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## Report

# **Analytical Dashboard on State wise number of Still Births**

#### Introduction:

This report analyzes the state wise data on stillbirths from 2009-10 to 2012-13. Stillbirth, the loss of a fetus in the womb after the 20th week of pregnancy, is a significant public health concern. Understanding the trends and variations in stillbirth rates across states is crucial for targeted interventions and improved maternal and fetal healthcare.

**Summary of Dashboard:** First tab i.e. Data tab covers summary of data. Second Tab i.e. Visualization tab covers interactive graphs and third tab i.e. Analysis tab covers ANOVA tests to check if cases have risen over the years.

# **Detailed Analysis**

#### Tab 1: Data

#### Part 1: Introduction

This part provides a brief introduction of dashboard and abbreviations used as provided earlier.

# Part 2: Table

This part provides the data that is used in this in this dashboard. It is downloaded from data.gov.in, which is open-source website by government of India

#### Part 3: Structure

This part of the data provides detailed overview of different variables of the data. Variables are State/UT (Names of states) and stillbirths from 2009-10 to 2012-13.

**Analysis:** Here summary function of R is used on all variables of data frame.

# **Key Findings:**

# **Total Pregnancy Outcomes:**

- The average total number of pregnancy outcomes increased from 585,889 in 2009-10 to 604,287 in 2010-11, showing a slight rise.
- The median number of pregnancy outcomes remained relatively stable around 187,980 to 187,896 across these two years.

#### Still Births:

- The average number of stillbirths rose from 9,215.1 in 2009-10 to 9,357.5 in 2010-11.
- The median number of stillbirths also increased from 3,349.5 in 2009-10 to 3,468 in 2010-11.

## Variations Across States:

- There is considerable variation in stillbirth rates among states, as indicated by the range of minimum (22.0) to maximum (45,925.0) stillbirths in 2009-10.
- Some states consistently reported higher stillbirth numbers, while others remained lower throughout the observed period.

# Trends Over Time:

- The data shows fluctuations in stillbirth numbers across the years,
  with some states experiencing an increase while others a decrease.
- It is important to note that there are missing values (NA's) in the data, which could affect the accuracy of the analysis.

## Implications and Recommendations:

## Further Investigation:

- States with consistently high stillbirth rates require focused investigation into underlying causes such as maternal health conditions, healthcare access, and prenatal care quality.
- Research should explore factors contributing to fluctuations in stillbirth rates over the years to tailor interventions effectively.

# **Targeted Interventions:**

Public health programs should target states with persistently high stillbirth rates to

- improve antenatal care, maternal nutrition, and access to healthcare facilities.
- Enhancing awareness among healthcare providers and expecting mothers about risk factors and preventive measures is essential.

# Data Quality Improvement:

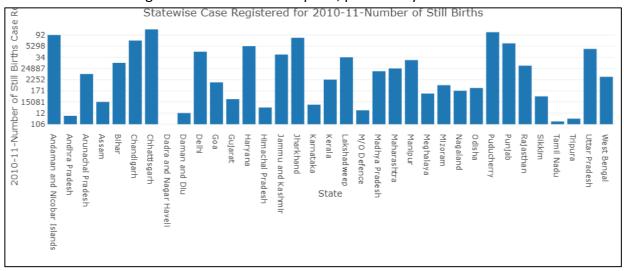
- Efforts should be made to reduce missing data points to ensure a comprehensive understanding of stillbirth trends.
- Standardization of data collection methods and reporting across states will improve the reliability and comparability of the data.

#### **Tab 2: Visualization**

## Stillbirth cases for the year 2010-2011 in India:

Each state is represented by a bar, and the height of the bar represents the number of stillbirth cases registered in that state. The chart also includes a title and labels for the x and y axes. Here are some of the key observations that can be made from the chart:

- The state with the highest number of registered stillbirth cases in 2010-2011 was Uttar Pradesh, with 29,881 cases.
- The state with the lowest number of registered stillbirth cases in 2010-2011 was Puducherry, with 10 cases.
- There is a large variation in the number of registered stillbirth cases between states. For example, the number of cases in Uttar Pradesh is almost 3000 times the number of cases in Puducherry.
- It is important to note that the number of registered stillbirth cases may not be an accurate reflection of the actual number of stillbirths that occurred in each state. This is because stillbirth registration is often incomplete, particularly in rural areas.

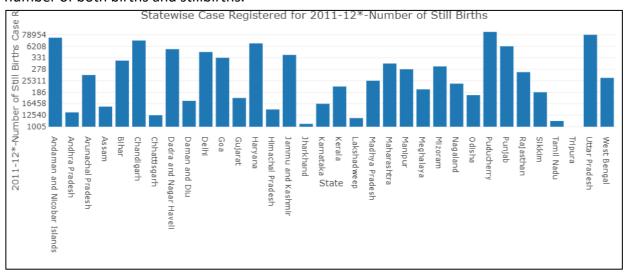


# Stillbirth cases for the year 2011-2012 in India:

The x-axis shows the state, and the y-axis shows the number of births. The bars in the graph are color-coded to represent the number of stillbirths in each state. Here are some key observations that can be made from the chart:

- The state with the highest number of births in 2011-2012 was Uttar Pradesh, with over 5.8 million births.
- The state with the lowest number of births in 2011-2012 was Nagaland, with just over 62,000 births.
- There is a large variation in the number of births between states. For example, the

- number of births in Uttar Pradesh is almost 100 times the number of births in Nagaland.
- The color coding of the bars shows that the states with the highest number of births also tend to have the highest number of stillbirths. For example, Uttar Pradesh had the highest number of both births and stillbirths, while Nagaland had the lowest number of both births and stillbirths.



## Stillbirth cases for the year 2012-2013 in India:

The chart also includes a title and labels for the x and y axes. Here are some of the key observations that can be made from the chart:

- The state with the highest number of registered stillbirth cases in 2012-2013 was Uttar Pradesh, with 29,886 cases.
- The state with the lowest number of registered stillbirth cases in 2012-2013 was Puducherry, with 10 cases.
- There is a large variation in the number of registered stillbirth cases between states.
  For example, the number of cases in Uttar Pradesh is almost 30 times the number of cases in Puducherry.
- It is important to note that the number of registered stillbirth cases may not be an accurate reflection of the actual number of stillbirths that occurred in each state. This is because stillbirth registration is often incomplete, particularly in rural areas.

