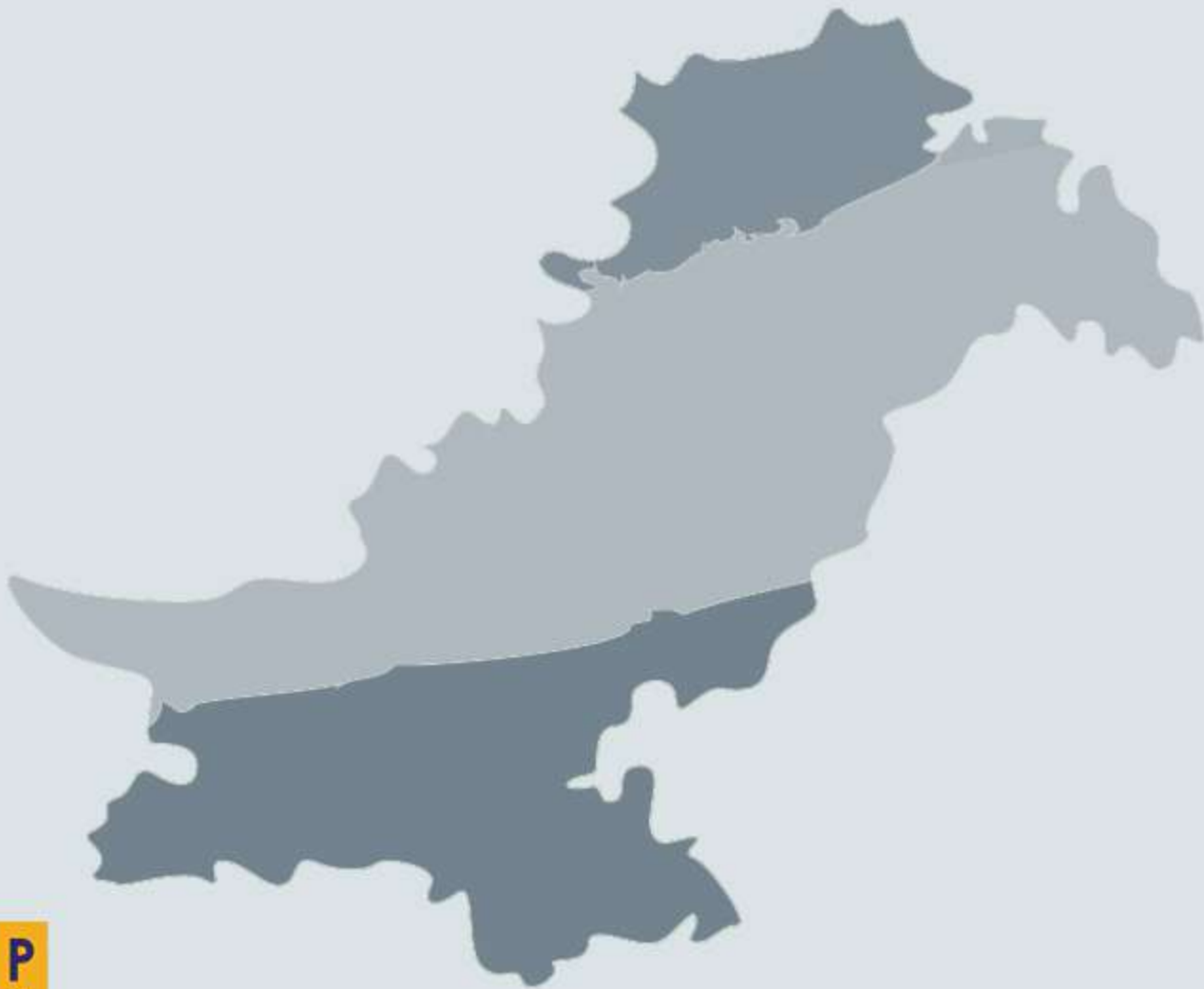


GALLUP BIG DATA ANALYSIS OF PAKISTAN BUREAU OF STATISTICS DATA

MORTALITY RATE IN PAKISTAN



The crude death rate in Pakistan was 6.7 in 2020, an all-time low
Gallup Pakistan Big Data Analysis on Mortality

Crude Death Rate 2010-2019:

The crude death rate has been on the decline. The decline has been very slow and gradual, but it has been declining

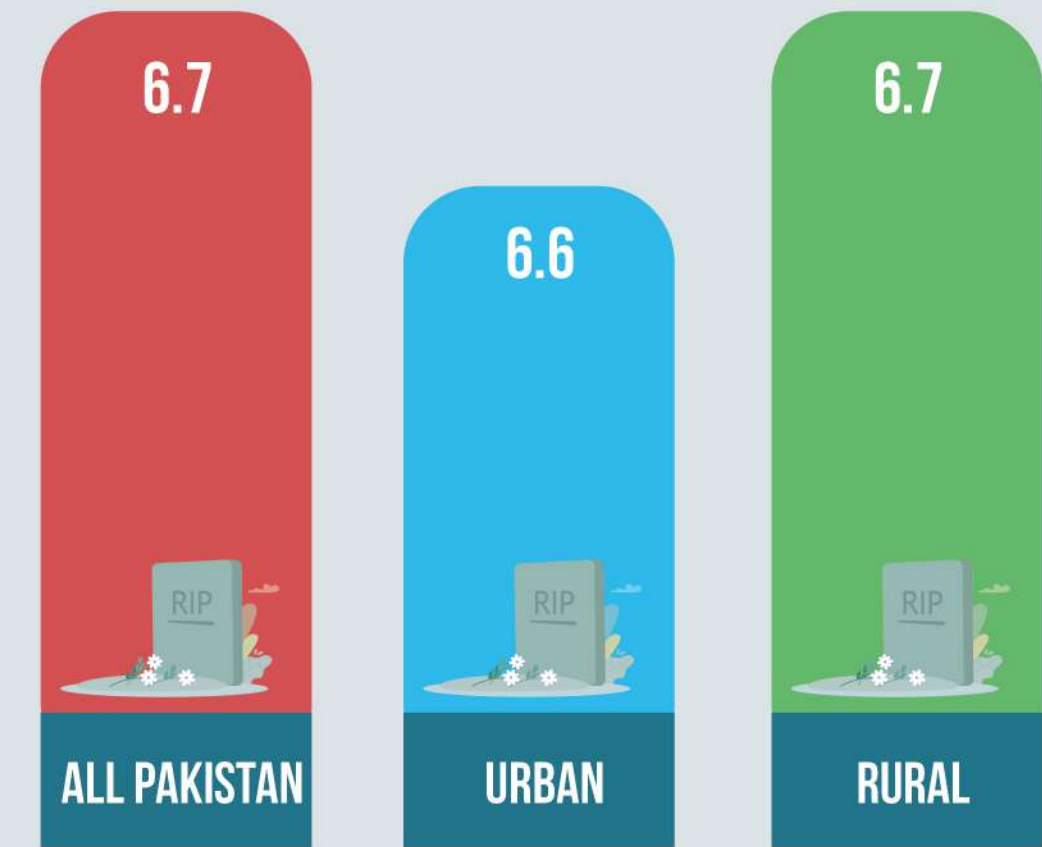
Per 1000 people

2010	7.568
2011	7.454
2012	7.349
2013	7.257
2014	7.176
2015	7.107
2016	7.048
2017	6.994
2018	6.942
2019	6.893

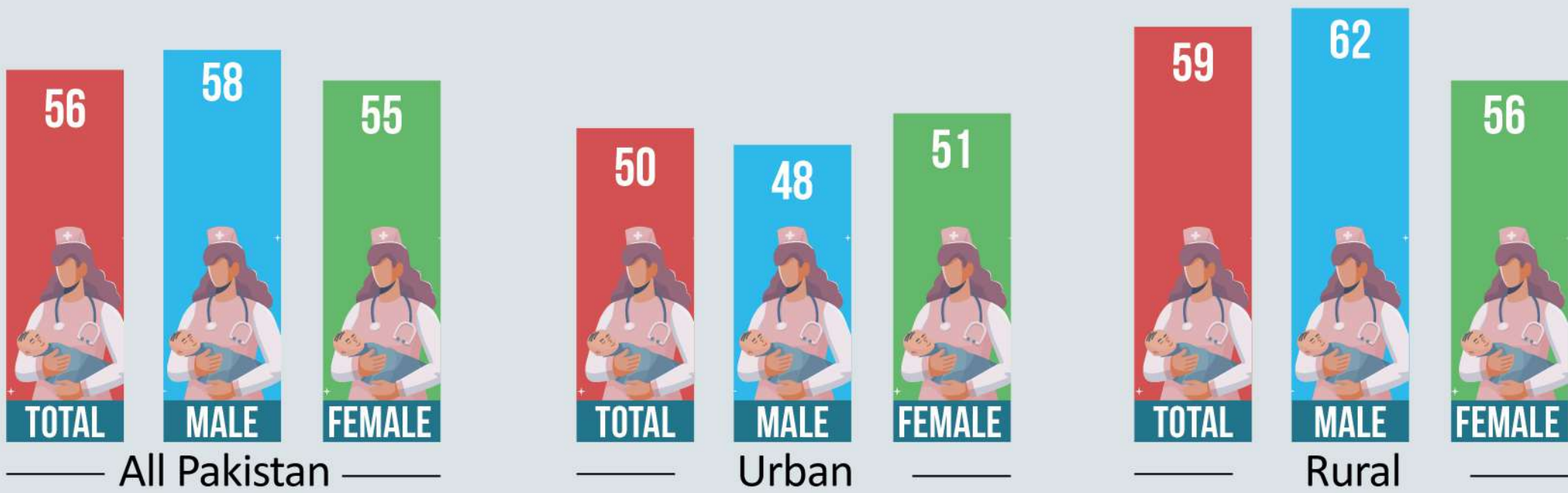
Crude Death Rate 2020:

The Crude Death Rate for 2020 is 6.7 per thousand persons for Pakistan. For the urban areas it is 6.6 and 6.7 for rural area. The Crude Death Rate is higher in rural areas than in urban areas.

Per 1000 people



Infant Mortality Rate (IMR): IMR for the period 2018-2020 was 56 deaths per 1000 live births.



PRESS RELEASE

Gallup Pakistan Analysis of Pakistan Bureau of Statistics Data

The crude death rate in Pakistan was 6.7 in 2020, an all-time low– Gallup Pakistan Big Data Analysis on Mortality

Islamabad, January 13th, 2023

Gallup Pakistan, as part of its Big Data Analysis initiative, is looking at the Mortality statistics for 2020. This data is compilation by the Pakistan Bureau of Statistics called the ‘Pakistan Demographic Survey – 2020.’ Pakistan Demographic Survey (PDS) is a regular activity of PBS, conducted during inter-censal period to provide reliable data on Demographic Indicators.

The complete Pakistan Demographic Survey 2020 is available [here](#).

What is the Big Data Analysis Series by Gallup:

Gallup Pakistan’s Big Data series was started by Bilal I Gilani, Executive Director of Gallup Pakistan. Bilal explains the rationale of the series, “The usual complaint from academics and policy makers is that Pakistan does not have data availability. Our experience negates that. Pakistan has lots of data, but it is not available in a usable form and its not widely accessible. At Gallup we plan to bridge this gap in terms of accessibility and use of data. The Gallup Big Data series has earlier worked with data sets such as PSLM, Labour Force Survey, and Economic Survey reports as well as National Census Reports and Election Commission Data sets.” The current series is using the Pakistan Statistical Yearbook, an annual compilation which seldom has data points not covered in many other reports. We hope that these series are useful, and we welcome both feedback as well as possible collaborations as we create a public good in the form of useful data sets in Pakistan’

What data points this current edition covers:

This series aims to present the important learnings from the Pakistan Demographic Survey 2020 for policy makers, the public, as well as for marketers in an easy and understandable way. In particular, this edition looks at the mortality rates including crude death rate, death rate by sex and type of area, infant mortality rate and the causes of death in 2020. The series’ main aim is to provide data. Implications of these data points for the relevant health and development sectors as well as wider socio-political ramifications is something we would like to trigger in relevant circles.

Today's topic is "Mortality."

Key Findings:

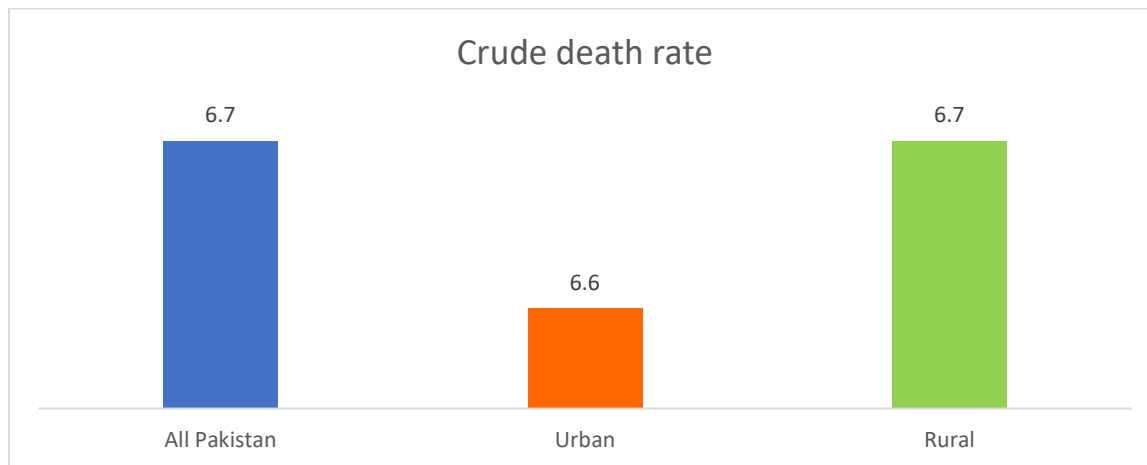
- 1) **Crude Death Rate:** The crude death rate in Pakistan for 2020 was 6.7.
- 2) **Sex and Age Specific Mortality Rate:** The highest mortality rate is for ages 85+ and below 1 year.
- 3) **Infant Mortality Rate (IMR):** IMR for the period 2018-2020 was 56 deaths per 1000 live births.

1) **Crude Death Rate:** The crude death rate in Pakistan for 2020 was 6.7.

The crude death rate is the number of deaths occurring among the population of a given geographical area during a given year, per 1,000.

The Crude Death Rate for 2020 is 6.7 per thousand persons for Pakistan. For the urban areas it is 6.6 and 6.7 for rural area. The Crude Death Rate is higher in rural areas than in urban areas. The difference between the rural and urban areas could be due to the urban areas having better health and medical facilities, they have lower crude death rate than the rural areas.

Figure 1a: Crude death rate (rate per 1000 people) for 2020

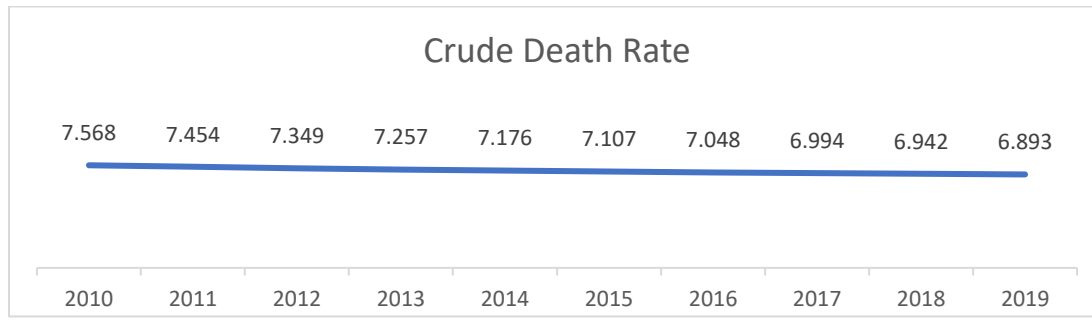


Source: Pakistan Demographic Survey 2020, analyzed by Gallup Pakistan

If we look at the crude death rate data provided by World Bank for 2010-2018, we can see that the crude death rate has been on the decline. The decline has been very slow and gradual, but it has been declining. This could be due to the development of medical and health facilities. Even though Pakistan still has a long way to go as far as the development of these facilities go, they are improving gradually, and we can definitely see the effects of that through the data.

The crude mortality rate is a good indicator of the general health status of a geographic area or population. Crude rates are influenced by the underlying age distribution of the population. As mortality varies greatly with age, this implies that a population's age structure strongly influences its crude death rate.

Figure 1b: Crude death rate 2010-2019 by [World Bank](#)



Source: World Bank Data, analyzed by Gallup Pakistan

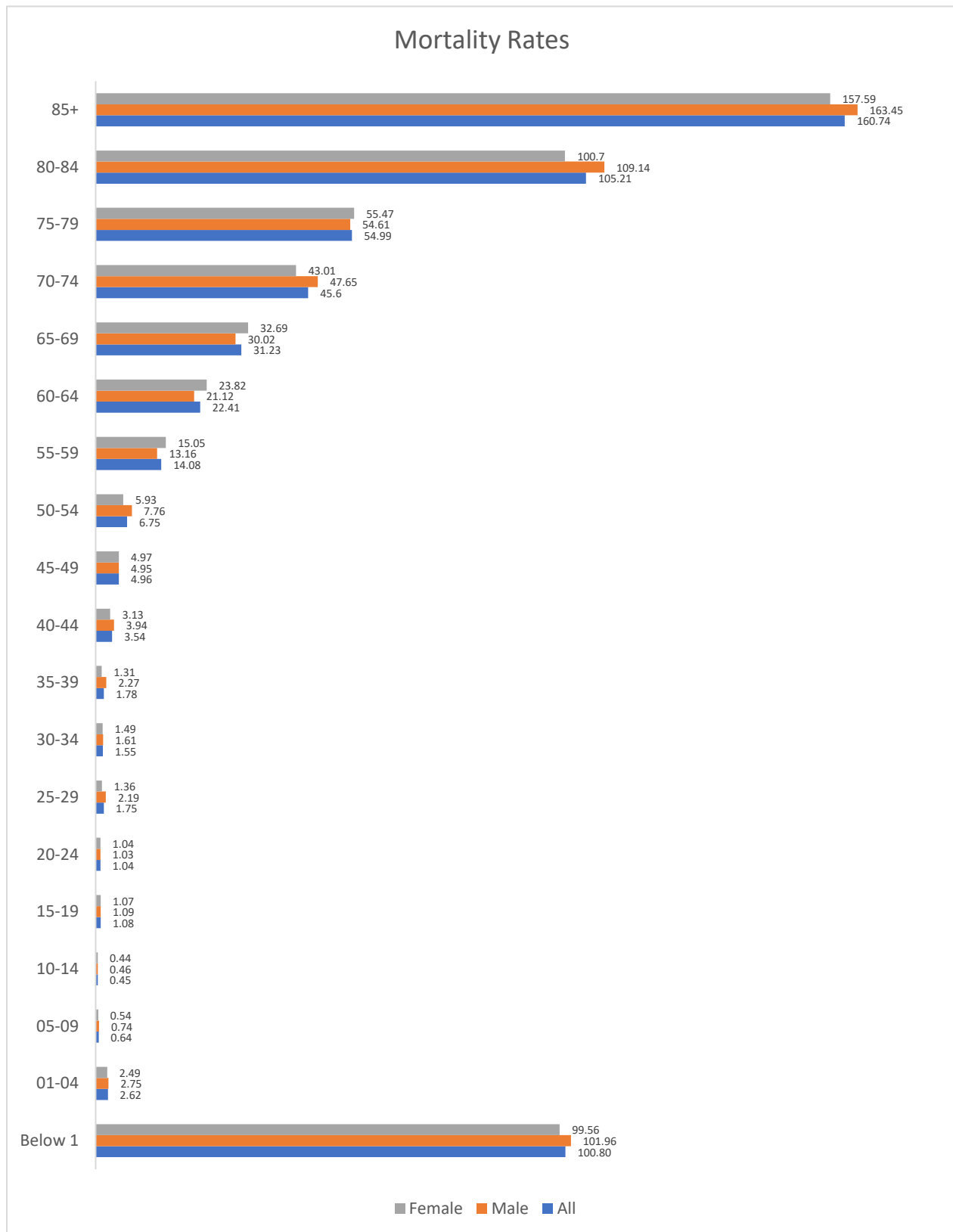
- 2) **Sex and Age Specific Mortality Rate:** The highest mortality rate is for ages 85+ and below 1 year.

The mortality rate is the lowest amongst children as it is 0.64 for 05–09-year old’s and 0.45 for 10–14-year-olds. The general trend shows a gradual increase in the mortality rates after the age of 14.

When we look at the gender divide, females have lower death rates than the males for most ages, with there being a slight anomaly in the data for 25-29 age range as the mortality for this is higher than males. One reason for this could be maternal mortality, since socially and culturally this is seen as the prime childbearing age.

Generally, males have a higher mortality rate for all age groups. This could be due to a general trend of more unhealthy and risky behavior amongst males. Their higher rates of cigarette smoking, gun use, employment in hazardous occupations, and risk taking in recreation and driving are responsible for males’ higher death rate due to lung cancer, accidents, suicide, and homicide.

Figure 2: Sex and Age Specific Mortality Rates for 2020



Source: Pakistan Demographic Survey 2020, analyzed by Gallup Pakistan

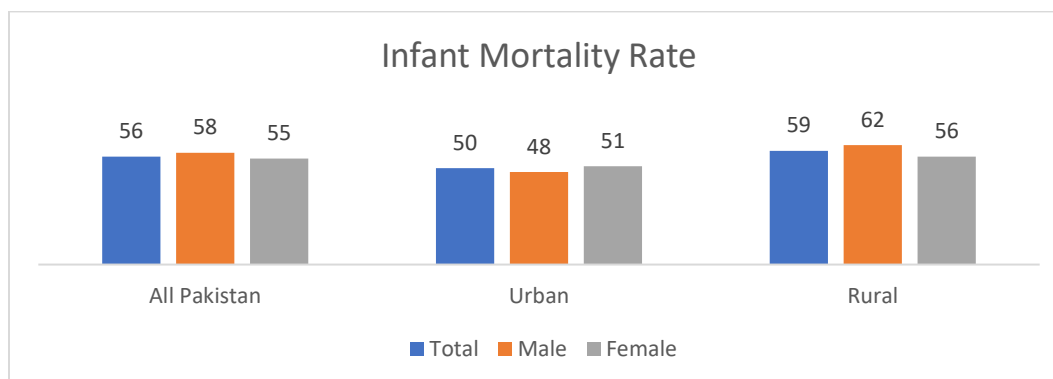
3) **Infant Mortality Rate (IMR):** IMR for the period 2018-2020 was 56 deaths per 1000 live births.

Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one. It is defined as the number of infant deaths during a calendar year per 1000 live births in the same year. Infant Mortality is an important indicator to judge socio- economic conditions, cultural factors, status of hygiene and availability & utilization of medical services.

The IMR for 2018-2020 was 56. When broken down by gender, there were more male deaths (58) than female deaths (55) per 1000 live births. If we look at the number of deaths by type of area, there were 59 deaths per 1000 live births in rural areas as compared to 50 deaths per 1000 live births in rural areas. In the urban and rural areas, the gender trend was also different. In urban areas fewer male deaths occurred (48) as compared to female deaths (51). Whereas, in rural areas, more male deaths (62) occurred than female deaths (56).

The overall difference in the number of deaths in rural and urban areas can be attributed to the difference in the medical facilities along with access and availability of basic healthcare.

Figure 3: Infant Mortality Rate by Type of Region and Sex (2018-2020)



Source: Pakistan Demographic Survey 2022, analyzed by Gallup Pakistan

The Infant Mortality Rate for 2017-2018 was provided by Pakistan Demographic and Health Survey (PDHS). The IMR for 2017-2018 was 62 deaths per 1000 live births. For 2018-2019, the IMR was provided by Pakistan Social and Living Standards Survey (PSLM) and was 60. For 2018-2020, the IMR was provided by the Pakistan Demographic Survey (PDS) and was 56.

The IMR has continued to decrease since 2017 and to a low of 56 deaths per 1000 live births in 2018-2020. The reasons for reduction in the IMR could be an improvement in the medical infrastructure, along with developments in sanitation, greater access to clean drinking water, uptake of immunization against infectious diseases and other improvements in public health measures.

In 2019, there was a typhoid vaccination drive initiated by the Sindh Government. Nearly 10 million children were vaccinated in Sindh province that year, and the number of Typhoid cases substantially decreased the following year. In 2018, UNICEF and WHO joined forces to support

Pakistan's mass measles immunization campaign. This resulted in millions of children being vaccinated against the disease. Such vaccination drives have helped immunize children against deadly diseases, prolonging their life span, in turn decreasing the infant mortality rates.

Table 1: Infant Mortality Rate 2017-2020, using PDHS, PSLM and PDS data

Infant Mortality Rate (IMR)			
Study By	<u>PDHS</u> <u>2017-2018</u>	<u>PSLM</u> <u>2018-2019</u>	<u>PDS 2020</u> <u>2018-2020</u>
IMR Pakistan	62	60	56

Source: Pakistan Demographic Survey 2022,

Analyzed by Gallup Pakistan

Wish to Contribute to Gallup Big Data Analysis?

Gallup Pakistan is looking for collaboration with researchers to expand both the Big Data Analysis project as well as this study of Pakistan Statistical Yearbook 2020. If you have any ideas, please write to Bilal I Gilani, Project Director, Big Data Analysis at Gallup Pakistan.

Wish to know more about the Pakistan Demographic Survey 2022?

Pakistan Demographic Survey (PDS) is a regular activity of PBS, conducted during inter-censal period to provide reliable data on Demographic Indicators. These Demographic statistics are inevitable for policymakers, planners and administrators for planning of development programs for the National & Provincial Governments.

Pakistan Demographic Survey (PDS), 2020 is the twentieth round of a series of surveys, initiated in 1984. After 1984 nineteen rounds of PDS were completed till 2007. Current round of PDS was started after a gap of 13 years, which provides the detailed information on various demographic indicators for the year 2018-2020 at National level with Urban-Rural breakdown. These indicators are Life Expectancy, Crude Birth Rate, Crude Death Rate, General Fertility Rate, Age Specific Fertility Rates, Age Specific Death Rates, Infant Mortality Rate and Rate of Natural Increase etc. Results of the survey are compiled at National level with Urban Rural Segregation.

You can find more information on the Pakistan Demographic Survey 2020, and complete tables, on www.pbs.gov.pk

Or visit:

[Pakistan Demographic Survey 2020](#)

Disclaimer: Gallup Pakistan is not related to Gallup Inc. headquartered in Washington D.C. USA. We require that our surveys be credited fully as Gallup Pakistan (not Gallup or Gallup Poll). We disclaim any responsibility for surveys pertaining to Pakistani public opinion except those carried out by Gallup Pakistan, the Pakistani affiliate of Gallup International Association. For details on Gallup International Association see website: www.gallup-international.com

Disclaimer: The views and inferences expressed in the article are that of the author himself and Gallup Pakistan does not take any responsibility in this regard. This series, and many such initiatives, are internally funded by Gallup Pakistan and Gilani Research Foundation. No outside country or local funding has been received for this current activity.



Gallup Pakistan is not related to Gallup Inc. headquartered in Washington D.C. USA. We require that our surveys be credited fully as Gallup Pakistan (not Gallup or Gallup Poll). We disclaim any responsibility for surveys pertaining to Pakistani public opinion except those carried out by Gallup Pakistan, the Pakistani affiliate of Gallup International Association.

Contact Details:
Islamabad : +92 51 2655630
Email: isb@gallup.com.pk
www.gallup.com.pk