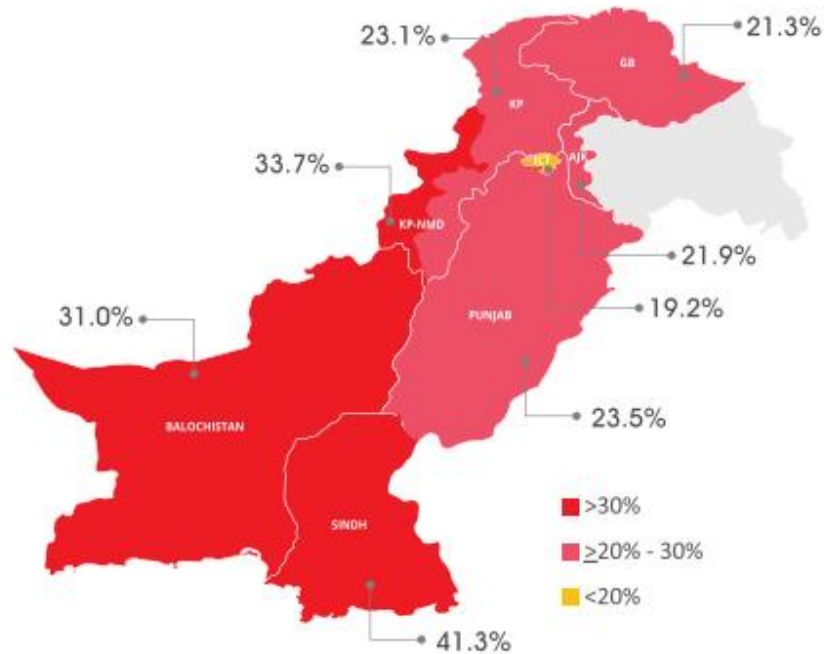
¹⁰ <https://www.unicef.org/media/149886/file/2024-HAC-Pakistan.pdf>

¹¹ <https://www.unicef.org/pakistan/media/1871/file/KeyFindings---NationalNutritionSurvey2018.pdf>

4. Underweight Indicator

28.9% of children in Pakistan are two standard deviations below the optimum weight for their age. As seen in Figure 6, Sindh has the highest proportion of children under five who are underweight (41.3%), followed by Balochistan (31%), Punjab (23.5%), and Khyber Pakhtunkhwa (23.1%). Sindh and Balochistan are considered critical areas as their rates are above 30%.

Fig 6. Prevalence of underweight children by province/region

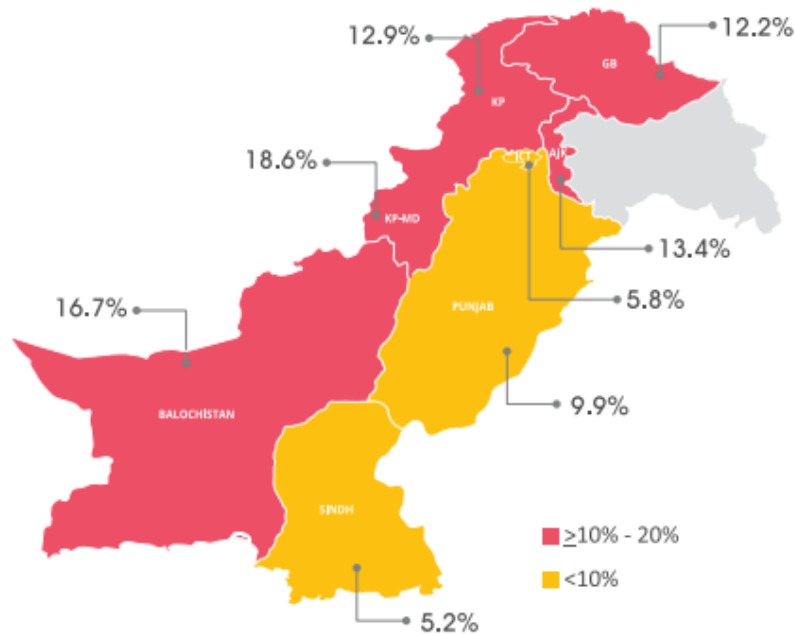


Source: UNICEF and Government of Pakistan. [Key Findings Report](#), National Nutrition Survey (2018)

5. Overweight Indicator

9.5% of children under five in Pakistan are overweight. 0.2% more children in urban areas are overweight, as compared to rural areas (9.4%). The provincial breakdown in Figure 7 shows that the incidence of overweight children is highest in Balochistan (16.7%), followed by Khyber Pakhtunkhwa (12.9%), Punjab (9.9%), and Sindh (5.2%).

Fig 7. Prevalence of overweight children by province/region



Source: UNICEF and Government of Pakistan. [Key Findings Report](#), National Nutrition Survey (2018)

6. The Way Forward

UNICEF claims that “food insecurity, maternal undernutrition, disease and illness, inadequate health services and lack of awareness about feeding and healthcare practices are the main reasons for malnutrition in children.”¹² Malnourishment passes from mother to baby; malnourished mothers give birth to underweight babies who will be susceptible to malnourishment and diseases. This also has the potential to raise the infant mortality rate. Breastfeeding for at least six months, and for up to two years is recommended. It must be kept in mind that keeping women healthy results in a healthier population.

The effects of malnutrition are widespread, preventing affected individuals from leading healthy, fulfilling lives or contributing to society. Instead, they increase the strain on the healthcare system and hinder economic growth¹³. Combatting these issues through a robust healthcare infrastructure which provides equitable services, hygiene and nutrition awareness sessions, adequate sanitation facilities, and satisfactory intake of essential micronutrients (including vitamins, calcium, zinc, and iron)¹⁴ is extremely important. The health, education, and agriculture sectors need to collaborate to find innovative solutions to this pressing issue, all while educating citizens on the gravity of the situation.

¹² <https://www.unicef.org/stories/fighting-malnutrition-pakistan-helping-hand-children-abroad>

¹³ <https://tribune.com.pk/story/2420101/malnutrition-in-pakistan-urgent-action-needed>

¹⁴ <https://tribune.com.pk/story/2420101/malnutrition-in-pakistan-urgent-action-needed>

GALLUP PAKISTAN PUBLIC HEALTH PROGRAM

Gallup Pakistan formally introduced the Gallup Pakistan Public Health Program in 2020. Through this dedicated space, we hope to act as catalysts of change in the public health landscape by using innovative and collaborative solutions to tackle complex problems in the country.

Under this program, the streams of work currently include:

1. Let's Talk Public Health
2. Gallup Pakistan and CDC Sponsored Projects: including the Cause of Death (COD) Training and Enhancing Integrated Mortality Surveillance Workshop held in Islamabad from February 6 – February 10, 2023
3. Gallup Pakistan and Digital Vaccine Register Project
4. Gallup Big Data Analysis of Pakistan Statistical Yearbook – Healthcare in Pakistan (2010 – 2020)
5. Gallup Big Data Analysis of Pakistan Statistical Yearbook – Live Births (2018 – 2020) – Pakistan Demographic Survey 2020
6. Gallup Pakistan 40-year report on Health

One of our pioneering initiatives as part of the Public Health Program is the **“Let's Talk Public Health”** series which was launched in March 2022. Through this platform, we conduct insightful conversations with experts/researchers/practitioners in the field, on public health challenges that Pakistan is facing today and we hope we can find ways to reimagine the concept of health as well as make meaningful contributions to the public health discourse in both, Pakistan and globally.

Links to our previous episodes can be accessed below:

- *Episode 1: Lifestyle and Non-communicable diseases (NCDs) – Conceptual, Empirical and Practical Perspective* by Dr. Ijaz Gilani. <https://youtu.be/uJcYQIj3GH4>
- *Episode 2: Pakistan's Healthcare Market, Medical Devices and Digital Health* by Hammad Ijaz. <https://youtu.be/Wz8QWExlHGg>
- *Episode 3: Health Perception Survey - WiN International and Gallup Pakistan* by Mishalle Kayani and Laila Waqar. <https://youtu.be/lFOp6Op6GrQ>
- *Episode 4: Value of Community Co-design for Vaccine Confidence Interventions - A Case from Karachi* by Rubina Qasim.: <https://youtu.be/7TqLL3cM17A>
- *Episode 5: Science Behind Artistic Processes (Conducive Tools for Health Sector)* by Dr. Habib Afsar. <https://www.youtube.com/watch?v=1ZWK0EhZyD8>
- *Episode 6: Family Planning in Pakistan: Issues, Progress and the Way Forward* by Dr. Adnan Khan. <https://youtu.be/LyOfFv0w8oA>
- *Episode 7: The Menace of Self-Citation: An Audit of Two Years from Journals of KPK* by Dr. Umema Zafar. <https://youtu.be/UZrCBreD8No>
- *Episode 8: International Health Regulations (IHRs) and Pakistan* by Dr. Saeed Ahmad. <https://www.youtube.com/watch?v=t9sZOnzfiS8&t=64s>
- *Episode 9: Migration and Health* by Dr. Roomi Aziz. <https://www.youtube.com/watch?v=E89KBuiU52E>
- *Episode 10: Dispelling Development Myths: The Power of Community Engagement* by Dr. Ayesha Khan. <https://www.youtube.com/watch?v=WtFXmrnazzc>
- *Episode 11: Nutrition and Health in Pakistan: A Conversation with Mishalle A. Kayani and Zainab Khan from Gallup Pakistan.* <https://www.youtube.com/watch?v=4LuHd771K-M>

In our 11th episode of our “Let's Talk Public Health” series, we discussed findings from Gallup Pakistan's 7th Health Cyber Letter, which focused on health and nutrition in the country. The

discussion included unpacking the cultural and regional influences on the perceptions of diet and health for an average Pakistani. In addition to this, we discussed changes in nutritional preferences and how these have been shaped by socio-economic influences over the years. For the last section of our talk, we explored the possible social policy actions that could encourage adopting healthier nutritional habits to improve the overall health status of Pakistan.

In addition to our talk series, we've worked on several *research projects with the Centers for Disease Control (CDC)*.¹⁵

Project: Survey of Social and Behavioral Determinants of COVID-19 Vaccination Uptake and Evaluation of On-going National and Subnational Programming to Increase Demand for COVID-19 Vaccines. 2021

Description: The project aimed to prepare for the rollout of COVID-19 vaccines by assessing social and behavioral determinants for under vaccination in the EMRO region. The multi-country assessment focused on understanding determinants of demand for COVID-19 and other vaccines among priority populations, particularly the role of rumors and misinformation on behavior, and a secondary focus on challenges in vaccine service delivery faced by healthcare workers and program administrators. This project also evaluated ongoing regional, country-level, and subnational planning efforts to introduce COVID-19 vaccines to high priority populations of healthcare workers, adults over 65, and high-risk adults. An important aspect of this project was data triangulation- collecting and reviewing diverse sources of data to compare, contrast, and develop a fuller picture of demand for COVID-19 vaccines in each selected country.

Project: A Cross-Sectional Survey on COVID-19 Knowledge, Attitudes, Practices (KAP) and Resiliency in Pakistan. 2021-2022

Description: The goal of this study was to provide a nationally and regionally representative comprehensive understanding of knowledge, attitudes, and practices (KAPs) around COVID-19 as well as the mental health impacts and other personal effects of the pandemic by providing context specific evidence to help address COVID-19 more effectively. Measuring key cognitive and behavioral factors associated with COVID-19 will help inform recommendations for effective public health management of the disease, such as behavior change strategies, communication strategies to counteract misperceptions around COVID-19, address stigma, community and home-care strategies, and the deployment of food or cash assistance, to vulnerable households.

Project: Track and Trace of COVID-19 Suspected Cases – Pilot Program Working with Faith-Based Organizations. 2022

Description: Engaging faith communities to advance COVID-19 risk communication and mitigation represents a pivotal opportunity to accelerate pandemic control. The project goal was to pilot a program in which contact tracing and advocacy around non-pharmaceutical intervention (NPIs) is done by FBO's and lessons can be learned and shared with policy-makers dealing with COVID-19.

¹⁵ Funding for this conference was made possible (in part) by the Centers for Disease Control and Prevention. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Project: *Estimating Excess Deaths and Improving Mortality Surveillance and Civil Registration Systems in Pakistan during COVID-19. 2022-2023*

Description: This project aims to estimate and improve the capacity for estimation of excess deaths and their causes in selected areas of Pakistan; understand and inform as to causes of increases in preventable deaths; and to attempt to integrate relevant partners and systems to build sustainable capacity in mortality surveillance and in National Public Health Institutes.

Cause of Death (COD) Training (Monday, February 6 to Wednesday February 8, 2023)

Over the course of 3-days, health stakeholders such as doctors from public and private hospitals, the district health office (DHO), Ministry of Health (MoH) and the Civil Registration and Vital Statistics Unit (CRVS) in Islamabad, participated in a training module led by the Centers for Disease Control and Prevention (CDC-US) with Gallup Pakistan's support. The technical training focused on assigning cause of death, the use of ICD-10/11 coding for maternal mortality (MM) and perinatal mortality (PM), and birth and death record assessment and management. Participants also took part in practical exercises using digital platforms like DORIS and AnaCOD as well as group case studies to appropriately fill out death registration forms and discuss mortality management with respect to participants' institutions.

Enhancing Integrated Mortality Surveillance Workshop (Thursday, February 9 to Friday, February 10, 2023)

On February 9 and 10, 2023, Gallup Pakistan and the Ministry of National Health Services and Coordination held a workshop in Islamabad to discuss potential ways to strengthen mortality surveillance in Pakistan. Participants included doctors from public and private hospitals in Islamabad, development organizations and other key actors involved in health surveillance and management systems in Pakistan. Participants had the chance to learn from insightful presentations on existing health infrastructure which included detailed information on data collection processes. In addition to this, participants also actively engaged in group exercises which involved the identification of problems as well as solutions to problems in current surveillance systems at different levels of implementation ranging from the community level up to the facility and institutional levels.

Lastly, during this year we also worked on a ***Digital Vaccine Register Project***, the details of which, you can find below:

The ***Zindagi Mehfooz (ZM)*** application has been designed as a digital repository of enrolment and vaccination records of women and children on a web-based dashboard, currently being leveraged as a micro-data collection tool in the health centers of Sindh, Pakistan. The scope of the research study was to evaluate the impact of the application on immunization service delivery, registry coverage, uptake of immunization services, and data use patterns.

The qualitative aspect of the evaluation included a series of focus group discussions, key informant interviews, and observations across health facilities/offices in the districts of Jacobabad, Shikarpur, and Naushahro Feroz with the goal of understanding the perceptions of all the stakeholders involved (ZM staff, caregivers, vaccinators, supervisors/coordinators, district managers, and provincial managers) regarding the use and impacts of the ZM application.

Gallup Big Data Analysis of Pakistan Statistical Yearbook – Healthcare in Pakistan (2010 – 2020)
<https://gallup.com.pk/wp/wp-content/uploads/2022/12/Health-pr.pdf>

Gallup Big Data Analysis of Pakistan Statistical Yearbook – Live Births (2018 – 2020) – Pakistan Demographic Survey 2020

In addition to all the initiatives, Gallup Pakistan is also working on producing a ***40-year report on Health in Pakistan*** which is a compilation of findings from health research conducted by the organization over the last 4 decades.

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A stylized world map in shades of blue and green, showing the continents. It is positioned in the lower half of the page, behind the contact details text.

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