



# Cancer Risk Factors & Intensity Analysis

## **Turning Health Data into Insights**

Power Query | Power BI | Canva

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## Objective:

Analyze lifestyle, environmental, and demographic factors that influence cancer risk levels.

**Goal:** Identify **patterns** and **preventive causes** through data-driven insights.



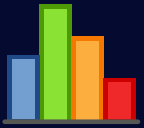


## Dataset & Tools

Dataset: 2,000 patient records

### Tools:

- Power Query → Cleaning, Structuring & transforming
- Power BI → Visualization & DAX modeling



## Dashboard Overview

- Interactive slicers by gender, age group, risk level and cancer types
- Dynamic charts showing patterns across risk vs demographics, lifestyle, and environmental
- KPI cards for average BMI, age and total patients



## Cancer Risk Factors & Intensity Analysis

2000

Total\_Patients

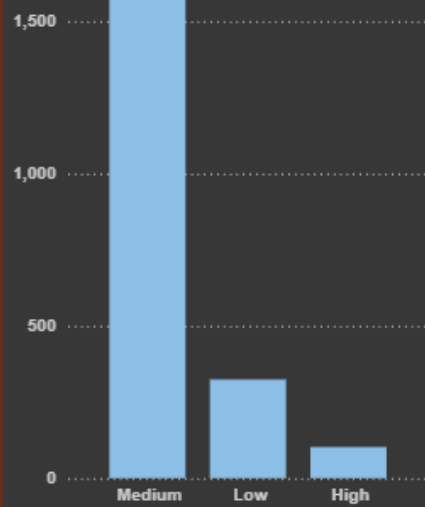
26.18

Avg\_BMI

63.25

Avg\_Age

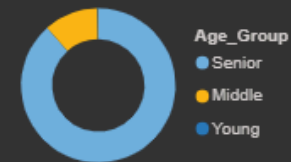
No. of Patients vs Risk\_Level



No. of Patients vs Cancer\_Type



Smoking vs Age\_Group



Gender

☐ F

☐ M

Age\_Group

☐ Middle

☐ Senior

☐ Young

Cancer\_Type

☐ Skin

☐ Prostate

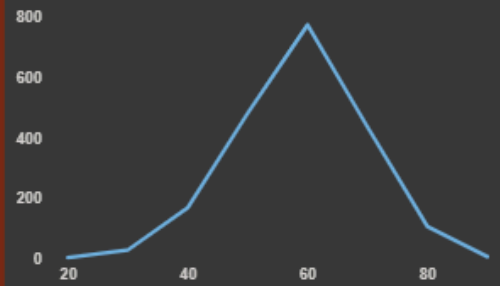
☐ Lung

☐ Colon

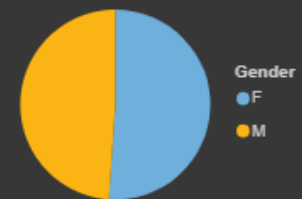
☐ Breast



Age Distribution of Patients



Obesity vs Gender



## Lifestyle and Risk Analysis

Gender

☐ F

☐ M

Age\_Group

☐ Middle

☐ Senior

☐ Young

Risk\_Level

☐ High

☐ Low

☐ Medium

Cancer\_Type

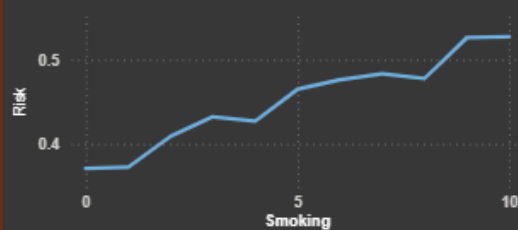
☐ Breast

☐ Colon

☐ Lung

☐ Prostate

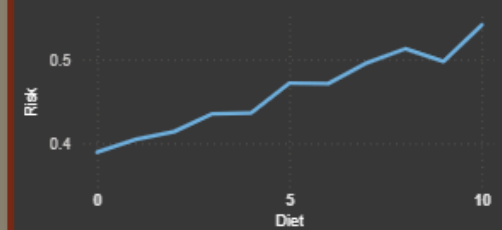
Risk vs Smoking



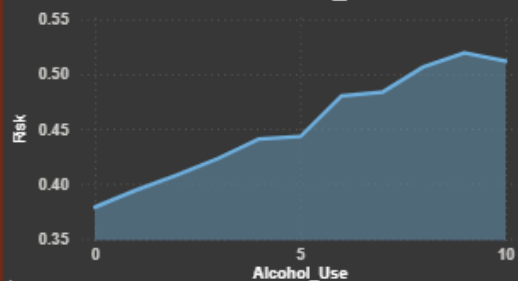
Risk vs Obesity



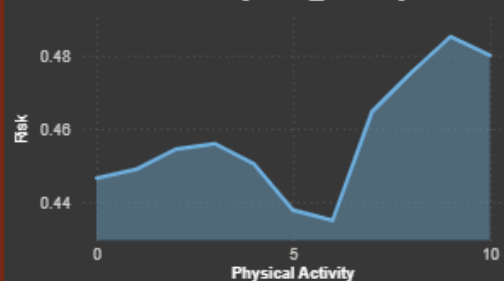
Risk vs Salted\_Processed



Risk vs Alcohol\_Use



Risk vs Physical\_Activity



Risk vs Red\_Meat



Activate



## Environmental & Combined Risk Analysis

Gender

- ☐ F  
☐ M

Age\_Group

- ☒ Middle  
☐ Senior  
☐ Young

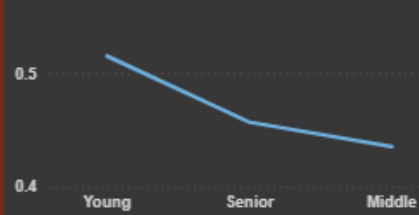
Risk\_Level

- ☐ High  
☐ Low  
☐ Medium

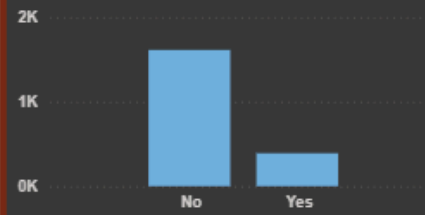
Cancer\_Type

- ☐ Breast  
☐ Colon  
☐ Lung  
☐ Prostate

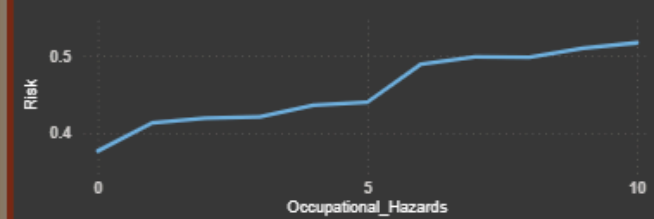
Risk vs Age\_Group



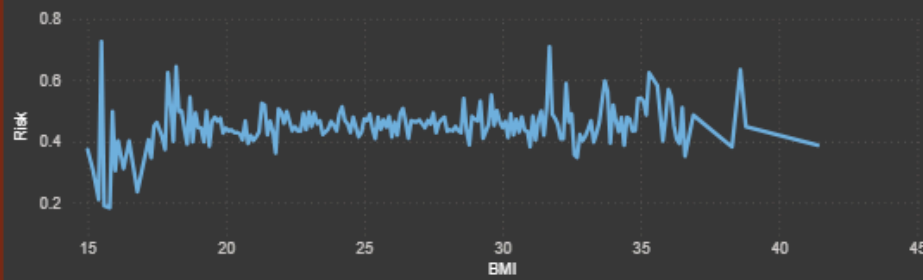
Cancer\_Type vs Family\_History



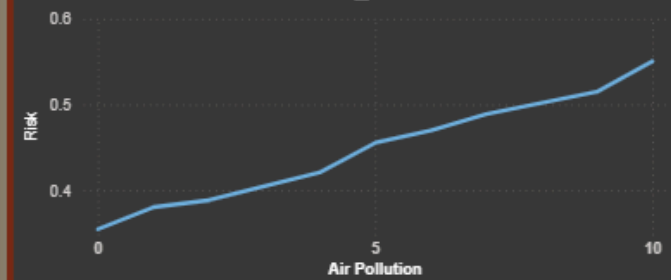
Risk vs Occupational\_Hazards



Risk vs BMI



Risk vs Air\_Pollution



## **Key Insights**

- Total patients 2000, Avg BMI-26.18, and Avg. Age 63.25
- 75% of patients fall under medium risk - a window for early intervention.
- Smoking, Obesity, and alcohol are the top risk factors
- Processed foods & red meat elevate risk levels.
- Among female patients, 44.52% suffer from breast cancer.
- Among men patients, 31.19% suffer from prostate cancer.

- Overweight (BMI above 31) & Underweight (BMI below 19) are at higher risk
- Risk levels tend to decrease with age, likely reflecting earlier lifestyle interventions older population
- Patients with a family history of cancer don't show a higher prevalence.
- Air pollution & occupational hazards are key environmental contributors to elevated cancer risk.





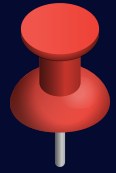
## Results & Recommendations

- Most risk factors are preventable.
- Awareness & early lifestyle changes can reduce intensity.
- Data-driven insights can guide public health policy and early detection efforts.



## Tools & Skills

Power BI | Power Query | DAX | Data  
Modelling | Data Storytelling |  
Dashboard Design



## **Conclusion**

“Data can’t cure cancer - but it can guide the fight against it.”

Let’s use data to drive better health outcomes.

**By Upasana Bara | Data Analyst**

**#DataAnalytics#PowerBI#PublicHealth**

**#CancerAwareness**