

Gallup Pakistan Health Cyberletter

Edition 3, December 2022



EDITOR'S NOTE

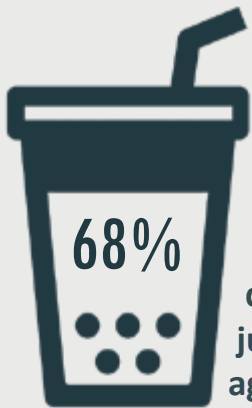
Health is a complex and multidimensional concept with many interlinked components which individually play an integral role in shaping the health and life of an individual. In the third edition of Gallup Pakistan's Health CyberLetter, "Insights from NCD Research by Gallup Pakistan," we move beyond the traditional medical lens and shed light on some different ways to think about lifestyles and non-communicable diseases (NCDs) in Pakistan.

One unique facet of our research is that we provide comparative data points with global comparisons, data trends over the years as well as cross-sectional data such as gender, age and education disaggregation for different research questions.

We observe that Pakistanis generally prefer to eat red meat, consume carbonated drinks and don't exercise frequently yet have a fairly positive view regarding their physical and mental health. In addition to this, views regarding the standard of healthcare facilities have changed positively in recent years and the majority now consider smoking as extremely harmful to health.

There is a growing realization that lifestyles and behaviors are instrumental in all aspects of health and even more so in preventive and curative care. With this theme in mind, our NCD research provides insights into some social and behavioral determinants of non-communicable diseases in Pakistan. This data is a snapshot of a potential future patient's perception regarding his/her/their own health and we hope that it is valuable to public health and/or medical professionals as they collaboratively work to tackle NCD incidence in Pakistan.

Mishalle A. Kayani



Young people (68%) are more likely to drink fizzy drinks or chill carbonated juices compared to other age groups.



There was a 15% decrease in the preference for fresh meat between 2007 and 2022.



Female participants (53%) are twice more likely to be working while standing compared to male participants (26%).



Participants aged more than 65 years old (79%) are less likely to feel depressed than other age groups.

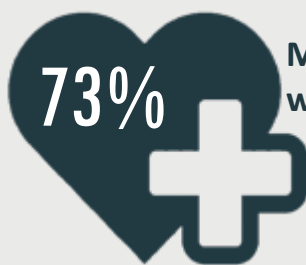
Comparing the type of treatment Pakistanis prefer, we observe a 13% increase in Alopathic Medicine between 1979 and 2009.

13%



90%

consider smoking to be very harmful to health.



More people were satisfied with the healthcare facilities in their area in 2022 (73%) as compared to 2009 (33%).

INTRODUCTION

Different structures can potentially influence lifestyle choices within a community – *Physical structures* like the places we live, rural urban locations, *behavioral structures* such as the cycle of life, the way we behave at different points in time, in different circumstances, *normative structures* like traditions, what is taught to us early on and *incentive structures* like society and economics which incentivize or disincentivize certain behaviors and choices, all either directly or indirectly impact the ways in which we make decisions regarding our health.

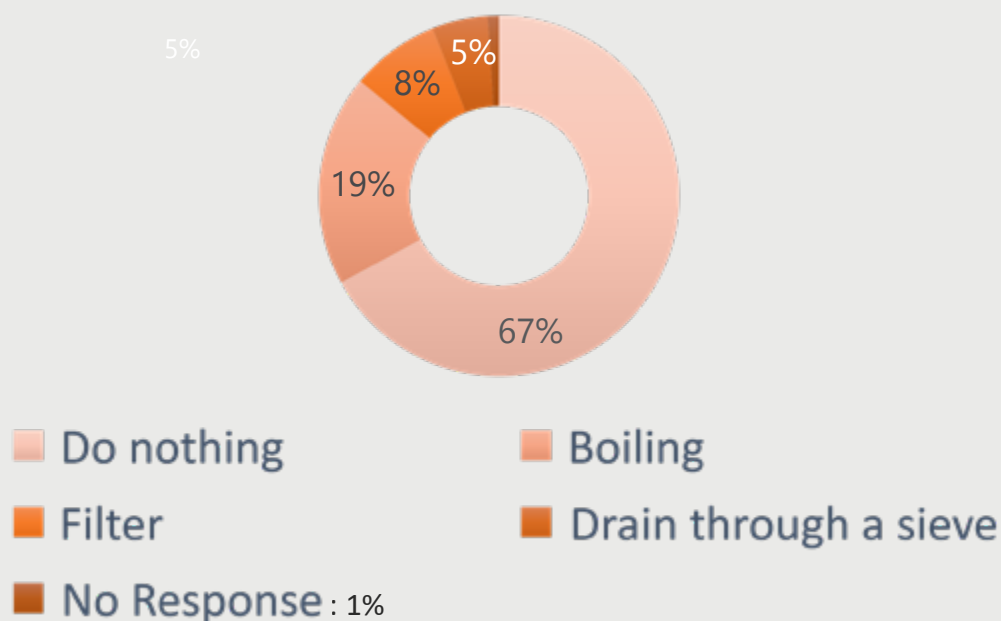
The challenge, of course, is really understanding the extent to which each of these structures can influence lifestyles and moving towards finding solutions which encourage certain lifestyle changes.

Through the following data points, we ask some key research questions related to the health and behaviors of people in Pakistan and attempt to analyze what potentially could lead to an increase in the disease-burden in the country.

EATING AND DRINKING HABITS

For eating and drinking habits, in particular, the research provides a glimpse into what people like to consume and how this choice is shaped by external factors.

How do you clean drinking water?



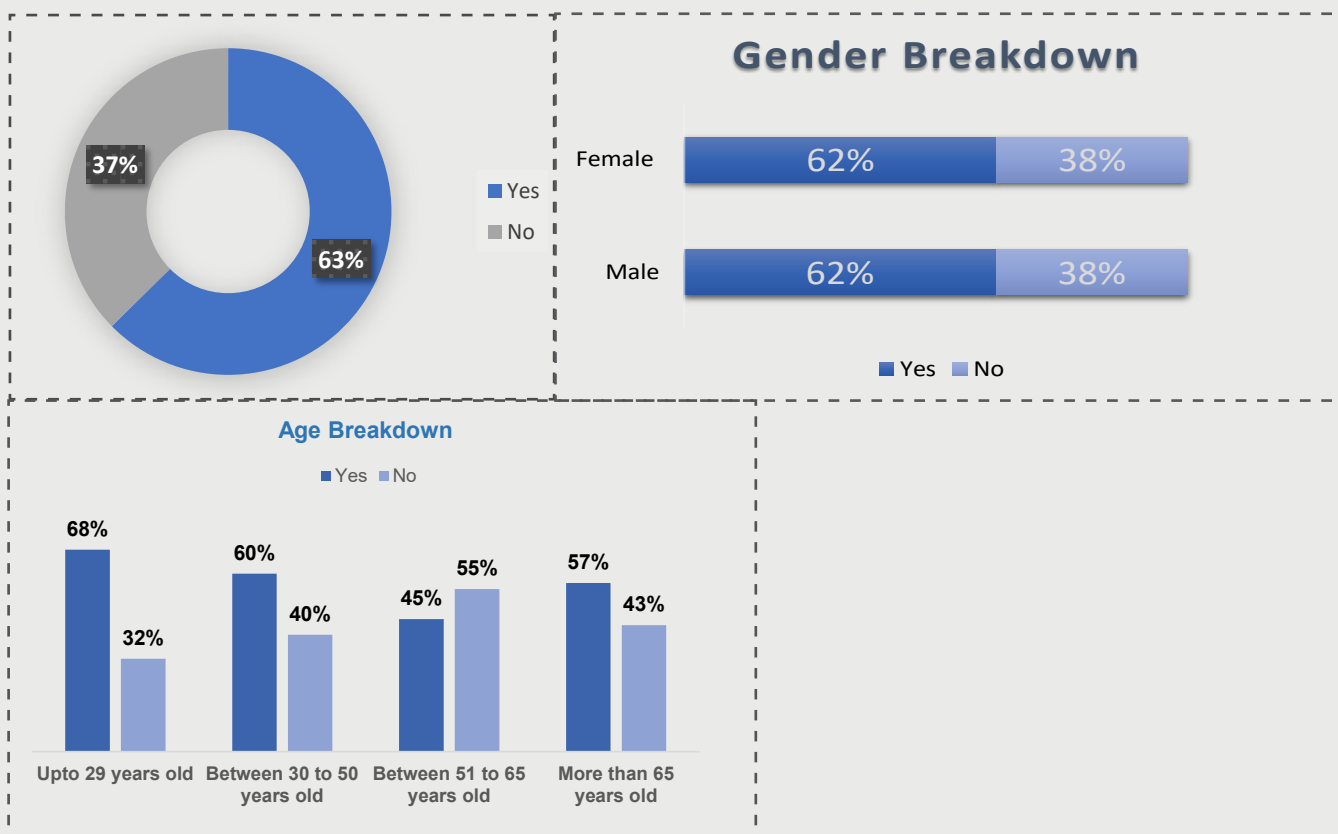
This finding is particularly interesting because approximately 60% people rated shortage of safe drinking water as a very important issue but when asked what people do to clean drinking water before use, more than half (67%) do nothing.

How important or unimportant, in your view, are the following problems?

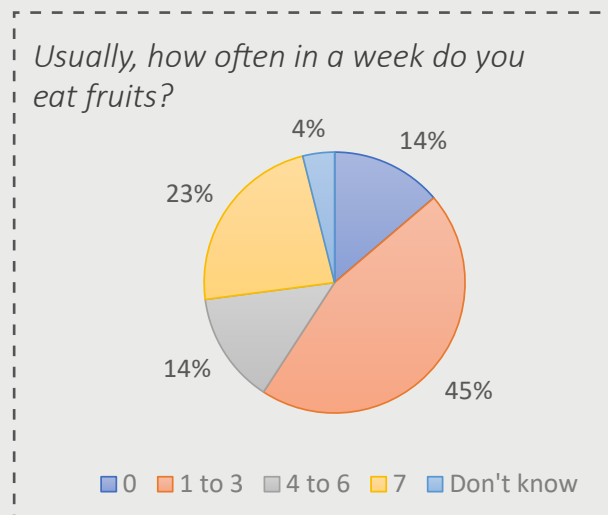
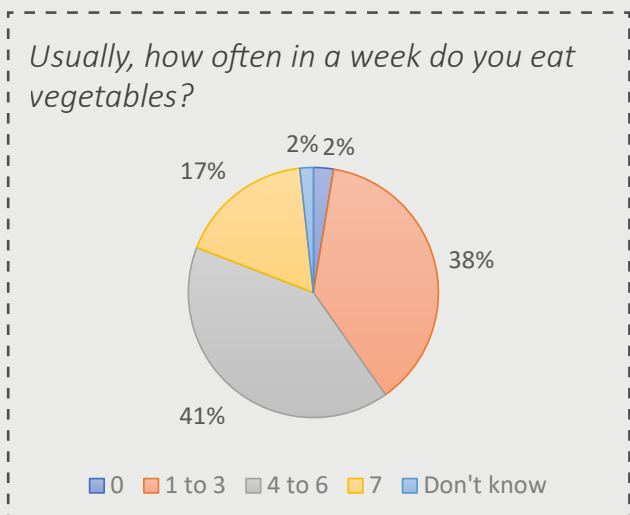
		Very Important	Somewhat Important	Not Important	Not at all Important	NR
1.	Water Pollution in Rivers, Lakes and Oceans	46%	28%	8%	6%	13%
2.	Air Pollution	42%	29%	9%	6%	14%
3.	Climate Change/Global Warming due to Green House Effect	35%	34%	13%	5%	13%
4.	Depletion of Natural Resources e-g. Forests, Farmland and Fish	40%	31%	11%	4%	14%
5.	Automobile Emissions	51%	21%	11%	5%	12%
6.	Loss of Animal and Plant Species	42%	28%	11%	3%	15%
7.	Shortage of Safe Drinking Water	59%	15%	11%	3%	12%
8.	Poor Agricultural Produce due to Unpredictable Weather Changes	46%	24%	11%	6%	14%

63% of the participants reported that they consume fizzy drinks. Young people (68%) are more likely to drink fizzy drinks or chill carbonated juices compared to other age groups

Do you drink any 'fizzy drinks' or chilled carbonated juices?



96% of the participants reported that they eat vegetables frequently in a week while an estimated 80% of the participants eat fruits, out of which 23% of them eat them every day in a week.



Some previous comparative data points reveal that generally people preferred consuming meat even if the prices of all meat, vegetables and pulses were equal although there is a change in this in 2022 with the preference for vegetables increasing irrespective of prices.

If the price of all the three food items i.e. meat, vegetables and pulses is equal, what would you prefer in your diet?

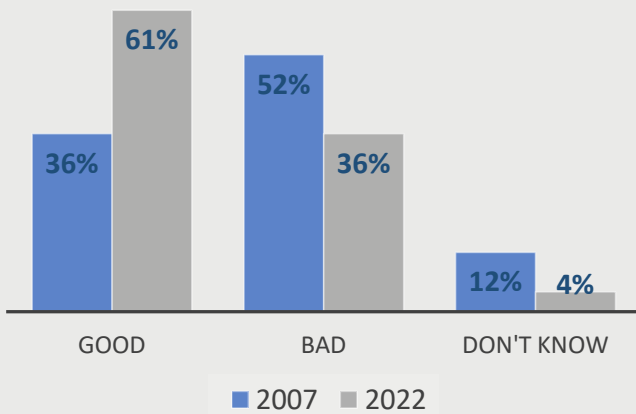
Comparative Data

	2005	2009	2022
Meat	44%	51%	35%
Vegetables	44%	32%	52%
Pulses	12%	15%	11%

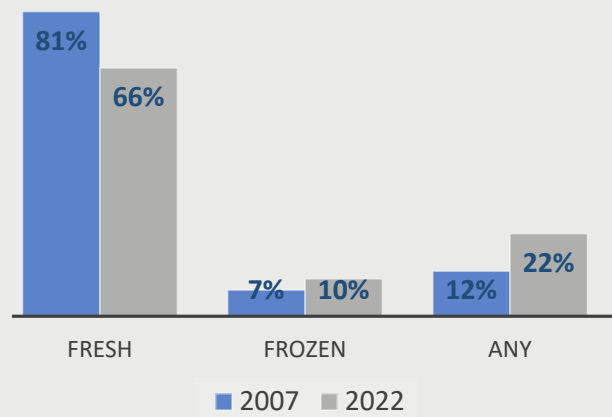
People also preferred to buy fresh meat from the butcher's shop (81%) and majority (52%) of our population considered frozen foods as bad a decade ago but there are shifts in this perception recently – one reason could perhaps be the convenience associated with frozen foods.

There has, however, been a 15% decrease in the preference for fresh meat between 2007 to 2022.

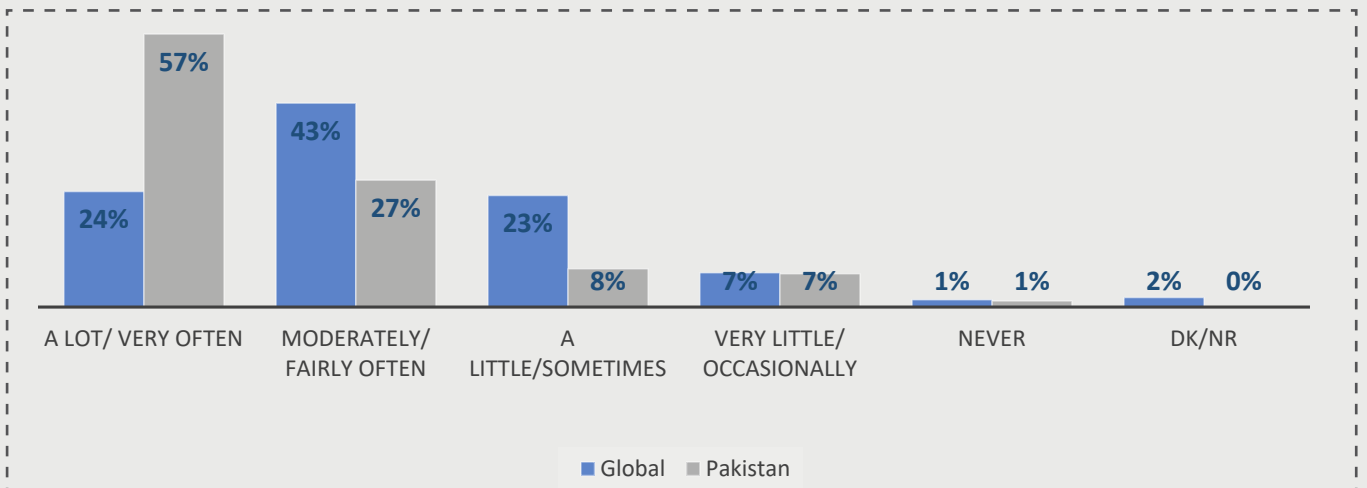
Some people believe it is not good to use frozen food and others consider it good. What is your view regarding frozen food?



Do you buy fresh meat from butcher's shop or do you buy frozen meat?



The data suggests that people are consuming fizzy drinks, they mostly don't clean the water they drink and also eat more red meat; in spite of this, generally people in Pakistan have a positive view regarding their health. Overall, Pakistanis generally consider themselves to be eating healthy – an overwhelming 84% people claimed to eat healthy frequently in 2021 which is 17% higher than the global average

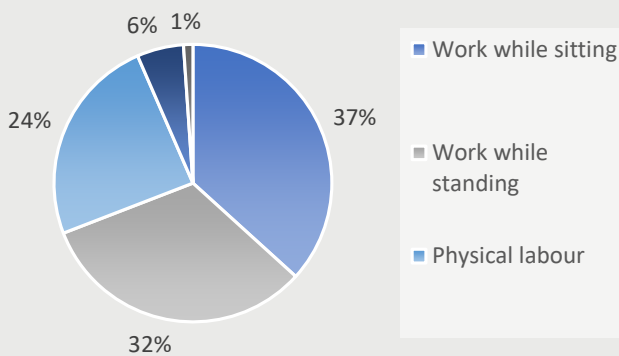


This is where the task of public health professionals can be quite challenging because the demand for correcting behavior is lacking and perhaps we need to first create awareness among communities on the prevalence of diseases and what is contributing to that prevalence.

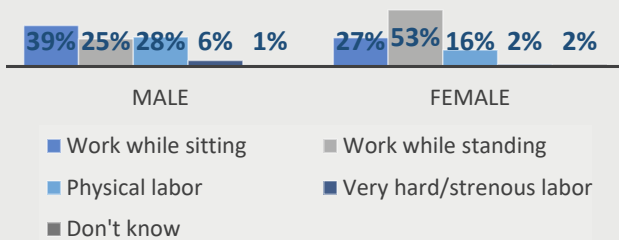
EXERCISE HABITS

Although physical activity is linked with positive health outcomes, generally people don't seem to be getting much of it in Pakistan. We observed that more than one-third of participants (37%) work mostly while sitting and female participants are twice as likely to work while standing compared to their male counterparts (53% vs 26%).

Which one of the following options matches your exercise and workout during your daily chores?

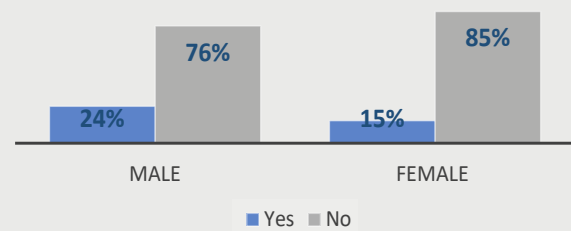


Gender Breakdown

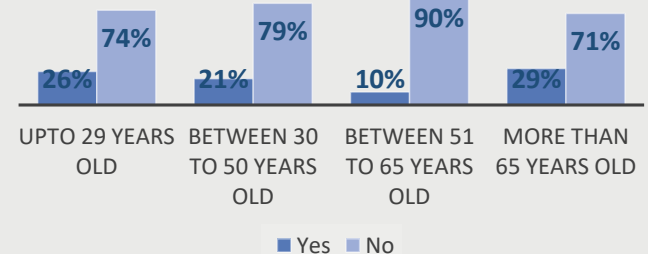


Do you perform any exercise or play which makes your breathing or heartbeat slightly faster?

Gender Breakdown

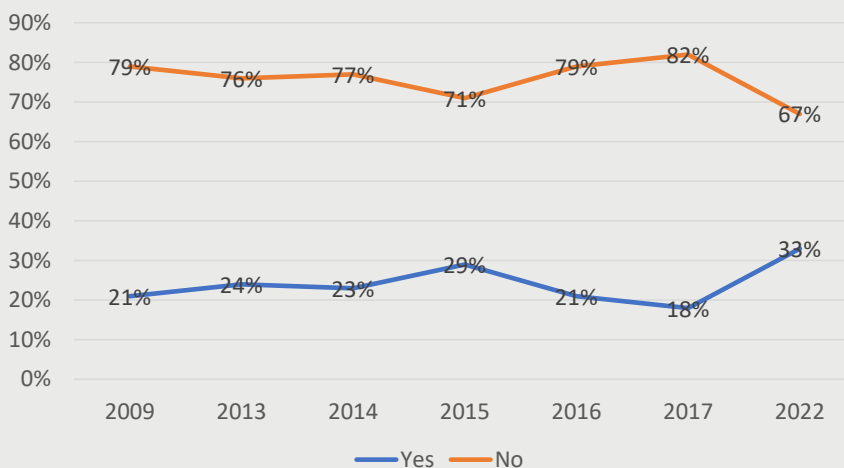


Age Breakdown



If we look at the trends over the years from 2009 to 2017, on average 80% people report that they do not have a recreational park near their houses – Perhaps this could be a contributing factor to the low rates of physical activity?

Do you have a recreational park near your house?



This data shows some country comparisons as well – Global average for regular exercise in 2021 was 40% and Pakistan was slightly higher at 44%.

	2020	2021
GLOBAL AVERAGE	39%	40%
IN – India	67%	64%
FI – Finland	58%	59%
PY – Paraguay	44%	56%
ES – Spain	57%	55%
KE – Kenya	No data	53%
CN – China	46%	51%
IE – Ireland	49%	50%
VN - Vietnam	44%	47%
PH – Philippines	48%	46%
CO – Colombia	No data	46%
US - United States	34%	45%
PK – Pakistan	32%	44%
FR – France	36%	44%
NG – Nigeria	45%	44%
CA – Canada	41%	43%
JP – Japan	44%	42%
DK - Denmark	43%	42%
SI – Slovenia	45%	41%
GB - United Kingdom	44%	41%
MY – Malaysia	37%	40%

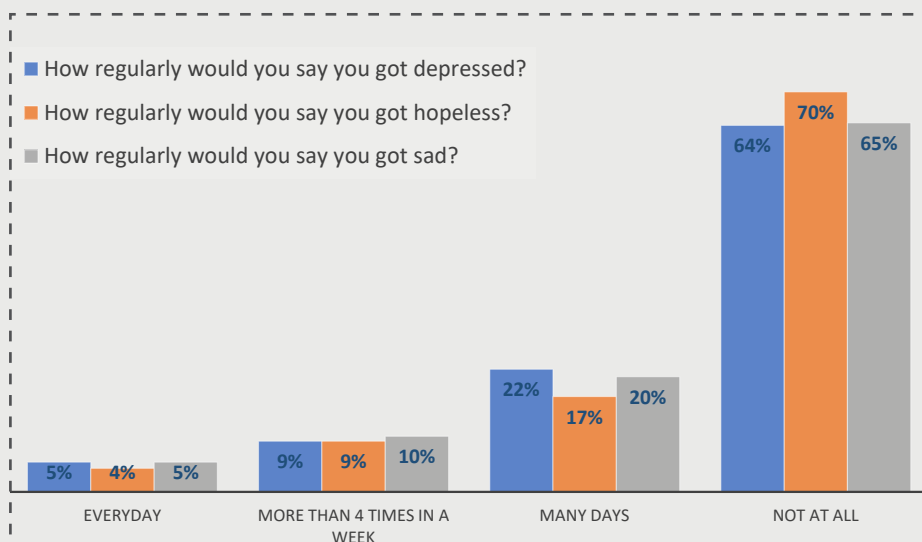
	2020	2021
ID – Indonesia	53%	40%
IT – Italy	36%	38%
HK - Hong Kong	41%	38%
AR – Argentina	33%	36%
BR – Brazil	30%	36%
LB – Lebanon	30%	35%
PS – Palestinian T.	31%	34%
DE – Germany	40%	33%
GR – Greece	No data	31%
MX – Mexico	23%	30%
RS – Serbia	27%	30%
PE - Peru	26%	29%
PL – Poland	33%	29%
EC – Ecuador	37%	29%
HR – Croatia	33%	27%
KR - South Korea	28%	26%
TR – Turkey	No data	24%
TH – Thailand	No data	24%
CL – Chile	20%	21%

With parks being located further away from houses and professions mostly requiring individuals to sit and work, how can we inculcate the practice of exercising in the community?

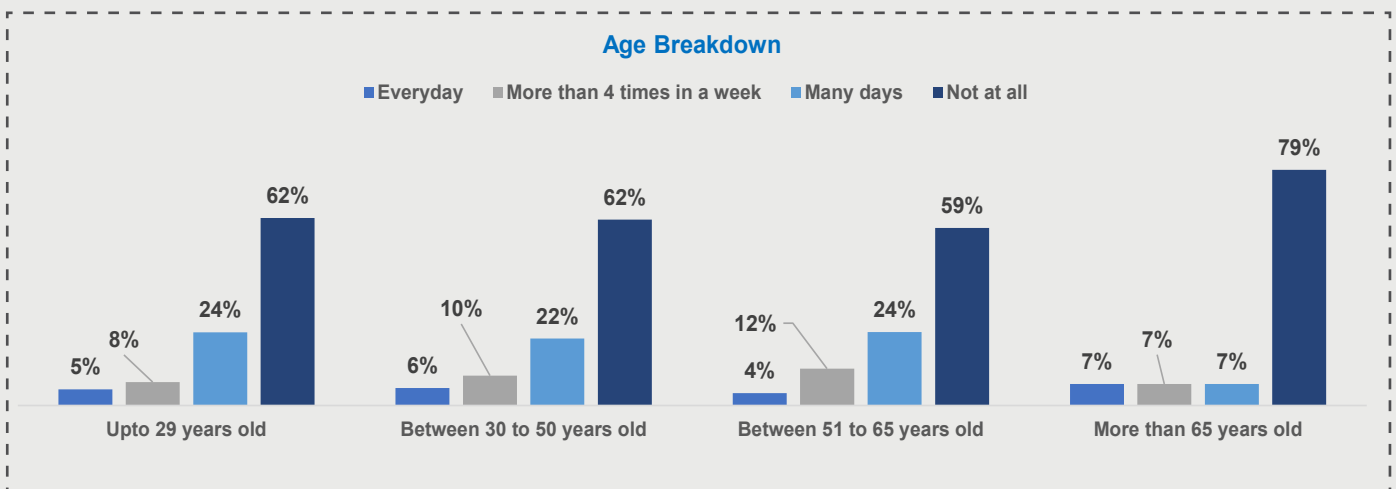
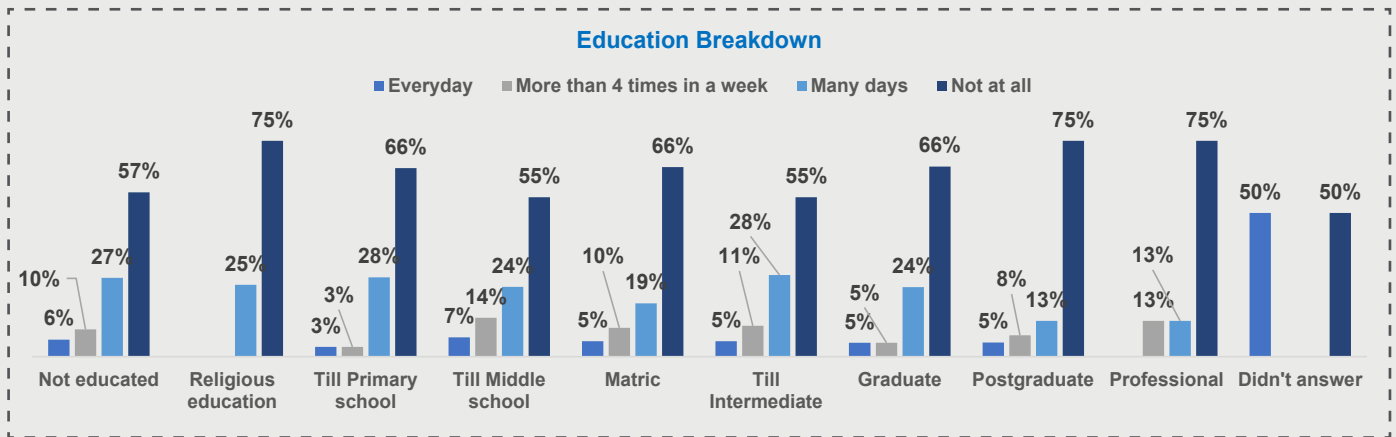
MENTAL HEALTH

One incredibly important component of NCD research includes mental health.

In a recent survey, majority of our respondents (60% to 70%) did not report feeling depressed, hopeless or sad but for those who did, depression and sadness were common.



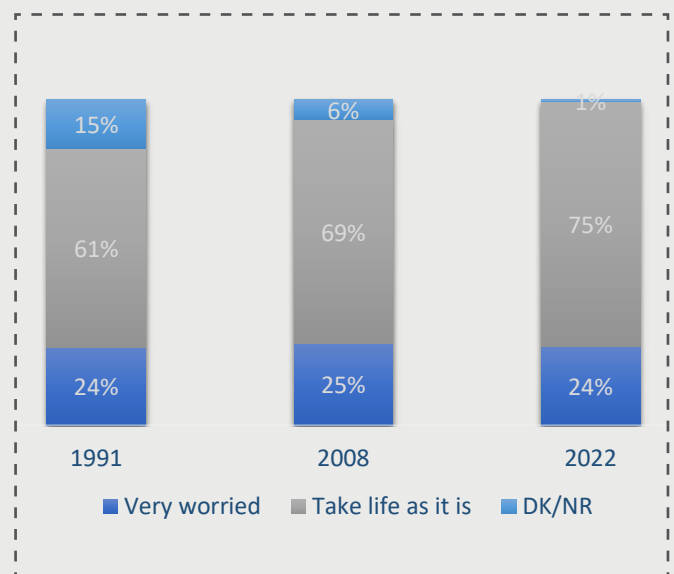
Looking at some cross-sectional data, participants aged 65 and above are less likely to feel depressed and across all education levels, 3 in 4 people generally don't feel depressed.



Generally, over the years 3 in 4 people reported taking life as it is.

These statistics can perhaps be more deeply analyzed to better understand whether income, expenses or education play a particular role in mental health

Just how people view themselves to be eating healthy in Pakistan, generally people's perception of their mental health based on this data is fairly positive too. However, during COVID-19 and more recently during the ravaging floods across the country, there may actually be an increase in mental health issues. This positive view could possibly be linked with how the topic of mental health has historically been stigmatized within the country.

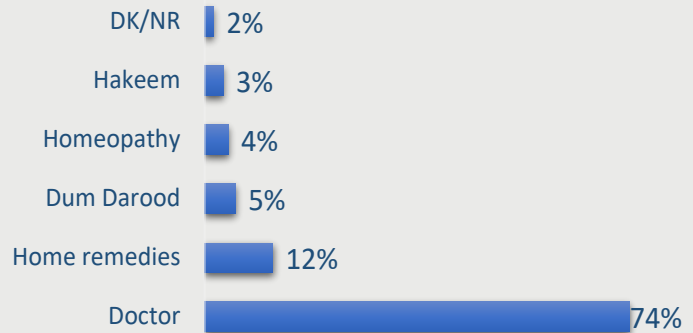


HEALTH-SEEKING BEHAVIORS

When we talk about lifestyles, it's the individual perception of health which contributes to how health-seeking behaviors are shaped.

Between 1979 and 2009, we observed a 13% increase in the preference for Alopathic medicine as the type of treatment (from 59% to 72%). Similarly, in 2022, 74% people preferred to visit the doctor to get treated

TYPE OF TREATMENT	1979	2009
ALOPATHIC MEDICINE	59%	72%
HAKEEM/HIKMAT	27%	13%
HOMEOPATHIC MEDICINE	4%	6%
HOME REMEDIES	3%	7%
SPIRITUAL TREATMENT	5%	1%
DON'T KNOW	2%	1%

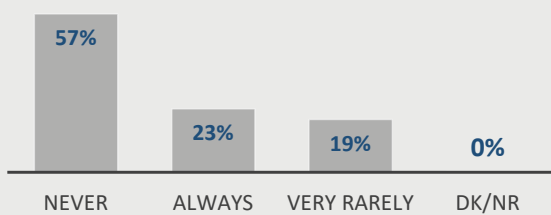


Majority of our respondents do not get an annual detailed medical checkup and the preference for government hospitals was much lower in 2009 (44%) as compared to private hospitals but in 2022 people equally preferred both.

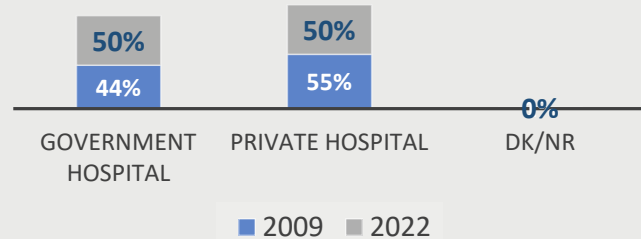
We can see that people used to regard government hospitals as bad quite a while ago but this perception has changed positively over the years.

Generally, people are much more satisfied with the healthcare facilities in their locality as compared to a decade ago.

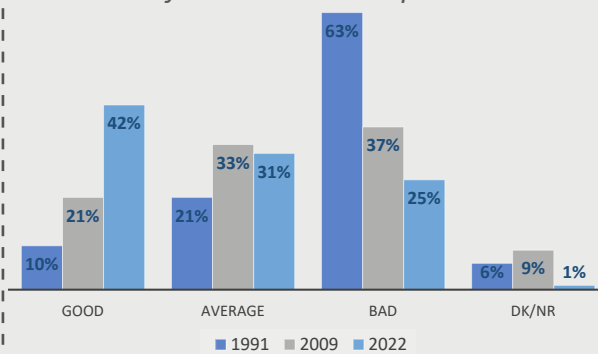
Do you get an annual detailed medical check-up?



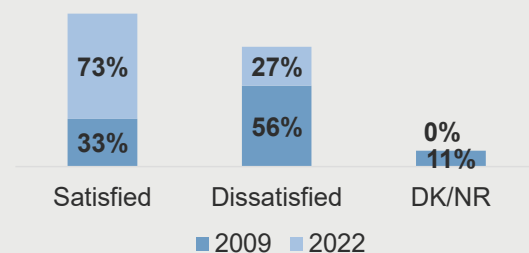
Preference for Type of Hospital when sick



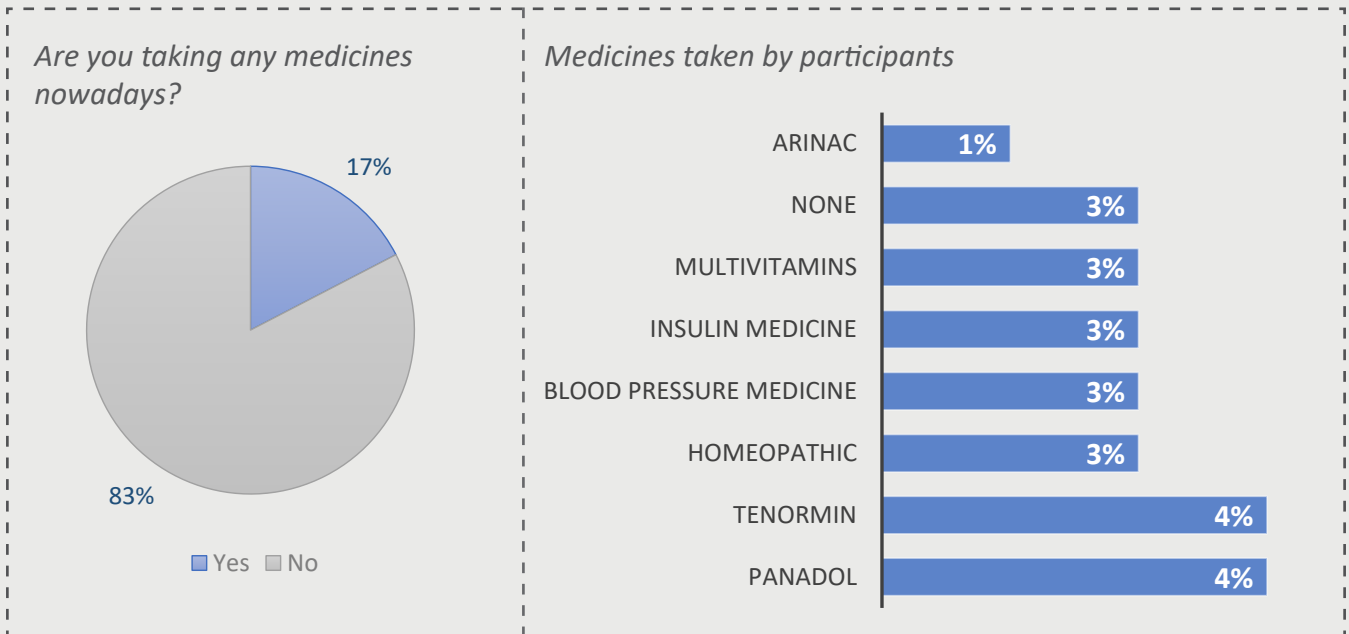
What is your opinion regarding the standard of Government Hospitals



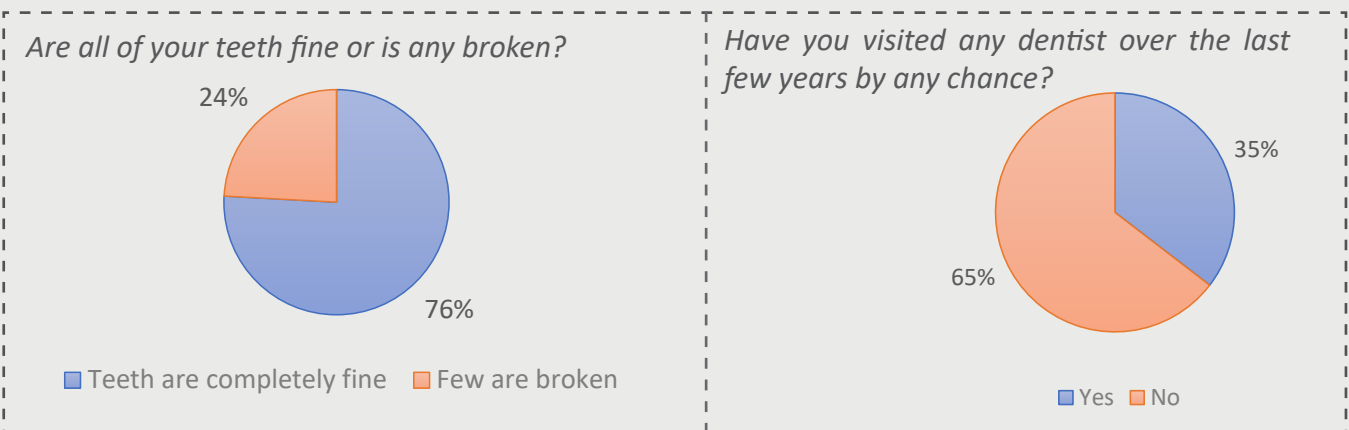
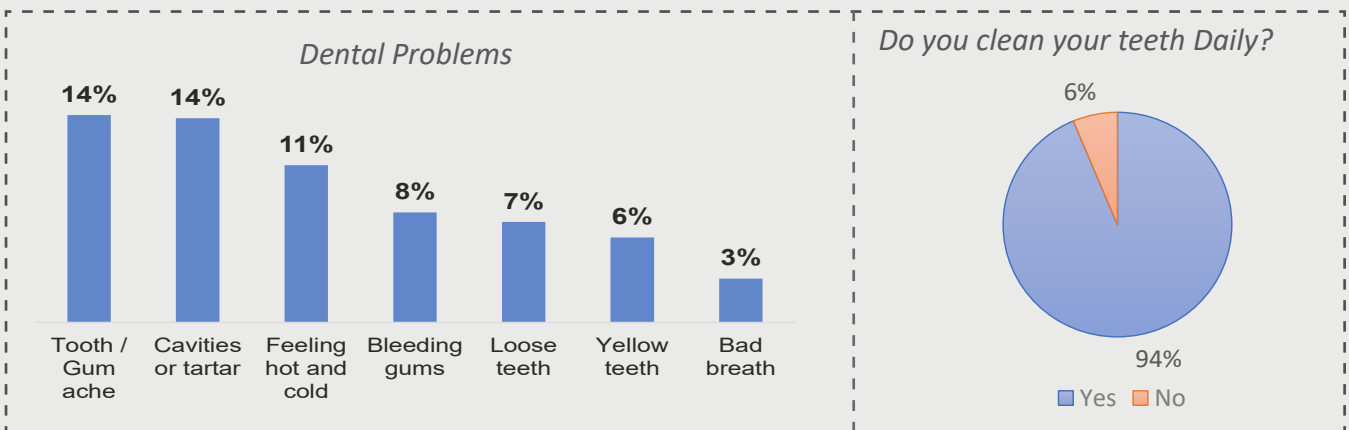
Satisfaction with healthcare facilities



Majority of the respondents also claim to not be taking any medicines currently but of those who do, "Panadol" and "Tenormin" are popularly consumed.



Another insight into health-seeking behaviors comes from our research questions surrounding dental care. Some common dental problems include toothaches and cavities but 65% people report not visiting the dentist over the last few years.

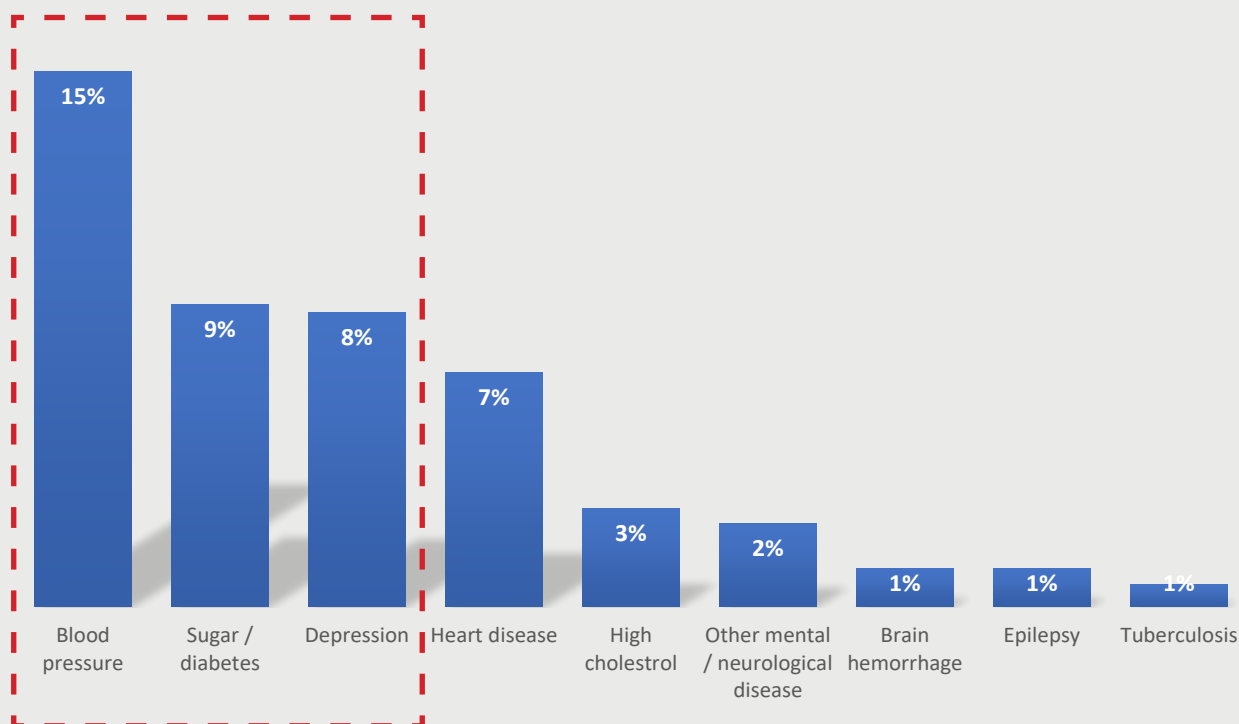


These are just some of the ways to think about health-seeking behavior; whether people feel the need to seek help, where they prefer to go, how frequently and to whom and this is particularly relevant to assess the increase or decrease in the incidence of NCDs in the country – For example if people are looking at alternative medicine as forms of treatment, this is suggestive of negative behavioral determinants of NCDs. Similarly, going to the wrong doctor or taking the wrong medicine would have a direct impact on how people get sick so in terms of curative care, this gives us an insight on some behavioral drivers.

INCIDENCE OF NON-COMMUNICABLE DISEASES (NCDs)

Blood pressure, diabetes and depression have the highest incidences, followed by heart disease and high cholesterol. These are, however, self-reported statistics and there could be discrepancies between these figures and the actual picture on ground.

We hope to use the self-reported number and perform a correction on those numbers for calculating the disease burden in our NCD research in future - This methodology, referred to as the Behavioral Risk Factor Surveillance System (BRFSS)¹ has been in the US for a long-time and we will be borrowing from that methodology and build on the initial findings from here.



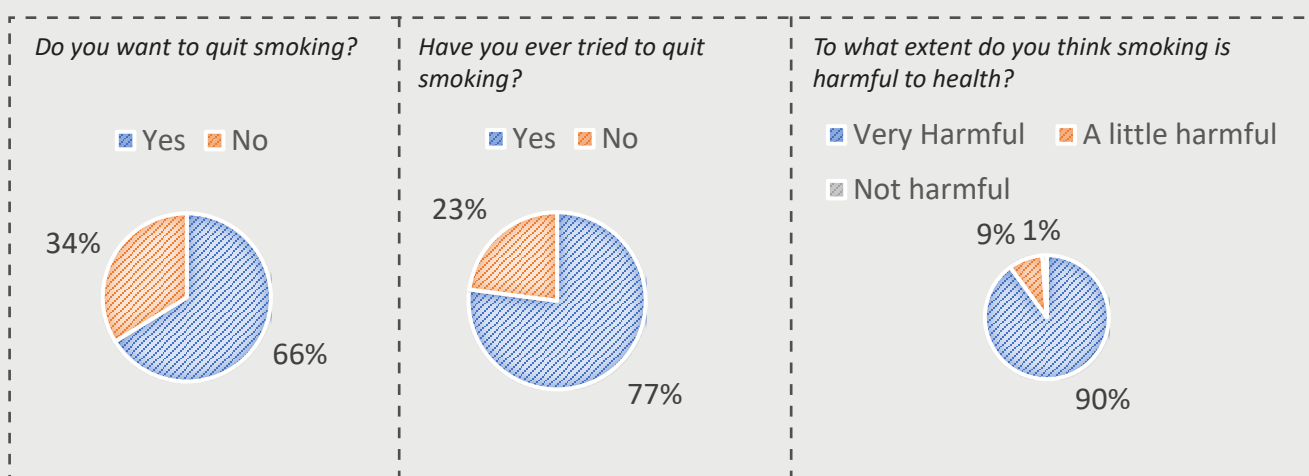
¹<https://www.cdc.gov/brfss/index.html>

SMOKING

Through our surveys and in line with global trends, we've also attempted to study smoking patterns. In Pakistan, one of the highest disease-burden especially with regards to NCDs is that of cardiovascular diseases and smoking is of course highly correlated with this.

Now according to the World Bank, there has been a 17% decrease in the smoking rate over the last 2 decades. In recent years, Pakistanis have moved towards healthier habits when it comes to smoking. Majority have tried to quit smoking and 90% consider it very harmful to health.

This is indicative of more positive picture in lifestyle changes over the years.



Pakistan Smoking Rate - Historical Data		
Year	Smoking Rate (Ages 15+)	Annual Change
2020	20.20%	-0.60%
2019	20.80%	0.00%
2018	20.80%	-2.80%
2015	23.60%	-3.80%
2010	27.40%	-4.50%
2005	31.90%	-5.60%
2000	37.50%	-5.60%

DISCUSSION

Historically and typically, medicine has been addressed by institutions; lifestyles, however, are a matter to be addressed by communities. The overarching goal to address NCD incidence in Pakistan should be geared towards eventually bridging the gap between communities and institutions and translating data into actionable points for both sides of the equation i.e. bringing about shifts in medical supply and institutional care and bringing about changes in behaviors to live healthier and happier.

We have some interesting findings from Pakistan which can be challenging to confront at a policy-level. For instance, Pakistani's have a fairly positive review regarding their mental health; however, the current environmental, economic and social conditions of the country might contribute to a decline in overall mental well-being. Several meta-analysis studies across the world have found links between diseases such as diabetes and mental disorders, including depression. Because such synergies between mental health and NCDs exist, it makes sense to move towards addressing common risk factors and system barriers to reduce preventable suffering.

We've also observed that another common policy problem is the accessibility of recreational parks. Given that physical activity is a key risk factor NCDs and the fourth leading cause of early death globally, (according to the WHO)², a collective effort at both national and local levels is required. For example, workplace policies can provide opportunities for being physically active during the day. It's important to work with aim of understanding participation in physical activity as a preventive measure for different diseases.

NCD research is of vital importance in concerted and collective efforts to manage and control NCD incidence but research rarely translates to policy changes or changes in practice at the provider's or health professional's level. Non-communicable diseases (NCDs) have been highlighted as a significant global health threat and the control of NCDs requires integrated action across all major areas of society that influence health. It is imperative that we strive to strengthen the collaboration between medical professionals and research organizations and embed ethical research training into curriculums in Pakistan to ensure we can use a whole system approach to reduce the disease-burden in future.

²World Health Organization.

GALLUP PAKISTAN PUBLIC HEALTH PROGRAM

Gallup Pakistan formally introduced the Gallup Pakistan Public Health Program earlier this year. 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
3. Gallup Pakistan and Digital Vaccine Register Project
4. **Gallup Big Data Analysis of Pakistan Statistical Yearbook – Healthcare in Pakistan (2010 – 2020)**
5. 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 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/IFQp6Qp6GrQ>
- Episode 4: Value of Community Co-design for Vaccine Confidence Interventions - A Case from Karachi by Rubina Qasim.: <https://youtu.be/7TqIL3cM17A>
- Episode 5: Science Behind Artistic Processes (Conductive 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/LyQfFv0w8oA>

In addition to our talk series, we've worked on several research projects with the Centers for Disease Control (CDC)³.

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.

³Funding 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 Zindagi Mehfooz (ZM)

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.

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>

As a developing country, Pakistan has been struggling with developments in the health sector. Even though there has been constant development happening, the country still has a long way to go. Undertaking an analysis of facts and figures available in The Pakistan Statistical Yearbook 2022 published by the Pakistan Bureau of Statistics, we provide an overview of the growth in the health sector over the last decade.

Key Findings From Gallup Pakistan Big Data Analysis

- The number of health institutions in Pakistan increased by 10% from 2011 to 2020.
- Almost 37% increase in the number of beds was seen in health institutions from 2011 to 2020.
- 61% increase in the number of doctors as compared to 135% increase the number of dentists in the country from 2011 to 2020
- 69% increase in lady health visitors, 50% increase in the number of nurses and 40% increase in the number of midwives was seen in the previous decade.

In addition to all the aforementioned 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.

For any queries, please contact:

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