

Effects of Tobacco Consumption on Women and Infant Health

SDG 3 Good Health And Well Being

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Data Analytics and Computational
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Project Description

The 2019-20 National Family Health Survey (NFHS-5), the fifth in the NFHS series, provides information on population, health, and nutrition for India and each state and union territory.

The primary focus was on analyzing tobacco consumption in the state of Telangana and relating it with effects

Categories considered from the NFHS Dataset:

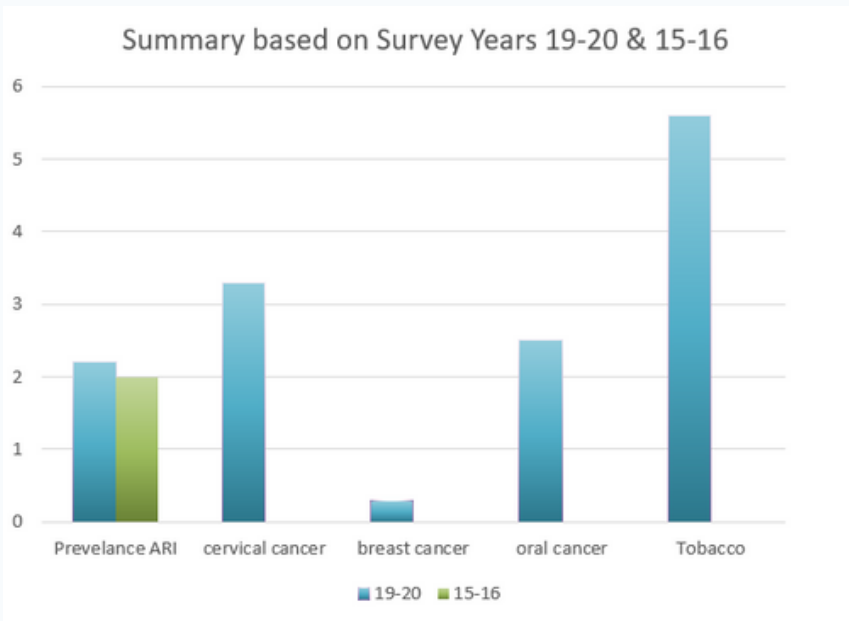
- Tobacco Use and Alcohol Consumption among Adults (age 15 years and above)
- Screening for Cancer among Women (age 30-49 years)
- Treatment of Childhood Diseases (children under age 5 years)

About Data

The data set consists of 4,135 data cells. Data cleaning is applied on it and data is integrated.

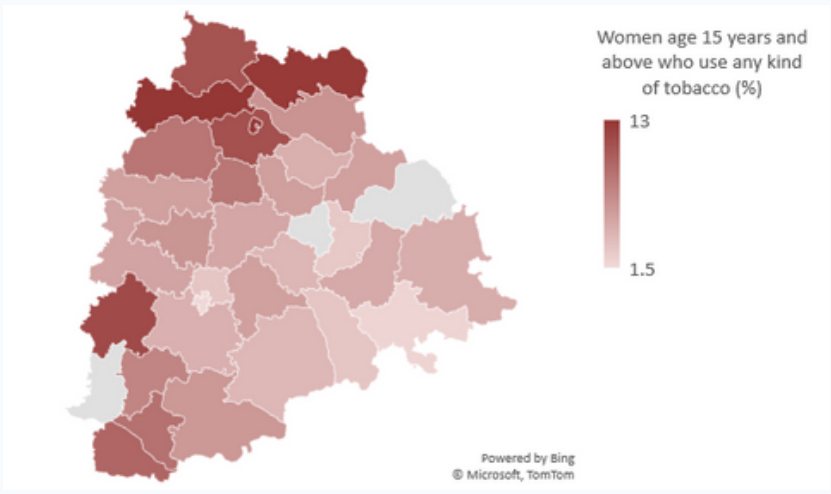
Preprocessing Decisions:

- Examined the data set and picked favorable indicators.
- Removed unwanted data sets after data cleaning.
- Corrected few district names to match with exact geographical locations while plotting.
- Identified the districts where Tobacco consumption is high in Telangana.
- Analyzed and segregated the districts.



Topic Analysis

Telangana is at 6th position in India as contributor of Tobacco Production. Tobacco is widely consumed across all districts in Telangana. In the selected dataset we have chosen a category "Tobacco Use and Alcohol Consumption among Adults". We considered the indicator related to tobacco use by Women. Since tobacco consumption has many adverse affects on the health and leads to multiple types of cancer in women we then selected "Screening for Cancer among women". This category has 3 types of cancers related data. Women who has ever undergone a screening test of cervical cancer, breast cancer and oral cancer.

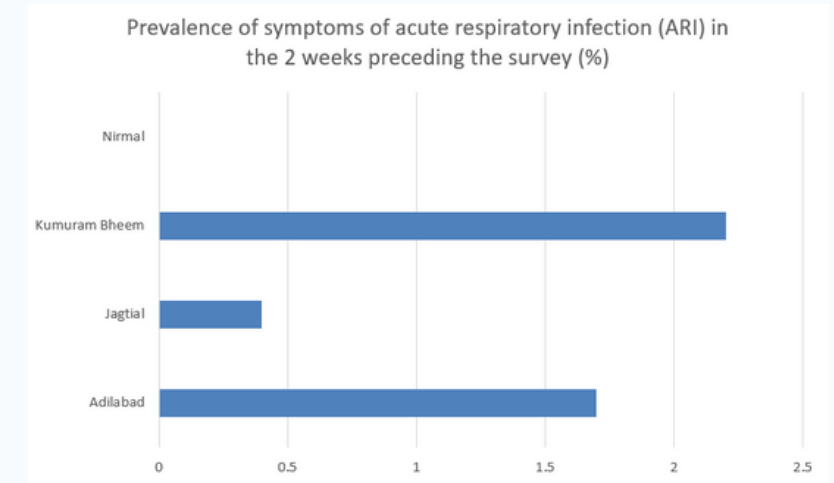


Treatment of Childhood Diseases (children under age 5 years) is the major concern. This category deals with the infants showing symptoms of Acute Respiratory Infection(ARI).

We considered the following districts which had high consumptions of tobacco(Women of age 15 and above) located north of Telangana:

1. Nirmal - 13%
2. Kumuram Bheem- 12.8%
3. Jagtial- 11.2%
4. Adilabad- 11%

Children of such women who were involved in tobacco consumption had respiratory issues. From the indicator prevalence of symptoms of ARI we found that children of kumuram bheem district reportedly had more cases of ARI when compared with rest which could be related to the high tobacco consumption



Predictions, Solutions and Conclusion

- We noticed that Kumuram Bheem had more tobacco consumption by women but the screening tests recorded were minimal. This is a high concern that there maybe no awareness about the problems caused by it. So implementing self help programs, creating awareness of adverse affects will help reduce the consumption percentage.
- NFHS survey was taken periodically with a long gap. If these surveys are taken on yearly-basis then we can overcome this problem.
- Northern Telangana is having high Tobacco consumption. Government should take special care of it.
- Cervical, breast and oral cancers could be avoided if tobacco consumption is eradicated.



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TOBACCO

Effects of Tobacco Use

Tobacco consumption has many adverse effects. Some of the deadly effects of tobacco smoking are **lung cancer, chronic bronchitis, emphysema, and pneumonia**. Smokeless tobacco can cause mouth cancers. It increases the risk of heart disease, leading to heartstroke.. As we have discovered that the women of "Adilabad","Nirmal","Jagtial","Kumuram Bheem" were involved in Tobacco Consumption more in comparison to other districts.

Upon researching we found that Tobacco by-products can cause damage to the DNA of cervical cells and lead to cervical cancer, they can increase the risk of breast cancer

Inferences :

- Jagtial had relatively more screening tests done for all the mentioned cancers.
- Though Kumuram Bheem had more women involved in consumption of Tobacco, it had comparatively less cases of cancer screening tests.
- Cervical cancer was the major concern when compared to breast and oral cancers.

