BITS PILANI, HYDERABAD CAMPUS

SSG515 Data Warehousing

Finding Links between Mother's Education, Socio-Economic Status, and Child Health

Submitted By

Group: 7

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ABSTRACT

Malnutrition is a major problem for every country. The inadequate or excessive intake of nutrients has a detrimental influence on the quality of life for many children. The key elements that impact mothers' health, together with the accessibility and cost of medical treatments, are how they feed their children and the knowledge they have in this area. The World Health Organization (WHO), the Ministry of Health Division, and the Education Division would all be extremely interested in tackling these concerns since they are critical for improving individual and community health and developing a strong and efficient public health system. To gain a better understanding of the relationship between the mother's level of education, the child's overall health, and the family's overall economic situation, we analyzed the National Family Health Survey, India (NFHS), 3,4,5 surveys that were specifically conducted for KR children under five years old. We used the dimension modeling discipline to identify fact tables and dimension tables. In addition, we employed AHP techniques to make a pairwise comparison and arrive at weights. Using this data, we created PowerBI reports on categories such as child health, mother education, and social-economic status in an attempt to understand the relationship between these elements. Stakeholders may benefit from this by getting a better grasp of the current state of public health and identifying areas of concern as well as opportunities for improvement. We discovered that a mother's economic position, her child's health, and her education level are all highly associated with one another after analyzing the patterns in the PowerBI reports.

INTRODUCTION

Mother's education is a critical factor in the health and well-being of children and communities. It provides individuals with knowledge and skills that can improve their health outcomes and enable them to make informed decisions about their health and the health of their families. Educated mothers are more likely to seek preventive healthcare services, follow recommended medical practices, and advocate for their children's health. Education can also have broader societal benefits, such as increasing civic participation and empowerment and contributing to economic growth and development. In developing countries, access to education and healthcare may be limited, and investing in education can indirectly affect health through its impact on social and economic status. In India, there is a need for further research to understand the relationship between education, social and economic status, and child health. This information can inform the development of targeted healthcare policies and campaigns that address the specific needs of different communities and populations. Malnutrition is a significant problem in developing countries and can have short-term and long-term health effects on children. This issue is particularly prevalent in slums and rural areas where access to healthcare and other necessities may be limited. By prioritizing the education and health of mothers and children, it is possible to improve the overall health and prosperity of communities in India and beyond. Several studies have found that a mother's education is directly related to her child's nutrition in slums and rural areas.[1] Maternal education and parental literacy—the capacity to understand medical instruction, the parents' economic background, the ability to treat illness, and the knowledge of treatments—are all critical factors in a child's health and survival. [2,4,5,7]

Children's health and survival is a concerning topic for any country. The following are significant stakeholders mainly associated with planning, organizing, and deploying people in different roles for smooth service functioning.

World Health Organization

- Surveying and publishing the report

Ministry of Health and Family Welfare, the Government of India

- Budget & funding to the department of concerned states
- Identifying root causes and announcing various schemes & programs

Ministry of Education

- Launching courses regarding maternal education, child's nutrition & illness treatments

the Ministry of Health

- Promote age-appropriate learning for a healthy lifestyle.
- Study of various diseases and methods to avoid them.

Regional Head of Public Health System

- To ensure that the health system of a particular region is properly functioning
- To make decisions about diseases in a particular region and find ways to deal with them.
- Providing vaccines, multivitamins, and medicines to health centers

NGO

- Organizing awareness campaigns
- Fundraising

These are some challenges that may be faced when implementing a child nutrition program or initiative:

- Collecting and maintaining data at regular intervals: It can be challenging to consistently collect data from mothers about their child's nutrition, especially if they are not familiar with the importance of the information or if they have other priorities that may make it difficult for them to participate.
- Bringing active participation of mothers in programs or workshops: It can be challenging to engage mothers in programs or workshops, especially if they are busy with other responsibilities or do not see the value in participating.
- Supply and distribute medicines to a rural area: It can be challenging to ensure that medicines are consistently available and accessible to people living in rural areas, especially if there are transportation or logistical issues.

A data warehouse is a centralized repository of structured data for reporting and analysis. It enables the storage and management of large amounts of data from multiple sources, such as healthcare records, demographic data, and education data. By integrating and organizing this data, a data warehouse can comprehensively view various factors that impact health and well-being, such as education levels, socioeconomic status, and access to healthcare. Data warehouse and business intelligence (BI) solutions can improve the health and well-being of children and communities by providing insights and data-driven decision-making capabilities that can inform the development of healthcare policies and campaigns. Organizations can better understand the complex interplay between education, social and economic status, and child health in different communities and populations using data warehouse and BI solutions. This information can be used to develop targeted healthcare policies and campaigns that address the specific needs of these communities and people, to improve the overall health and well-being of children and mothers.

Various studies have been done in this area. Calculating Standard Deviation of weight for age, height for age, weight for age, Body mass index(BMI), and vaccination status are target attributes. Also, the mother's primary education, higher education, maternal education, economic status, housing quality, ability to read the descriptions, etc., as independent variables are the attributes to identify the link between the mother's education and socioeconomic status toward the child's health.

BACKGROUND

Abyua et al. [1] performed a comprehensive study in the slums of Nairobi to confirm the link between mothers' education and child's nutritional status. To identify a child's condition, birth weight and gender is considered for child-level characteristics. For mothers, age, marital status, parity (no of birth before), and ethnicity are considered for maternal demographic characteristics. For maternal health knowledge and pregnancy intentions, no antenatal visits, place of delivery, and knowledge of complementary foods are categorized. Economic status is also considered. Cross-tabulation and, univariable analysis, multiple logistic analysis are done to identify links. As a result of the study, the authors found stunting more in boys than girls. Stunting was found in children of old mothers. Also, fewer chances of stunting were found in children of mothers with higher education than only primary level of education. Also, there is a strong link between child stunting and mothers' intention to get pregnant. Mothers with higher parity have children with higher chances of child stunting.

Desai et al.[4] examines the association between maternal education and child health outcomes. The authors conduct a literature study and discover a favorable relationship between maternal education and child health. They discovered that moms with greater levels of education had healthier children with better health outcomes. The authors speculate that this is because women with greater levels of education are more likely to have access to healthcare and nutrition knowledge, as well as to seek out treatment for their children and adhere to suggested healthcare practices. They also imply that moms with a higher education degree may have more resources and support, leading to improved child health outcomes. Overall, the authors suggest that maternal education is an essential determinant in child health and that efforts to promote maternal education may improve child health outcomes.

Frost et al. [5] have examined the individual-level data based on various pathways, i.e., socioeconomic status, knowledge, attitudes, autonomy, reproductive variables, measurement, and how crucial they are in balancing the impact of maternal education and child nutrition. It is also very obvious how socioeconomic position affects health-related behaviour—spending more on nourishing food, warm clothes, medications, and medical services that directly

benefit children's health. Knowledge helps women understand the causes of sickness, how to prevent it, recognize it, and treat it, as well as the dietary needs that may impact their health behaviour. Education can also affect how people feel about their behaviour when it comes to their health by causing a shift away from traditional beliefs and practices, increasing openness to new concepts and methods, and increasing the likelihood that people will accept rational explanations for illness and modern medicine. Maternal education can also impact children's health by giving women in the household more authority to make decisions. The extent of a mother's autonomy is positively correlated with the survival of her offspring, and research has connected schooling to higher child survival. Birth timing decisions are made consciously, and reproductive behaviour is watched to avoid unwanted pregnancies. The measurement, a dichotomous variable based on height and age data, indicates the children's measurements and mainly focuses on stunting analysis.

In this paper, Cleland et al. [3] have tried to establish a relationship between a mother's education and a child's health.

Education and socio-economic status

There is a general universal tendency that well-educated women mostly marry capable men who are mostly educated and financially well-off and can provide a higher standard of living. So some can argue that this economic advantage influences the child mortality rate and not the level of the mother's education. The authors have thus conducted an extensive study of various surveys available. They have concluded that economic advantage contributes approximately 50% to the effect of a mother's education on a child's health. This was done by re-examining factors like toilet facilities, water supply, etc., on the child's health.

Education and use of health services

It is well-known that educated individuals are more likely to respond to novel ideas and services. They are more in tune with the outside world, more confident in communicating with officials, and more willing to travel outside their home community in search of better services. The findings of the authors also support these expectations. There is empirical evidence that educated mothers are more likely to avail of health services and take part in immunization

campaigns. It must also be noted that for this effect to be widely noticeable, the presence of health services, preferably western medicine and facilities, is necessary because formal schooling mainly teaches about west-oriented healthcare. An analysis in a Nigerian village showed that the presence of health services improved the child survival rate by 20%, and mothers' education in the absence of health services showed an improvement of 33%. At the same time, their joint effect resulted in an 87% improvement in the child survival rate.

Kabubo-Mariara et al. [9] explore the factors that affect children's nutritional status in Kenya. To better understand the association between numerous variables and children's nutritional health, the authors studied data from Demographic and Health Surveys. They discovered that various characteristics, including the mother's education, family affluence, and access to healthcare, were strongly linked with children's nutritional status. The authors also discovered that children from higher-income homes had better nutritional status, while children from lower-income households were more likely to be malnourished. Furthermore, they discovered that access to healthcare was a key determinant in children's nutritional status. Children who had access to healthcare were less likely to be malnourished than those who did not. Overall, the authors suggest that maternal education, family income, and access to healthcare are major drivers of children's nutritional conditions in Kenya and that addressing these variables may aid in improving the country's nutritional status.

CONCEPTUALISATION

Multiple studies attempted to model the effects of a parent's education on a child's health.

1. *Mothers' Education & Child Health*
   Knowledge of pregnancy-related information, traditional beliefs, and practices are closely related to child health. Also, Mothers should know what to feed their children. Many researchers found that knowledge regarding feeding is related to child health [2,4,5,8]

2. *Mothers' Education & Social Economic Status*
   There is a general global trend for well-educated women to marry capable men who are mainly educated and financially secure. Some may argue that this economic advantage, rather than the mother's education degree, determine the child's risk of dying. [1,6,7,10]

3. *Social Economic Status & Child Health*
   Children from low socio-economic backgrounds are more likely to have poorer health outcomes, including lower birth weight, higher rates of malnutrition, and higher mortality rates. These differences may be due to various factors, such as inadequate access to healthcare, poor nutrition, and environmental conditions. [1]

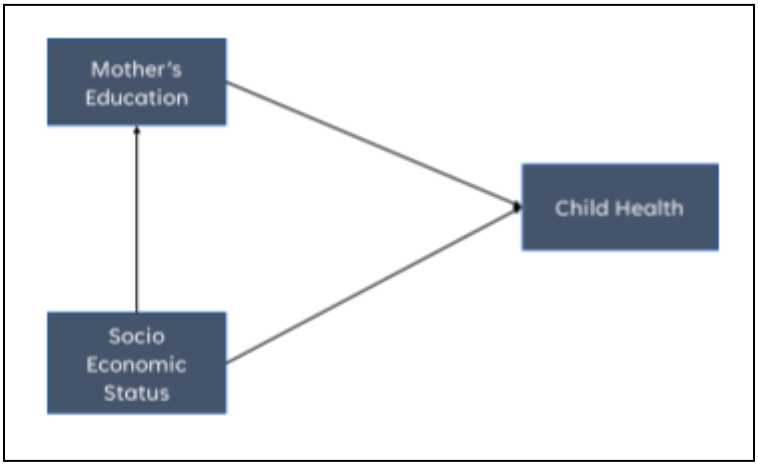


Figure 1 - Relationship among the constructs

There is an essential link between a child's health and their mother's education and economic level. Higher levels of mother education and socioeconomic position are often connected with improved child health outcomes. For example, children of more educated moms are likely to have greater birth weights, better nutrition, and a lower incidence of infectious illnesses. Similarly, children from higher socioeconomic origins are more likely to have access to better healthcare, nutrition, and living circumstances, all of which may lead to improved health outcomes. Children of moms with lower levels of education and socioeconomic position, on the other hand, are more likely to have poor health outcomes. These issues must be considered when developing policies and initiatives to promote child health.

DIMENSIONAL MODELING

We are trying to model links of influence between a mother's education and a child's nutritional status in India using the Demographic and Health Survey (DHS). MACRO International, an opinion research corporation, collects Demographic and Health Surveys. Survey data in the DHS include fertility, family planning, work histories, and maternal and child health care utilisation information. In addition, the DHS collected anthropometric measures and health and vaccination histories for all children aged 0–60 months whose mothers were surveyed. To estimate the effects of maternal education on child nutritional status, our sample from the DHS is limited to children between the ages of 0–60 months for whom height data are available.

Dimension table name	Attributes
Literacy	*Literacy Key*, Literacy, Literacy Score
Anemia	*AnemiaLevelKey*, Anemia level, AnemiaScore
Wealth	*Wealth Key*, Wealth Index, Wealth Score
Education Attainment	*Attainment Key*, Edu Attainment, Edu Score
Mother Education	*Mother Education Key,* Education Level, Edu Level Score
Partner Education	*Partner Education Key*, Education Level, Edu Level Score
District	*District Key*, District
Survey	*Survey Key*, Survey
State	*State Key*, State
Underweight	*Underweight Level Key*, Underweight Level

Wasting	*Wasting Level Key*, Wasting Level
Stunted	*Stunting Level Key*, Stunting Level
Residence Type	*Residence Key*, Residence Type

Table 1 - Confirmed dimension tables and attributes

Fact table Name	**Fact table type**	**Attributes (from the fact table)**
Mother's Education	Transactional	*Mother ID, Survey Key, State Key, District Key, Residence Key, Mother Education Key, Attainment Key, Partner Education Key, Literacy Key*
Socio-Economic Status	Transactional	*Mother ID, Survey Key, State Key, District Key, Residence Key, Wealth Key*
Child Health	Transactional	*Child ID, Survey Key, State Key, District Key, Residence Key, Residence Key, AnemiaLevelKey,* Height/Age SD, Weight/Age SD, Weight/Height SD, *Stunting Level Key, Underweight Level Key, Wasting Level Key*

Table 2 - Fact tables and attributes

Nutrition is a critical factor in children's physical and cognitive development. To assess the nutritional status of children under the age of 5, various measurements can be taken and compared to standards established by the World Health Organization (WHO). These measurements include height, weight, and age and can help identify if a child is suffering from malnutrition or other nutritional issues. The AHP technique is used for weight values of the mother's education, wealth index, and anemia level by scoring the attribute value according to what is best for the child's health and the mother's education. Someone can calculate based on health-related measures like BMI, hemoglobin

level, and ammonia level using AHP techniques. But according to WHO & DHS standards, using standard deviation values of Height/Age, Weight/Age, and Weight/Height, one can categorize the child as Stunted/Wasted/ Underweight.

Stunting is a condition in which a child's height is significantly lower than expected for their age. This can be caused by chronic malnutrition and can have long-term effects on physical and cognitive development. Their height is measured and compared to the WHO Child Growth Standards to determine if a child is stunted. Consider Height/Age S.D. for stunting level:

- Severe < -300
- Moderate < -200
- Not Stunted otherwise

Wasting is a condition in which a child's weight is significantly lower than expected for their height. This is often caused by acute malnutrition or illness and can be life-threatening if not treated promptly. Their weight and height are measured and compared to the WHO Child Growth Standards to determine if a child is wasted. Consider Weight/Height S.D. for Wasting Level:

- Severe < -300
- Moderate < -200
- Overweight 200 < SD < 9990
- Not Wasted otherwise

Underweight is a condition in which a child's weight is significantly lower than expected for their age. This can be caused by malnutrition or illness and can have long-term effects on physical and cognitive development. Their weight is measured and compared to the WHO Child Growth Standards to determine if a child is underweight. Consider Weight/Age S.D. for Underweight level:

- Severe < -300
- Moderate < -200
- Overweight 200 < SD < 9990
- Not Underweight otherwise

By regularly measuring and assessing the nutritional status of children under the age of 5, it is possible to identify and address any issues that may arise, ensuring that children have the best chance of reaching their full potential.

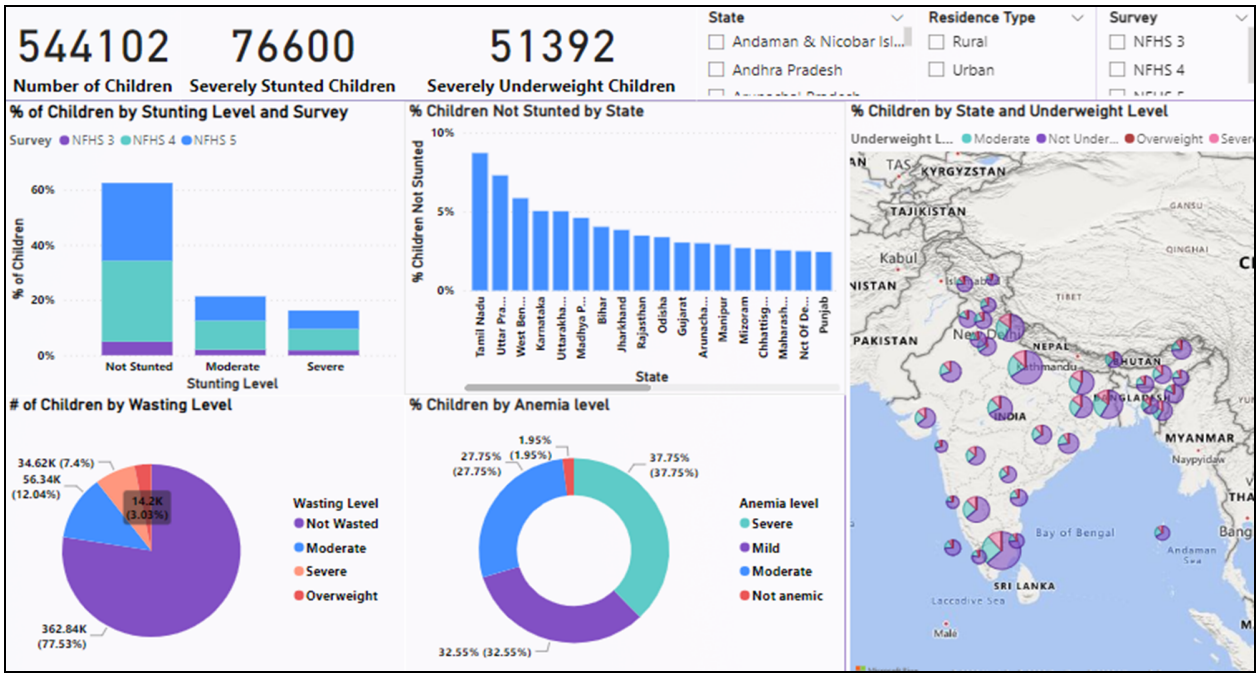
Even though we calculated relative weights for the construct, Instead of using AHP-based scoring methods to evaluate the child's health and the mother's education, we followed the above condition to assess them.

BUSINESS INTELLIGENCE REPORTS

Power BI lets users build interactive data visualizations and reports from numerous sources. Using NFHS surveys to create a report on mother education, socioeconomic position, and child health, stakeholders may use Power BI to evaluate trends and patterns in the data and obtain insights into the link between these characteristics and child health. Using Power BI, stakeholders may generate graphs and charts showing the association between a mother's education level and a child's health outcomes. Stakeholders can view visualizations highlighting how socioeconomic status influences child health in various areas or communities. Using Power BI to build a report on mothers' education, socio-economic position, and child health helps you comprehend and evaluate the data to make educated choices and enhance child health outcomes.

NFHS345 Child Health

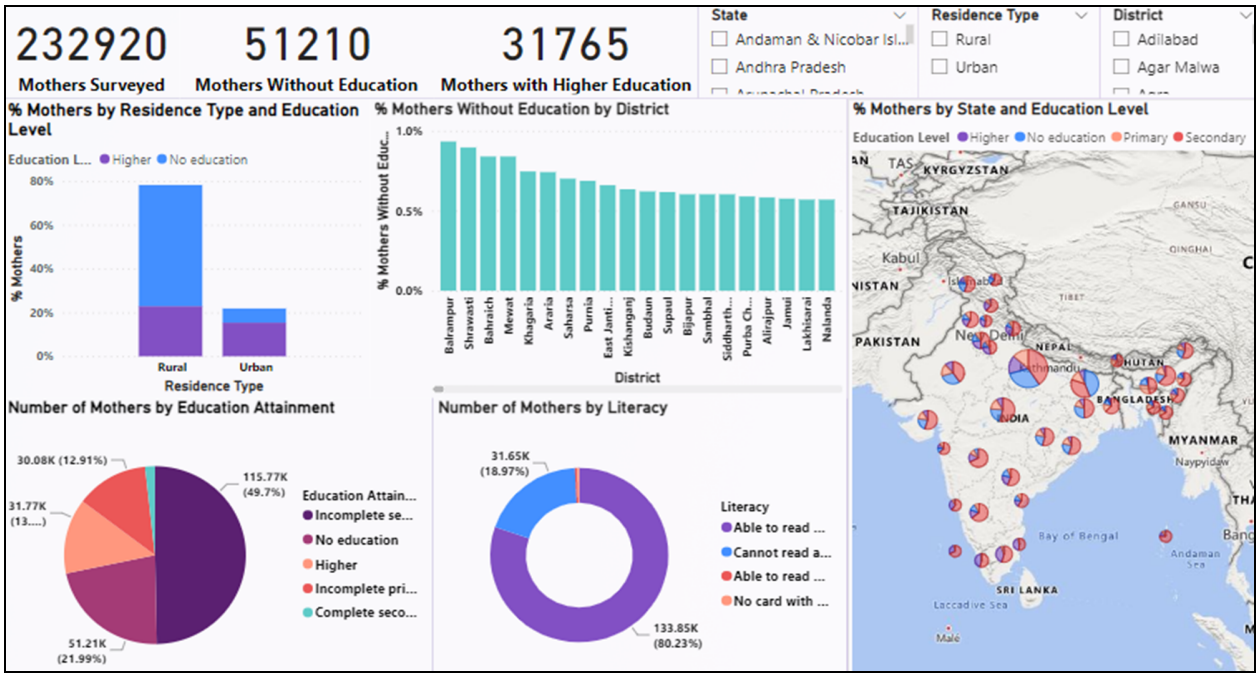
<table>
<tr><td>KPI:
no of children</td><td>KPI:
Severely Stunted Children</td><td>KPI:
Severely Underweight Children</td><td>Slicer:
State</td><td>Slicer:
Residence Type</td><td>Slicer:
Survey</td></tr>
<tr><td>Visualization Type:
Stacked Column Chart
%children by stunting level
and survey</td><td>Visualization Type:
Stacked Column Chart
%children by not stunted
by state</td><td colspan="3" rowspan="2">Visualization Type: Map
% of children distribution by underweight level in different states</td></tr>
<tr><td>Visualization Type:
Donut Chart
%children by Wasting level</td><td>Visualization Type:
Donut Chart
%children by Anemia level</td></tr>
</table>



This report will help stakeholders to analyze the child's health demographically. It helps understand the percentage of severely stunted/wasted children by the state, residence type, and trends of same according to surveys. So that stakeholders can make decisions about running campaigns related to awareness and allocate proper resources to decrease the number of unhealthy children eventually.

NFHS5 Mother Education

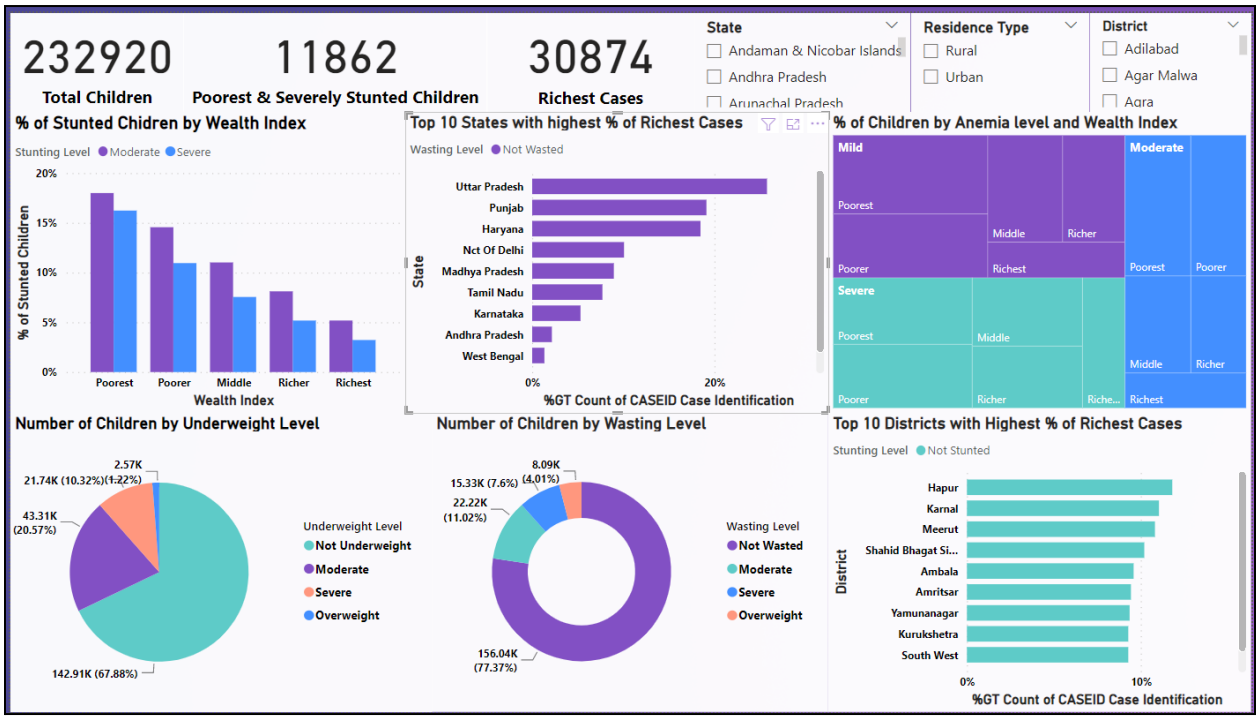
KPI: *Mothers Surveyed*	KPI: *Mothers Without Education*	KPI: *Mothers With Higher Education*	Slicer: *State*	Slicer: *Residence Type*	Slicer: *District*
Visualization Type: *Stacked Column Chart* *%mothers by residence type and education*	Visualization Type: *Stacked Column Chart* *%mothers without education by district*	Visualization Type: Map *% of mothers by state and education level*			
Visualization Type: Donut Chart *No of mothers by education attainment*	Visualization Type: *Donut Chart* *No of mothers by literacy*				



This report helps understand the mother's education and literacy levels by state, district, and residence type. Users will understand the overall distribution of highly educated and non-educated mothers. They can decide how to convey important information to mothers through awareness campaigns to increase their effectiveness. Decision-makers can know where to focus more to increase mothers' education and literacy levels.

NFHS5 Child Health & Socio-Economic Status

KPI: *Total no of children*	KPI: *Poorest & Severely Stunted Children*	KPI: *Richest Case*	Slicer: *State*	Slicer: *Residence Type*	Slicer: *District*
Visualization Type: *Clustered Column Chart* *%stunted children by Wealth Index*	Visualization Type: *Stacked Bar Chart* *Top 10 state by % of richest cases by stunting level*	Visualization Type: Tree Map *% of children by Anemia level and Wealth Index level*			
Visualization Type: *Pie Chart* *%children by underweight level*	Visualization Type: *Donut Chart* *%children by wasting level*	Visualization Type: *Stacked Bar Chart* *Top 10 District with highest % of richest cases by not stunted cases*			



This report will help users understand the relationship between mothers' socio-economic status and child health in the NFHS5 survey. This report clearly shows how the number of severely unhealthy children decreases or increases based on the wealth index. It also shows the top 10 states and districts with the highest percentage of richest cases with healthy children. Decision makers can understand which socio-economic category to focus more to decrease the number of unhealthy children.

The key findings from the dataset analysis are as follows:

- Percentage of non-Educated Mothers is highest in Rural areas.
- There is no case of a Mother without education in Kerala in the latest NFHS5 Survey
- Children of Non-Educated Mothers have more chances of stunting/wasting.
- Percentage of non-educated Mothers is highest in the Poorest wealth index category, whereas the percentage of highly educated Mothers is highest in the Richest wealth Category.
- Percentage of severely stunted/wasted/underweight Children is highest in the Poorest wealth index category.
- Percentage of severely stunted Children is highest in the NFHS3 Survey

CONCLUSION

Through this project, we are able to get an understanding of the NFHS dataset by performing the required analysis and generating the PowerBI reports. We started by understanding the dataset description, properly labeling the dataset columns choosing the right constructs for our project topic to generating final PowerBI Reports. The reports help decision-makers to get an overall understanding of the strong linkage between socioeconomic status, mother's education, and child health. As well as demographic analysis of each of these constructs will help them in making decisions related to running awareness campaigns and which areas to focus more to bring good results eventually in society.

There are a few key insights we found through our study. The percentage of non-Educated Mothers is highest in Rural areas. Children of Non-Educated Mothers have more chances of stunting/wasting. The percentage of non-educated Mothers is highest in the Poorest wealth index category, whereas the percentage of highly educated Mothers is highest in the Richest wealth Category. The percentage of severely stunted/wasted/underweight Children is highest in the Poorest wealth index category. Our findings suggest the child's health can be improved in an environment with proper resources, mothers' education awareness, and socio-economic status.

We are claiming a few key findings from our study and analysis of the dataset. We believe other measures also indirectly affect the child's health. As in our dataset subject of analysis is mainly children under age 5. We don't have much data on the child's entire family except the mother. There do exist a few factors in the real world which affect the child's health, but due to no data available in KR children, we are not able to take the effects of those factors into account.

Improved factors from various contexts can be used to improve further findings related to the linkage between Mothers' education and child health. , Also ways the like AHP mechanism can be well utilized on those factors to improve the effectiveness of our study. Further research on the education-mortality link in India is necessary to inform the development of effective healthcare policies and campaigns that address the needs of different communities and

populations. By prioritizing the education and health of mothers and children, it is possible to improve the overall health and prosperity of communities in India and beyond.

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APPENDIX A

AHP Calculation

Mother Education & Partner Education

CR Value = -0.048 Reasonable Consistency

Pairwise comparisons

Item Num	Item Number	1	2	3	4	5	6	7	8	9	10
	Item Description	No Educat	Primary Ed	Secondary	Higher Educ						
1	No Education	1.00	0.11	0.11	0.11						
2	Primary Education	9.09	1.00	0.66	0.33						
3	Secondary Education	9.00	0.20	1.00	0.67						
4	Higher Education	9.09	3.03	1.50	1.00						
5						1.00					
6							1.00				
7								1.00			
8									1.00		
9										1.00	
10											1.00
5	Sum	28.18	4.34	3.27	2.11						

STANDARDIZED MATRIX

		No Educat	Primary Ed	Secondary	Higher Educ							Weight
1	No Education	0.04	0.03	0.03	0.05							3.7%
2	Primary Education	0.32	0.23	0.20	0.16							22.8%
3	Secondary Education	0.32	0.05	0.31	0.32							24.7%
4	Higher Education	0.32	0.70	0.46	0.47							48.9%
5												

Amenities

CR Value = 0.000 Reasonable Consistency

Pairwise comparisons

Item Num	Item Number	1	2	3	4	5	6	7	8	9	10
	Item Description	Household has: Car	Household has: Electricity	Household has: Motorcycle/scooter	Household has: Bicycle						
1	Household has: Car	1.00	3.00	5.00	9.00						
2	Household has: Electricity	0.33	1.00	3.00	5.00						
3	Household has: Motorcycle/	0.20	0.20	1.00	3.00						
4	Household has: Bicycle	0.11	0.20	0.33	1.00						
5						1.00					
6							1.00				
7								1.00			
8									1.00		
9										1.00	
10											1.00
5	Sum	1.64	4.40	9.33	18.00						

STANDARDIZED MATRIX

		Household has: Car	Household has: Electricity	Household has: Motorcycle/scooter	Household has: Bicycle							Weight
1	Household has: Car	0.61	0.68	0.54	0.50							58.1%
2	Household has: Electricity	0.20	0.23	0.32	0.28							25.7%
3	Household has: Motorcycle/	0.12	0.05	0.11	0.17							11.0%
4	Household has: Bicycle	0.07	0.05	0.04	0.06							5.1%
5												

Anemia level

CR Value = 0.016 Reasonable Consistency

Pairwise comparisons

Item Num	Item Number	1	2	3	4	5	6	7	8	9	10
	Item Description	Not anemic	Mild	Moderate	Severe						
1	Not anemic	1.00	3.00	5.00	7.00						
2	Mild	0.33	1.00	3.00	5.00						
3	Moderate	0.20	0.20	1.00	3.00						
4	Severe	0.14	0.20	0.33	1.00						
5						1.00					
6							1.00				
7								1.00			
8									1.00		
9										1.00	
10											1.00
5	Sum	1.68	4.40	9.33	16.00						

STANDARDIZED MATRIX

		Not anemic	Mild	Moderate	Severe							Weight
1	Not anemic	0.60	0.68	0.54	0.44							56.3%
2	Mild	0.20	0.23	0.32	0.31							26.5%
3	Moderate	0.12	0.05	0.11	0.19							11.5%
4	Severe	0.09	0.05	0.04	0.06							5.7%
5												

Wealth Index

CR Value = 0.015 Reasonable Consistency

Pairwise comparisons

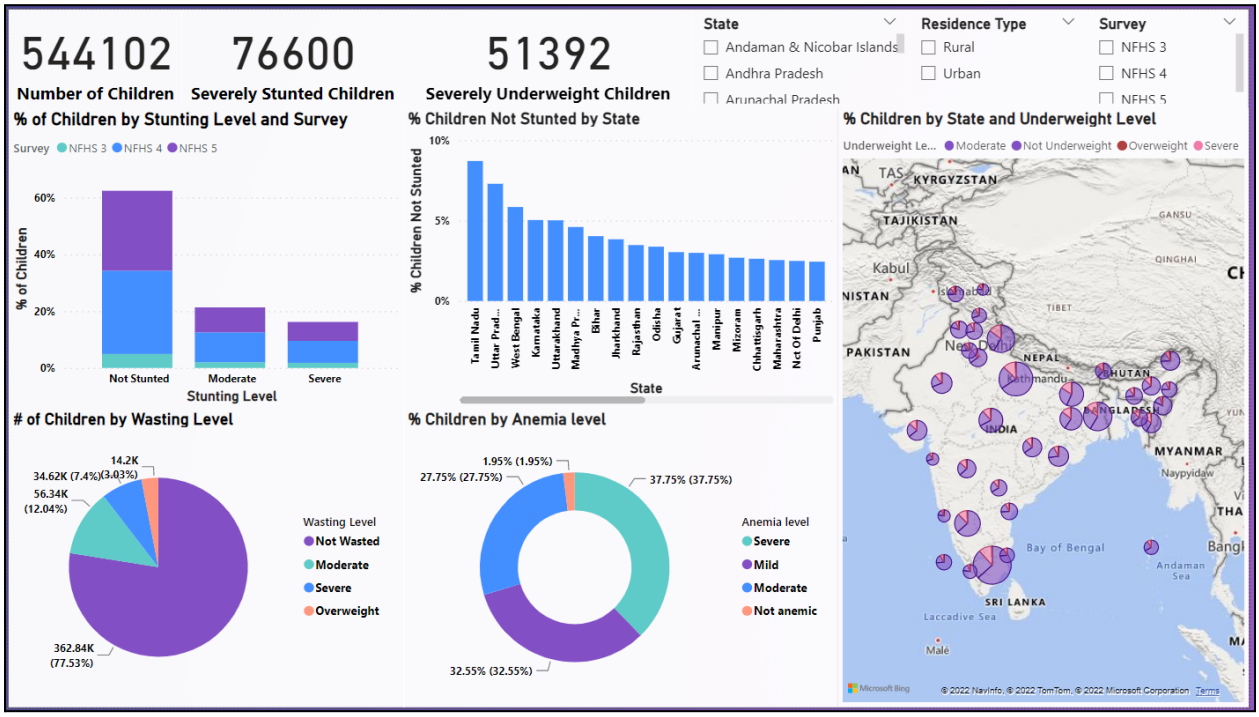
Item Num	Item Number	1	2	3	4	5	6	7	8	9	10
	Item Description	Poorest	Poorer	Middle	Richer	Richest					
1	Poorest	1.00	0.50	0.33	0.25	0.25					
2	Poorer	2.00	1.00	0.50	0.33	0.33					
3	Middle	3.03	0.20	1.00	2.00	2.00					
4	Richer	4.00	3.03	0.50	1.00	1.00					
5	Richest	4.00	3.03	0.50	1.00	1.00					
6							1.00				
7								1.00			
8									1.00		
9										1.00	
10											1.00
5	Sum	14.03	7.76	2.83	4.58	4.58					

STANDARDIZED MATRIX

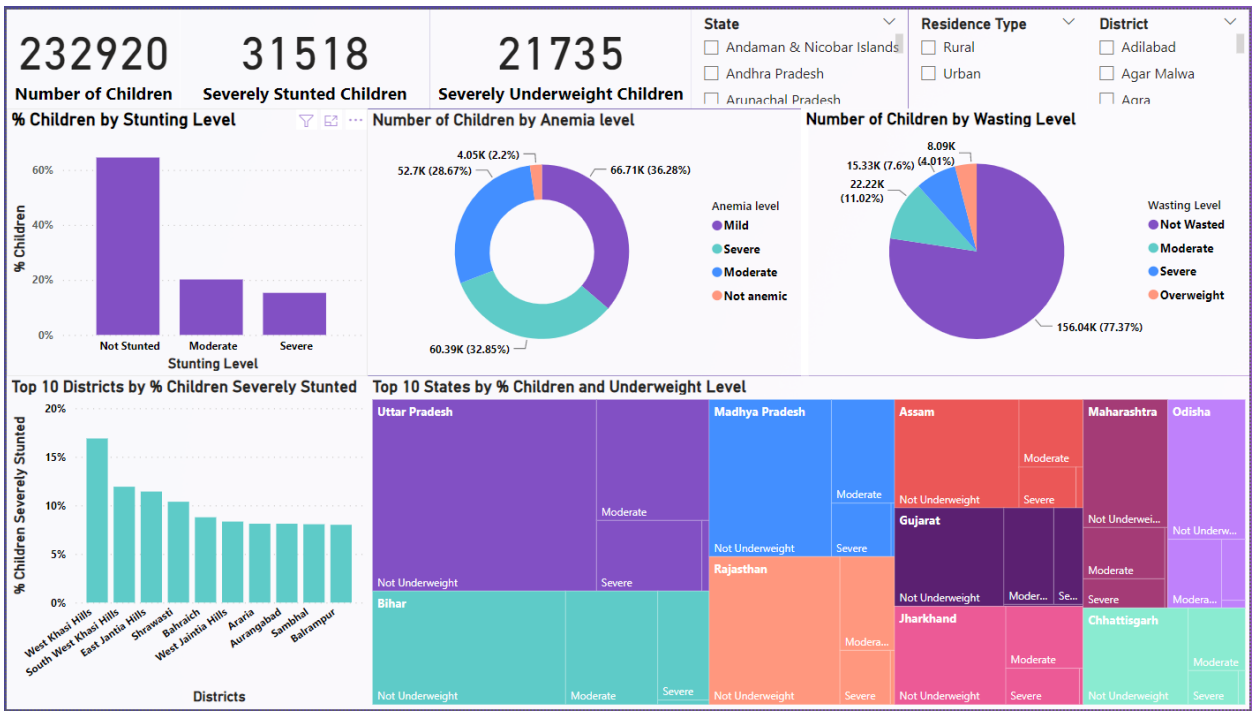
		Poorest	Poorer	Middle	Richer	Richest						Weight
1	Poorest	0.07	0.06	0.12	0.05	0.05						7.2%
2	Poorer	0.14	0.13	0.18	0.07	0.07						11.8%
3	Middle	0.22	0.03	0.35	0.44	0.44						29.4%
4	Richer	0.29	0.39	0.18	0.22	0.22						25.8%
5	Richest	0.29	0.39	0.18	0.22	0.22						25.8%
6												

APPENDIX B

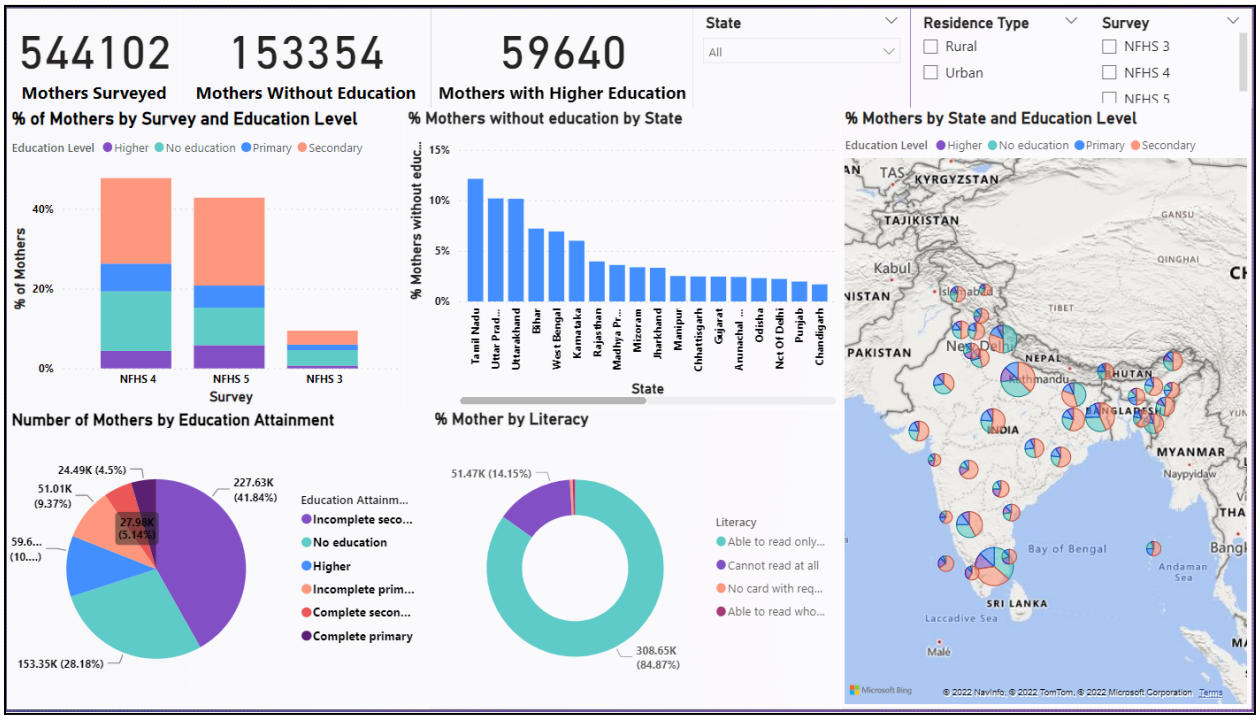
NFHS345 Child Health



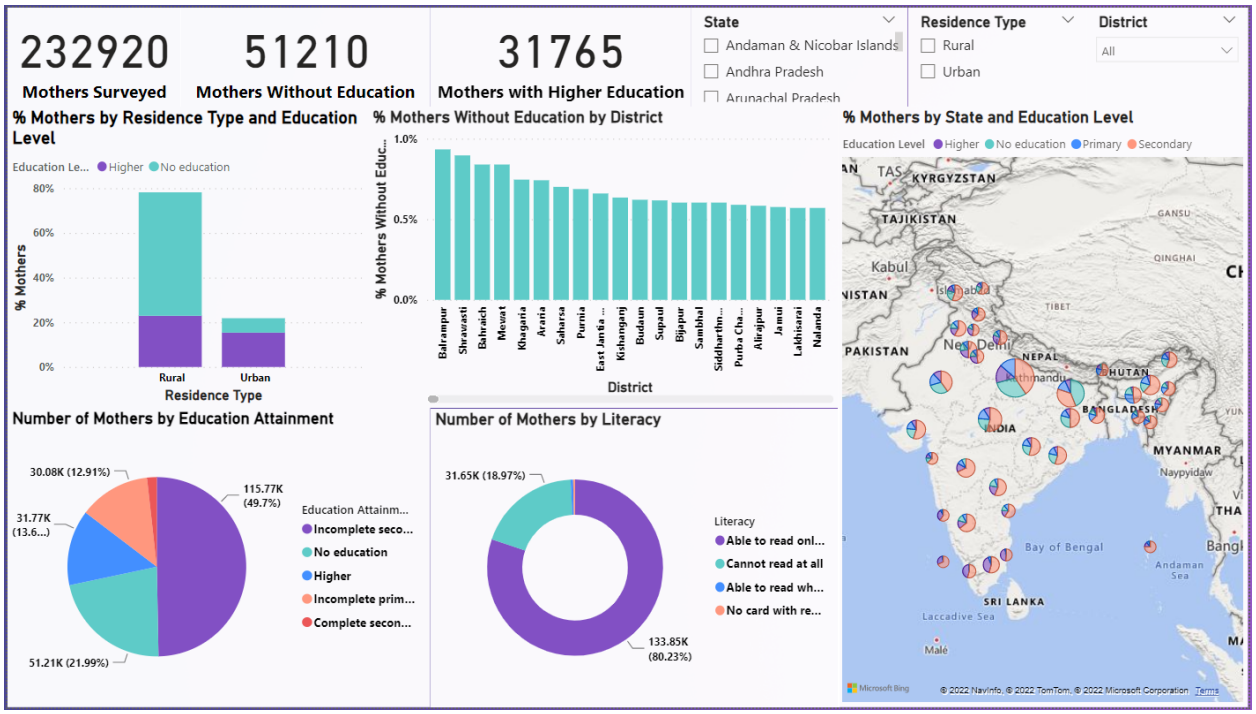
NFHS5 Child Health



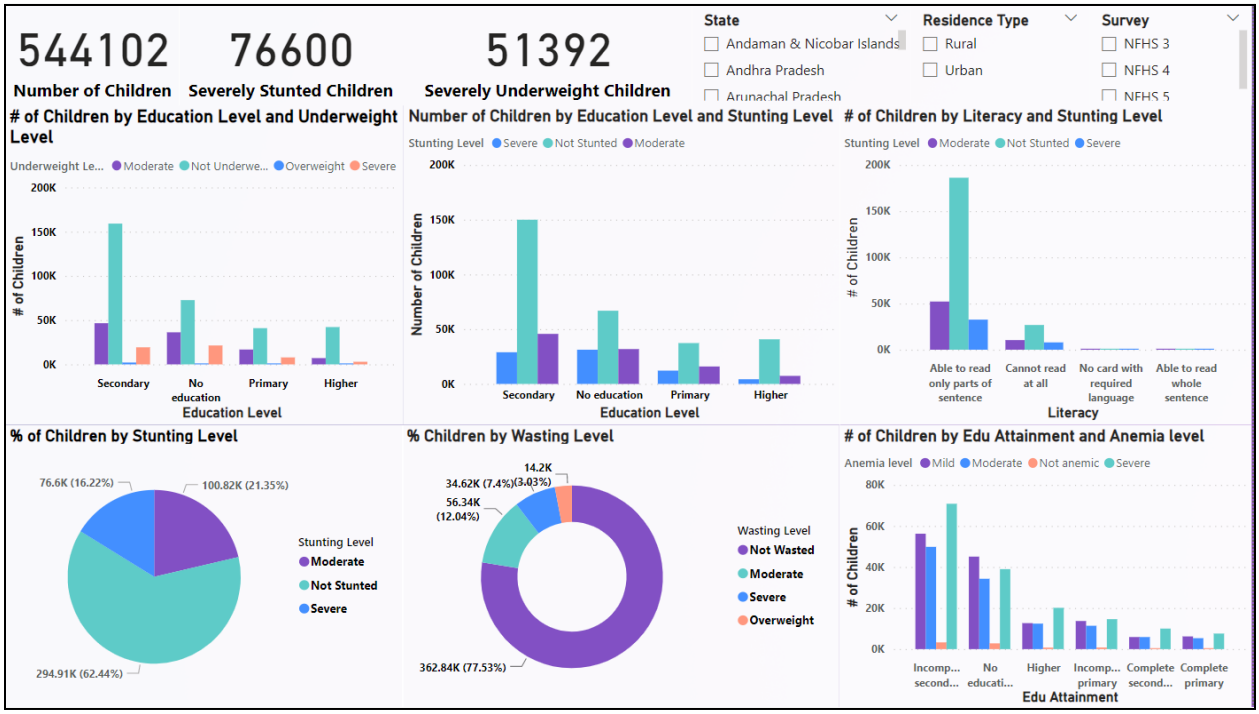
NFHS345 Mother Education



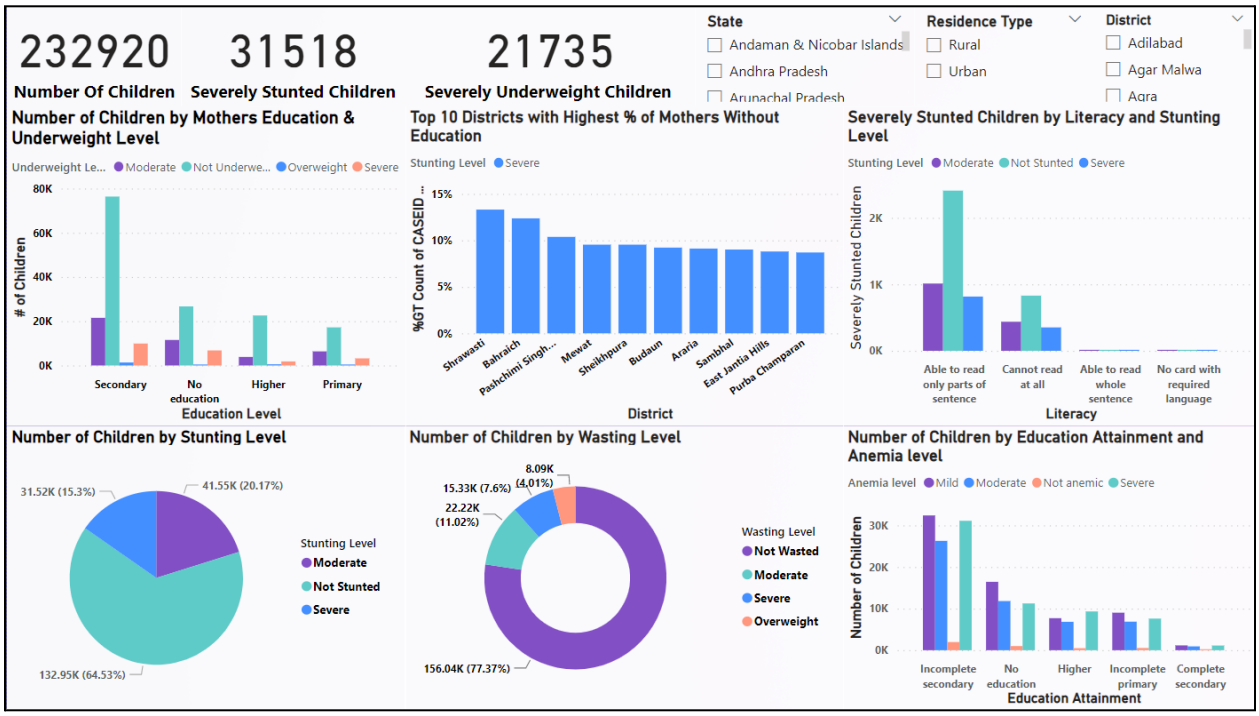
NFHS5 Mother Education



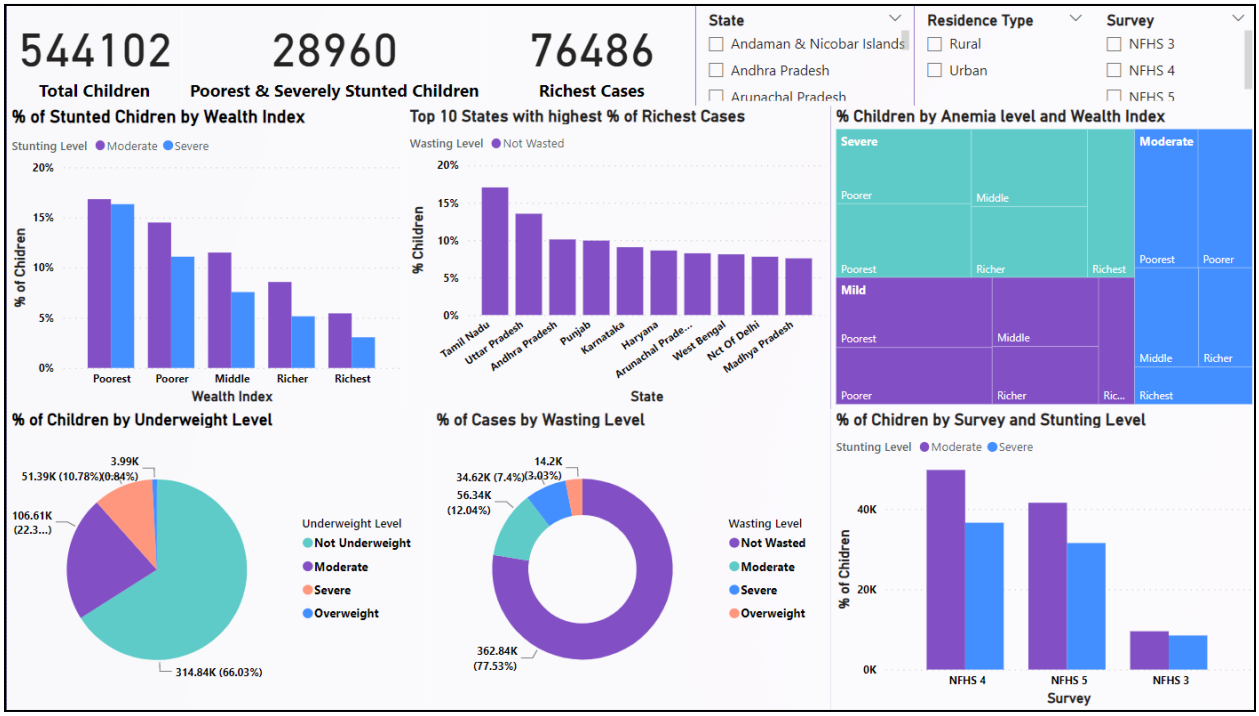
NFHS345 Mother Education & Child Health



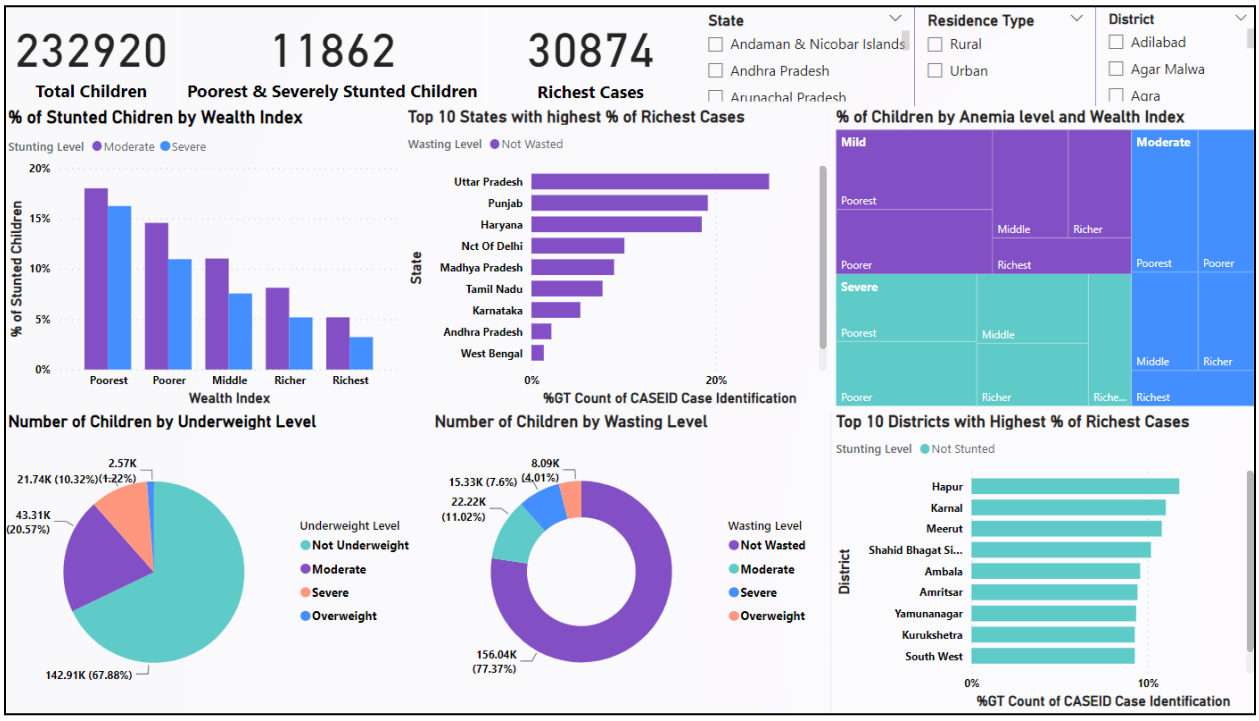
NFHS5 Mother Education & Child Health



NFHS345 Socio-Economic & Child Health



NFHS5 Socio Economic & Child Health



NFHS345 Socio-Economic & Mother Education