

# **DATA ANALYSIS ON SUICIDES IN INDIA**

## **2001-2012**

Master Of Computer Applications (2022-2024), Department Of  
Computer Science,  
University of Delhi  
Mathematical Techniques for Computer Science Application

**Made By**

Ajay Kumar(02)

Satyandra Pal (49)

Rohan Majhi(38)

**Submitted To**

Dr. Vasudha Bhatnagar

# Why we chose this dataset

Analyzing the dataset on suicides in India is important for several reasons. Firstly, suicide is a serious public health concern that affects individuals, families, and communities in India. By analyzing the data, we can gain insights into the factors that contribute to suicide and identify trends and patterns that can inform prevention and intervention strategies.

Secondly, suicide is a complex phenomenon that can be influenced by a range of social, economic, cultural, and environmental factors. By analyzing the data, we can examine the relationships between these factors and suicide rates and identify areas where interventions may be needed to address the underlying causes of suicide.

Thirdly, suicide has a significant economic impact on individuals, families, and society as a whole. By analyzing the data, we can estimate the economic costs of suicide and the potential benefits of investing in suicide prevention and intervention programs.

Overall, analyzing the dataset on suicides in India is important for understanding and addressing this serious public health issue. It can help inform policies and programs aimed at reducing suicide rates and improving the well-being of individuals and communities in India.

## DESCRIPTION OF DATASET

	State	Year	Type_code	Type	Gender	Age_group	Total
61816	Delhi (Ut)	2002	Professional_Profile	Farming/Agriculture Activity	Female	60+	0
61817	Delhi (Ut)	2002	Professional_Profile	Others (Please Specify)	Female	60+	2
61818	Delhi (Ut)	2002	Professional_Profile	Farming/Agriculture Activity	Male	60+	6
61819	Delhi (Ut)	2002	Professional_Profile	Retired Person	Male	60+	4
61820	Delhi (Ut)	2002	Professional_Profile	House Wife	Male	60+	0
61821	Delhi (Ut)	2002	Professional_Profile	Others (Please Specify)	Male	60+	0
61822	Delhi (Ut)	2002	Professional_Profile	Service (Government)	Male	60+	0
61823	Delhi (Ut)	2002	Professional_Profile	Professional Activity	Male	60+	0
61824	Delhi (Ut)	2002	Professional_Profile	Public Sector Undertaking	Male	60+	0
61825	Delhi (Ut)	2002	Professional_Profile	Service (Private)	Male	60+	0
61826	Delhi (Ut)	2002	Professional_Profile	Unemployed	Male	60+	5
61827	Delhi (Ut)	2002	Professional_Profile	Student	Male	60+	0
61828	Delhi (Ut)	2002	Professional_Profile	Self-employed (Business activity)	Male	60+	1
61829	Delhi (Ut)	2002	Social_Status	Divorcee	Female	0-100+	3
61830	Delhi (Ut)	2002	Social_Status	Married	Female	0-100+	274
61831	Delhi (Ut)	2002	Social_Status	Never Married	Female	0-100+	110
61832	Delhi (Ut)	2002	Social_Status	Widowed/Widower	Female	0-100+	9
61833	Delhi (Ut)	2002	Social_Status	Seperated	Female	0-100+	14
61834	Delhi (Ut)	2002	Social_Status	Divorcee	Male	0-100+	0
61835	Delhi (Ut)	2002	Social_Status	Never Married	Male	0-100+	172
61836	Delhi (Ut)	2002	Social_Status	Married	Male	0-100+	434
61837	Delhi (Ut)	2002	Social_Status	Seperated	Male	0-100+	22
61838	Delhi (Ut)	2002	Social_Status	Widowed/Widower	Male	0-100+	15
61839	Delhi (Ut)	2003	Causes	Paralysis	Female	0-14	0
61840	Delhi (Ut)	2003	Causes	Property Dispute	Female	0-14	0
61841	Delhi (Ut)	2003	Causes	Other Prolonged Illness	Female	0-14	0
Showing 61,816 to 61,842 of 237,519 entries, 7 total columns							

**Source:-**

<https://data.gov.in/>

**Links to our dataset:-**








- <https://data.gov.in/resource/stateut-wise-distribution-suicides-means-adopted-during-2001-2012>
- <https://rb.gy/ycp6cd>

## Brief about dataset

This dataset describes about number of suicide happened in India in the year 2001-2012

### Attributes:-

#### Column names:-

-  **State:** Location of the suicide.
-  **Year:**2001-2012
-  **Type\_code:** Parameters
-  **Type :** Reason of the suicide
-  **Gender:** Male or Female
-  **Age\_group:** Range of age
-  **Total:** It is the count of parameters.

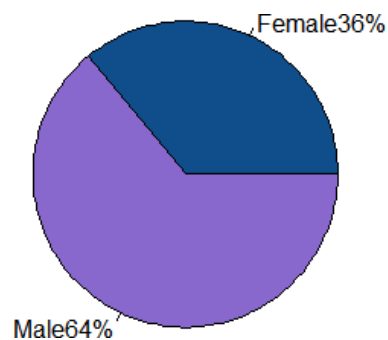
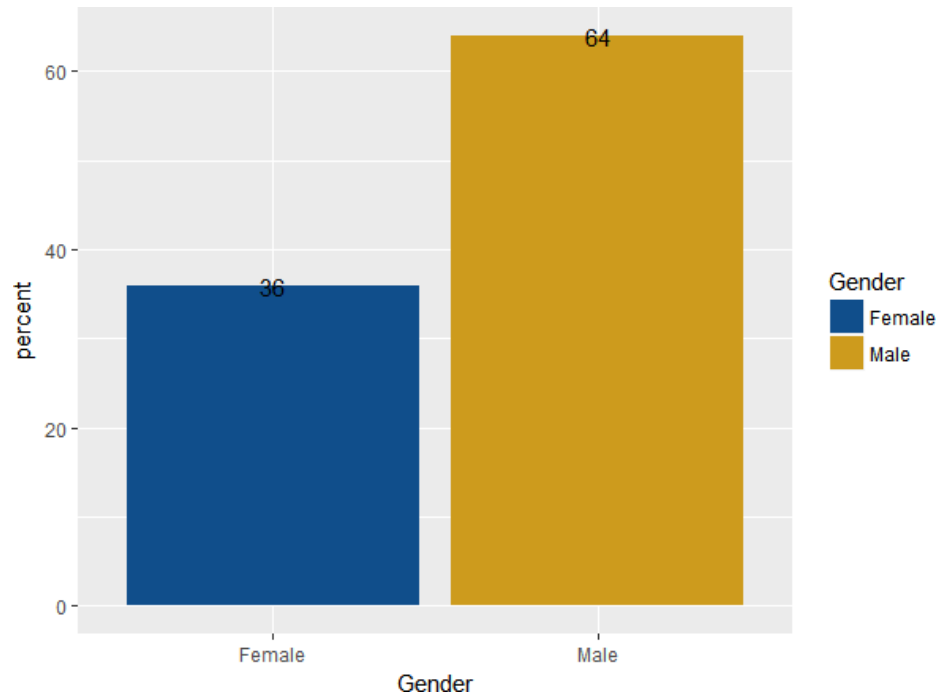
	State	Year	Type_code	Type	Gender	Age_group	Total
61816	Delhi (Ut)	2002	Professional_Profile	Farming/Agriculture Activity	Female	60+	0
61817	Delhi (Ut)	2002	Professional_Profile	Others (Please Specify)	Female	60+	2
61818	Delhi (Ut)	2002	Professional_Profile	Farming/Agriculture Activity	Male	60+	6
61819	Delhi (Ut)	2002	Professional_Profile	Retired Person	Male	60+	4
61820	Delhi (Ut)	2002	Professional_Profile	House Wife	Male	60+	0
61821	Delhi (Ut)	2002	Professional_Profile	Others (Please Specify)	Male	60+	0
61822	Delhi (Ut)	2002	Professional_Profile	Service (Government)	Male	60+	0
61823	Delhi (Ut)	2002	Professional_Profile	Professional Activity	Male	60+	0
61824	Delhi (Ut)	2002	Professional_Profile	Public Sector Undertaking	Male	60+	0
61825	Delhi (Ut)	2002	Professional_Profile	Service (Private)	Male	60+	0
61826	Delhi (Ut)	2002	Professional_Profile	Unemployed	Male	60+	5
61827	Delhi (Ut)	2002	Professional_Profile	Student	Male	60+	0
61828	Delhi (Ut)	2002	Professional_Profile	Self-employed (Business activity)	Male	60+	1
61829	Delhi (Ut)	2002	Social_Status	Divorcee	Female	0-100+	3
61830	Delhi (Ut)	2002	Social_Status	Married	Female	0-100+	274
61831	Delhi (Ut)	2002	Social_Status	Never Married	Female	0-100+	110
61832	Delhi (Ut)	2002	Social_Status	Widowed/Widower	Female	0-100+	9
61833	Delhi (Ut)	2002	Social_Status	Seperated	Female	0-100+	14
61834	Delhi (Ut)	2002	Social_Status	Divorcee	Male	0-100+	0
61835	Delhi (Ut)	2002	Social_Status	Never Married	Male	0-100+	172
61836	Delhi (Ut)	2002	Social_Status	Married	Male	0-100+	434
61837	Delhi (Ut)	2002	Social_Status	Seperated	Male	0-100+	22
61838	Delhi (Ut)	2002	Social_Status	Widowed/Widower	Male	0-100+	15
61839	Delhi (Ut)	2003	Causes	Paralysis	Female	0-14	0
61840	Delhi (Ut)	2003	Causes	Property Dispute	Female	0-14	0
61841	Delhi (Ut)	2003	Causes	Other Prolonged Illness	Female	0-14	0

Showing 61,816 to 61,842 of 237,519 entries, 7 total columns

# 1. OUTPUT AND CONCLUSION

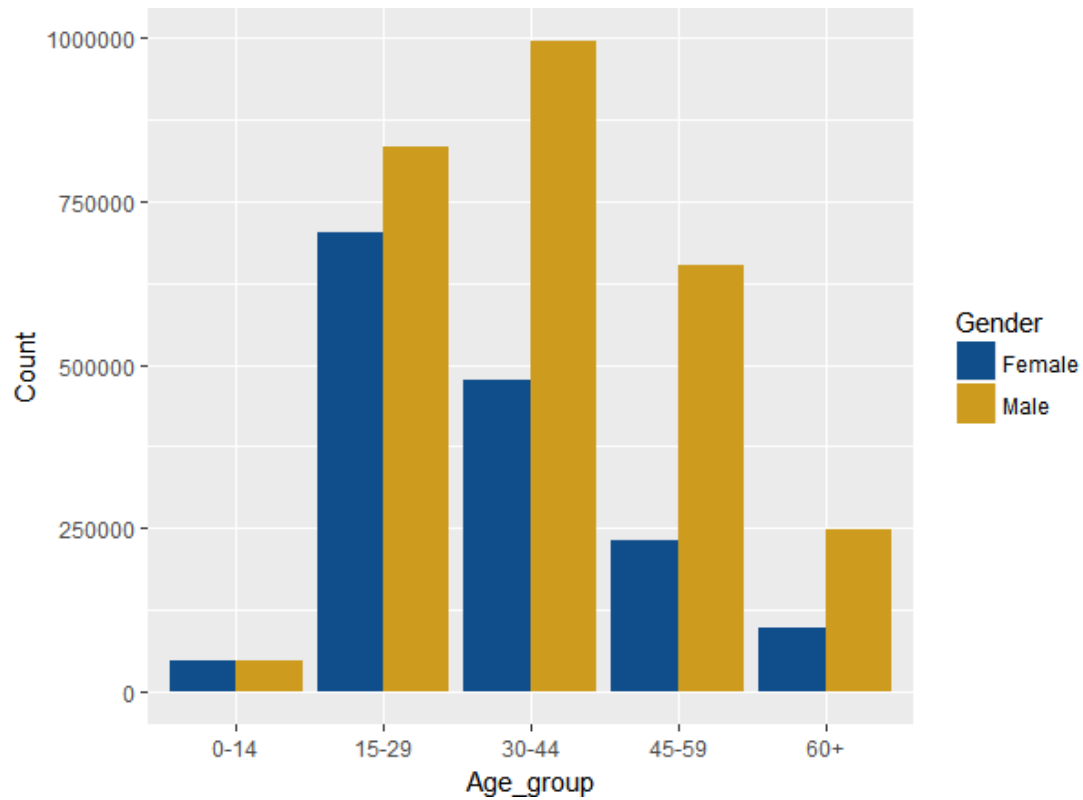
The conclusion for every graph is given at the end of each section.

## 1.1. GENDER WISE ANALYSIS:



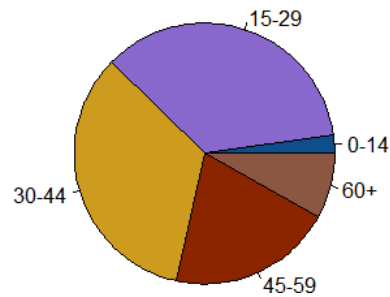
## Conclusion: Who makes more suicide attempts Male or Female?

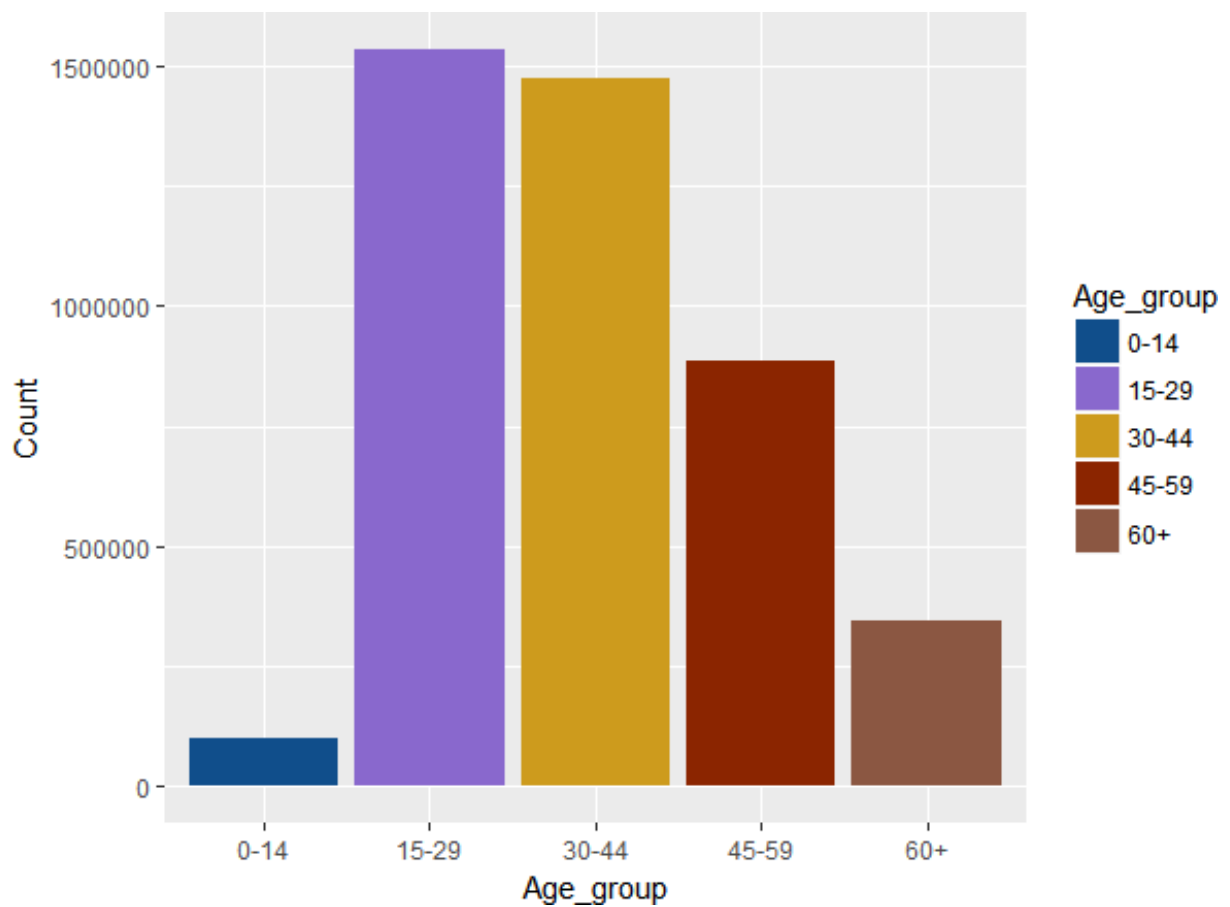
According to the result, around 64% Male and 36% Females commit suicide, i.e. Male commits more suicide than female.



## 1.2. AGE GROUP

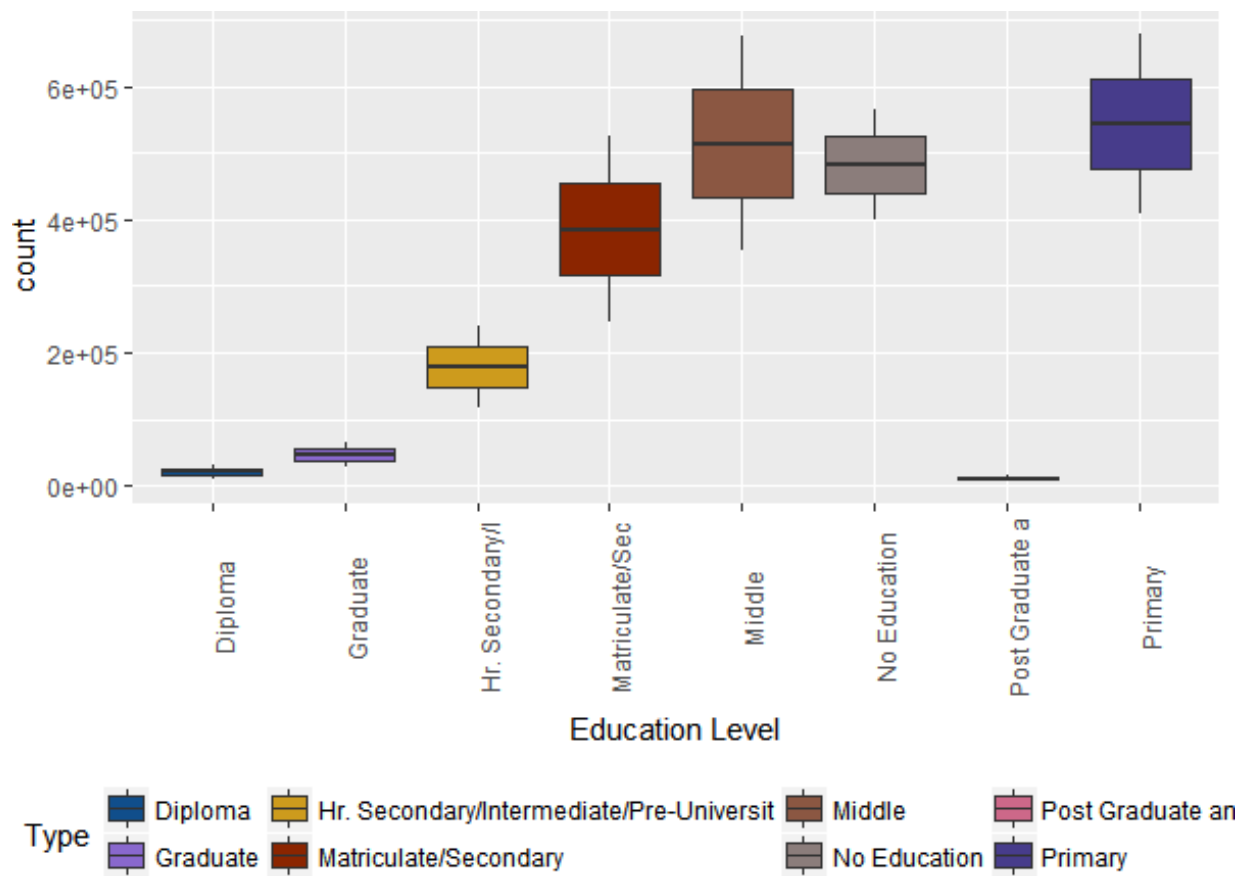
Suicide and Age Groups





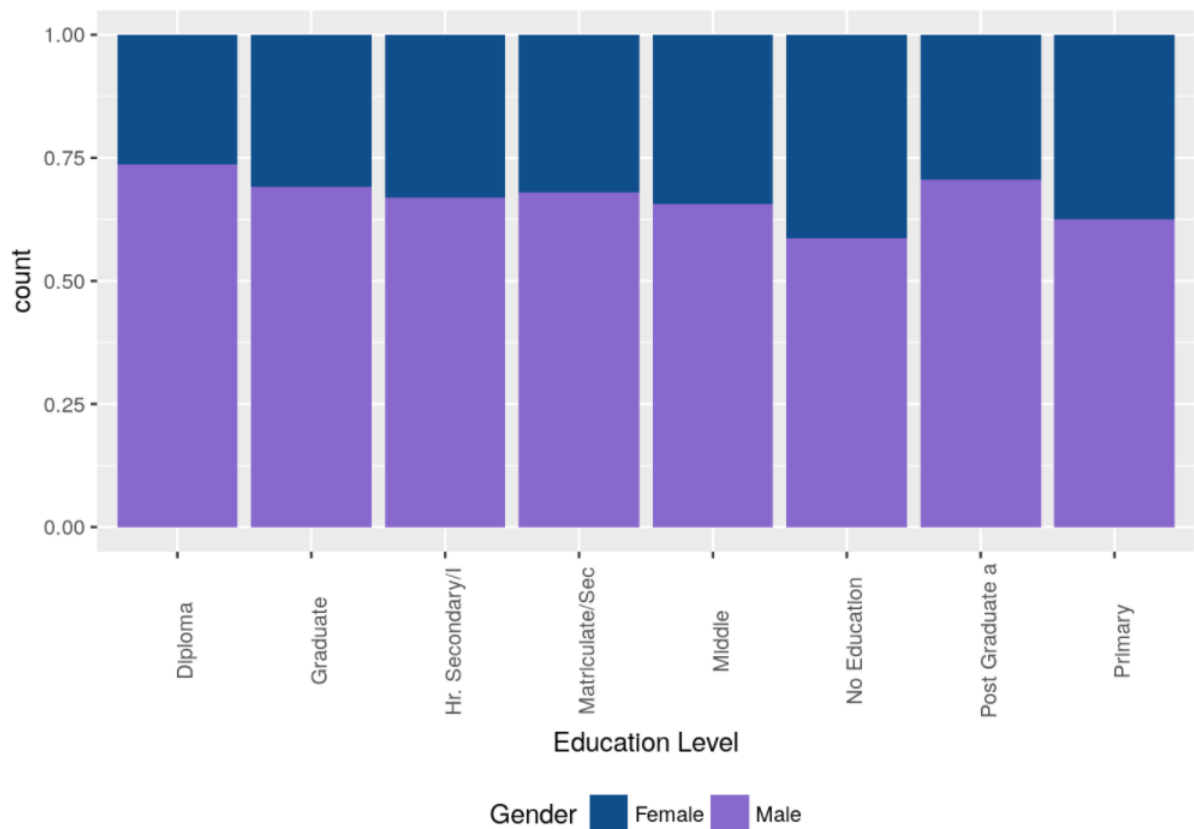
**Conclusion:** Which Age group makes more suicide attempts?

15-29 Age group, i.e. Teenagers commits most suicides followed by age group of 30-44, which seems about right. Teenagers have study burden and adults have family problems which makes them take such a huge step.



### 1.3. EDUCATION LEVEL



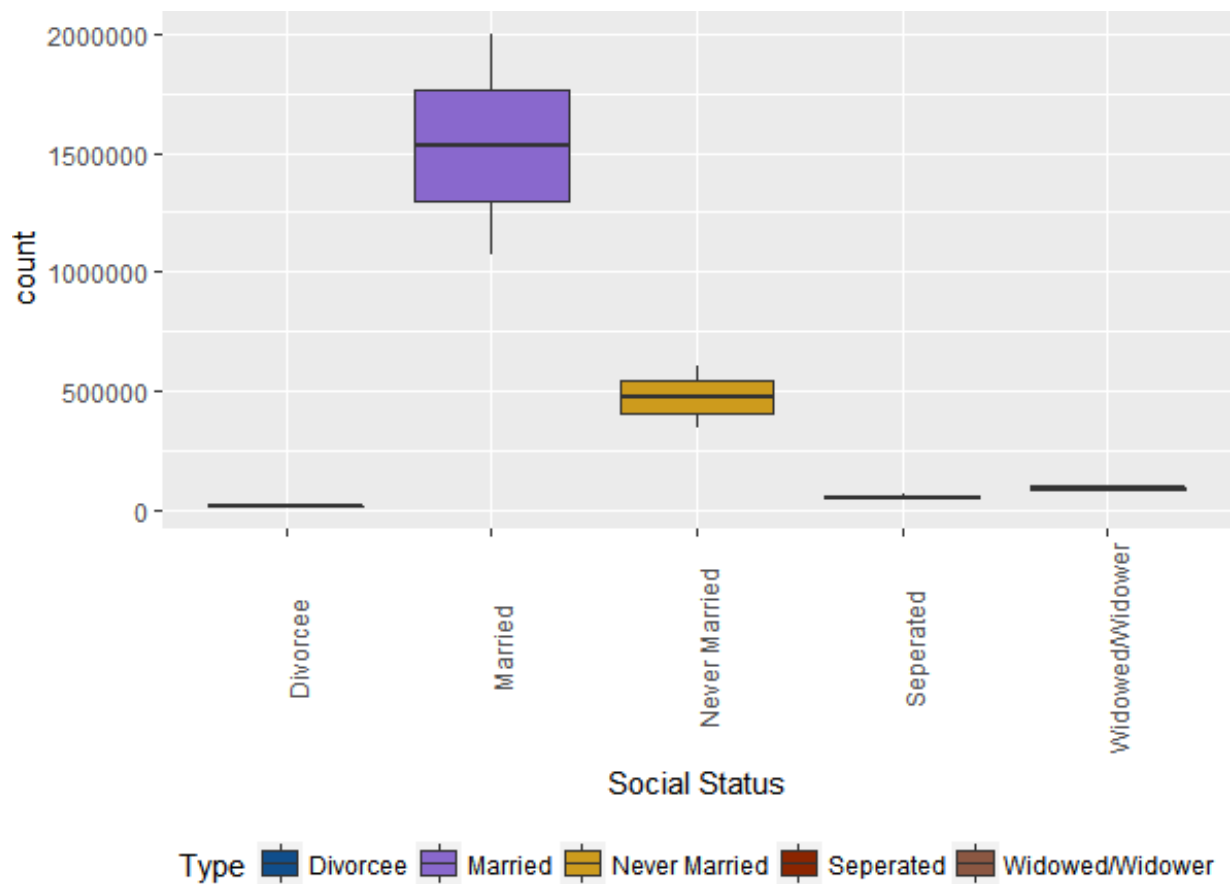


**Conclusion:** Levels of Primary, Middle got more suicide counts.

Academic performance and pressures have been found to be strongly related to teenage suicide problem and are one of the main causes leading to it.

Also Uneducated people also attempt for it. People who are post graduate, diploma, graduate counts seem comparatively less.

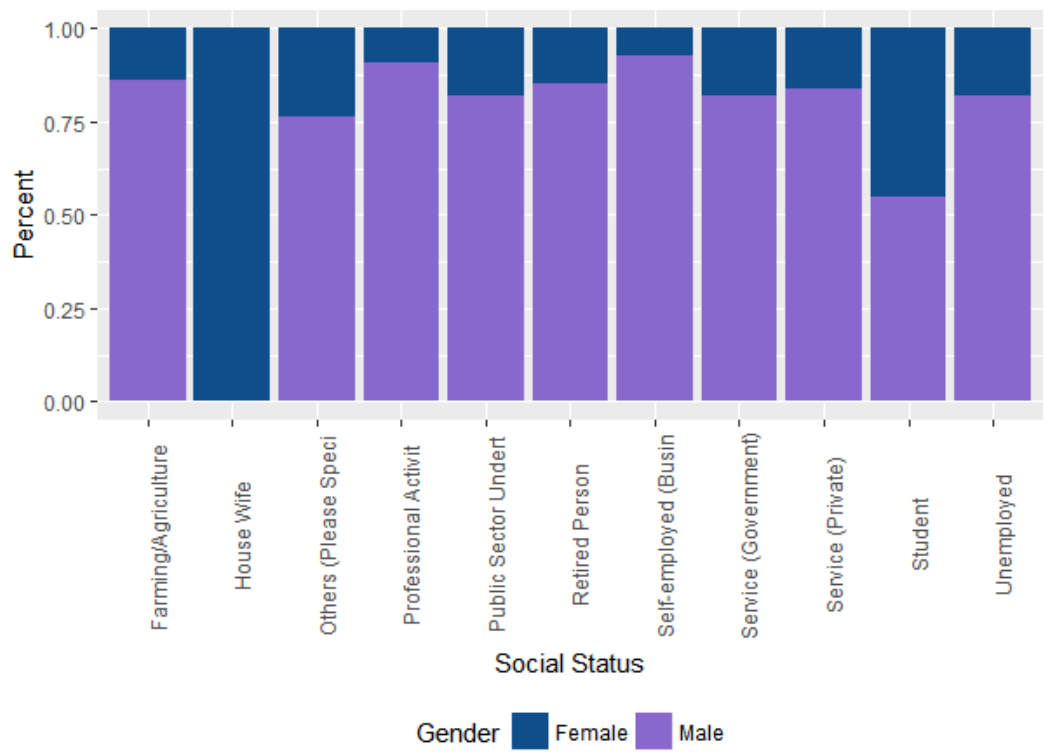
Education is the most powerful weapon which can change the world. School should do proper mentoring to the students.

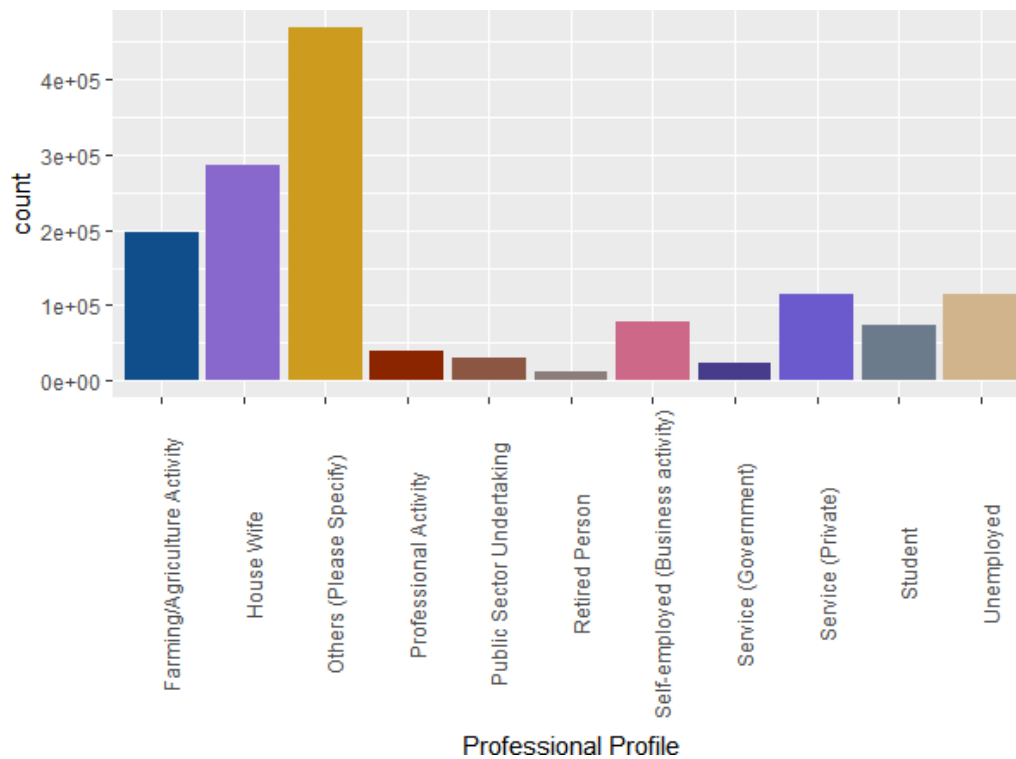


## 1.4. SOCIAL STATUS

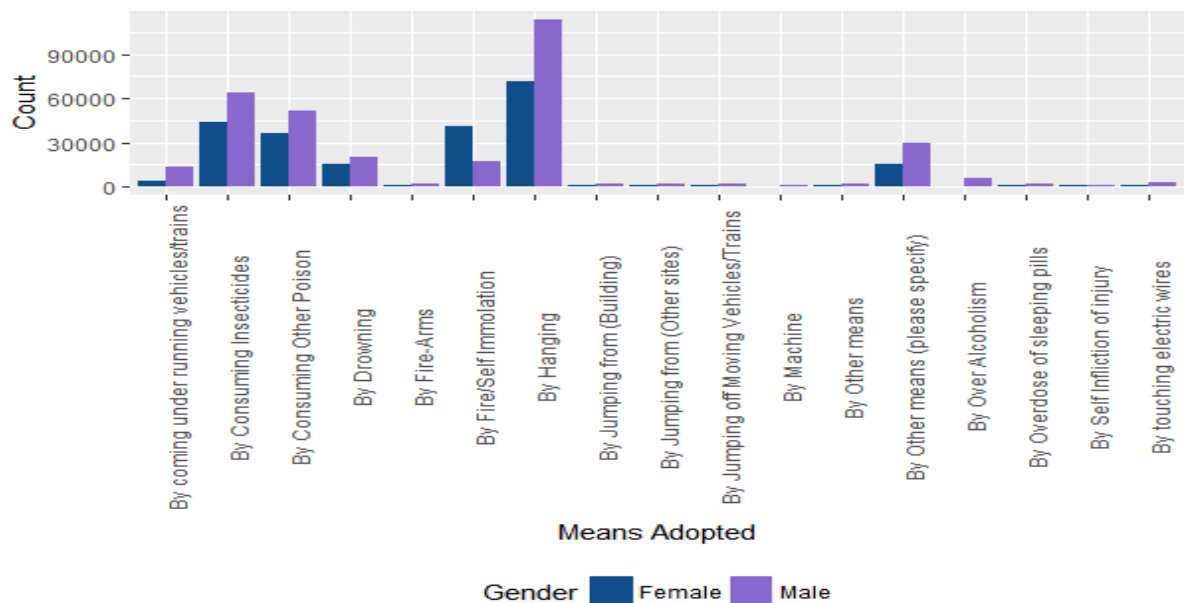
**Conclusion:** Married people are the major victims of suicide comparing to other category.

1.5. Professional Profile

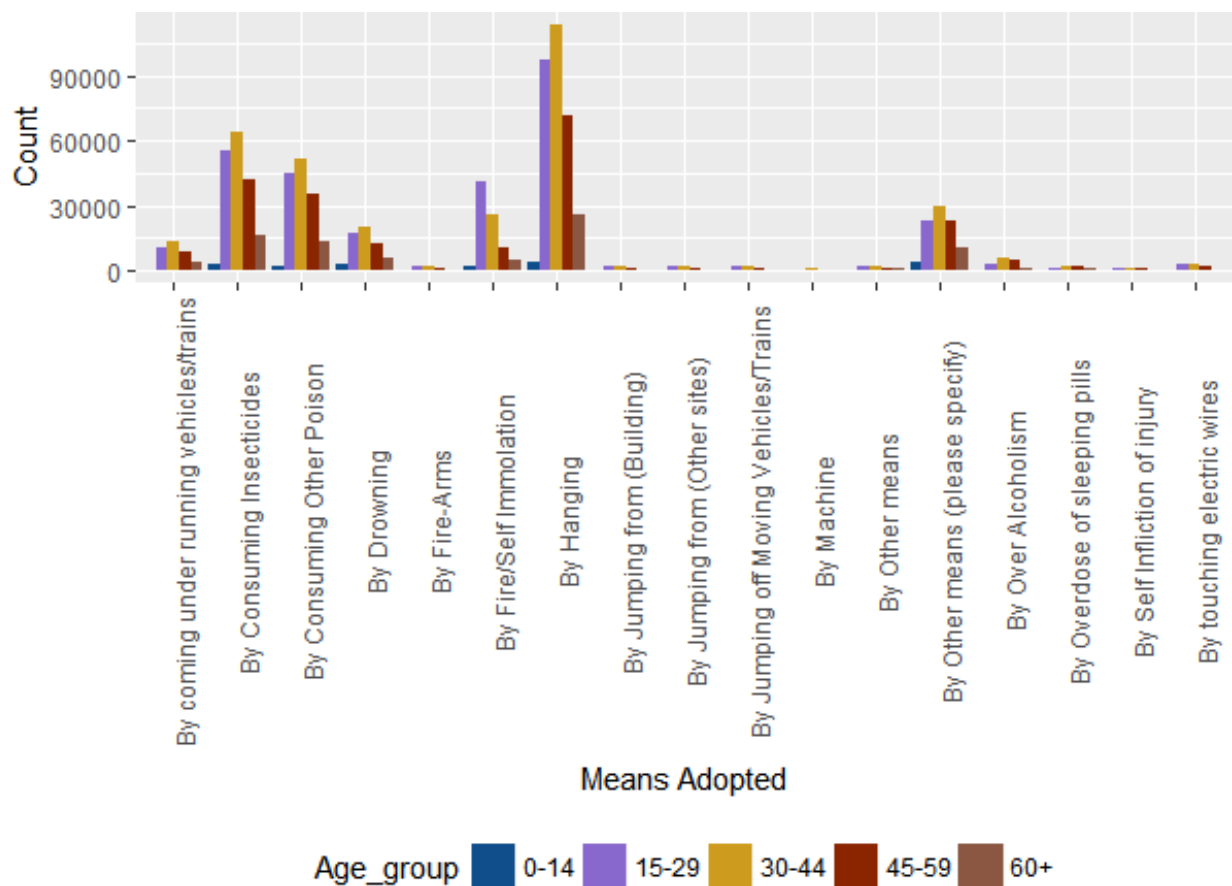




**Conclusion:** Housewife are the major victims in suicide and next one was the people who do farming and Agriculture.



## 1.6. MEANS ADOPTED TO COMMIT SUICIDE



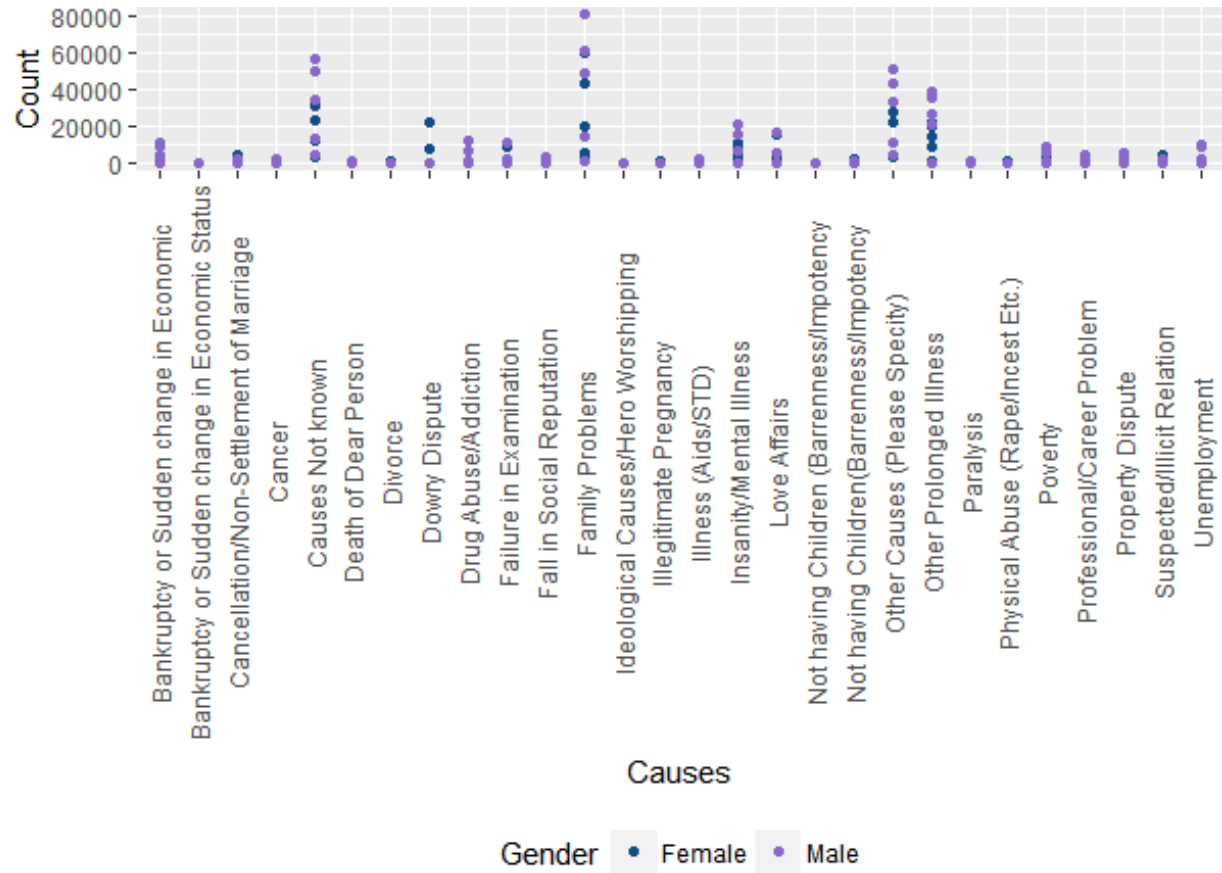
**Conclusion:** Hanging is the most frequently used method of suicide.

Materials for hanging were easily accessed and respondents considered it 'simple' to perform without the need for planning or technical knowledge.

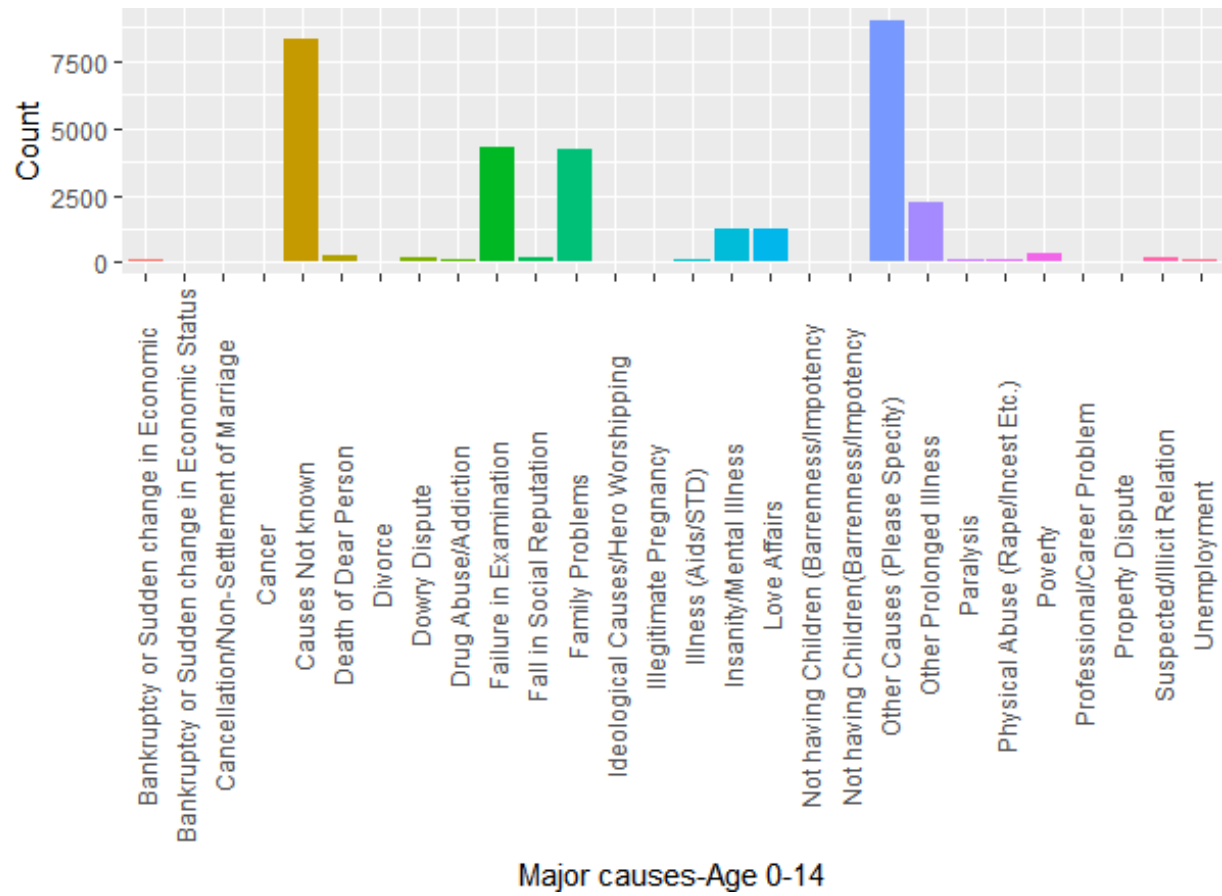
Hanging was thus seen as the 'quickest' and 'easiest' method with few barriers to completion and sometimes adopted despite not being a first choice.

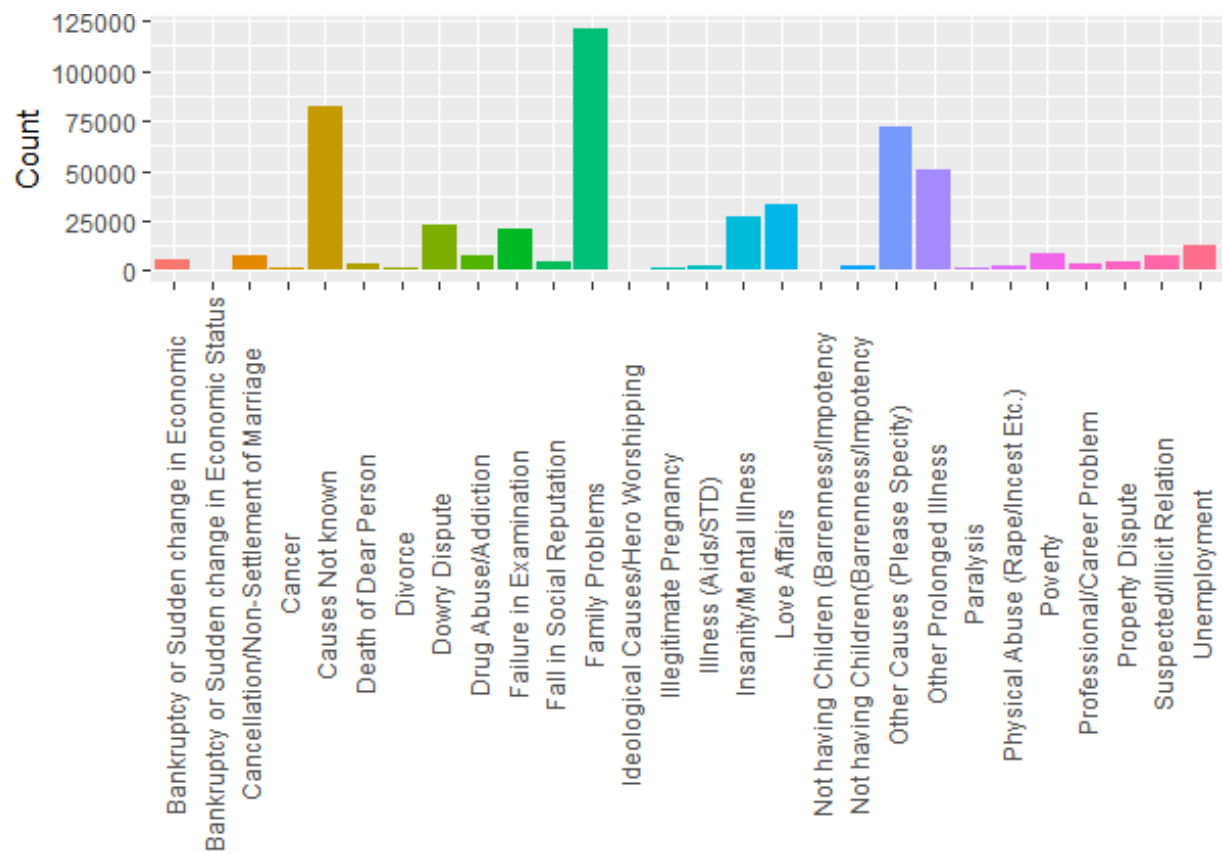
Prevention strategies should focus on countering perceptions of hanging as a clean, painless and rapid method that is easily implemented. However, care is needed in the delivery of such messages as some individuals could gain information that might facilitate fatal implementation.

## 1.7. Major Causes:



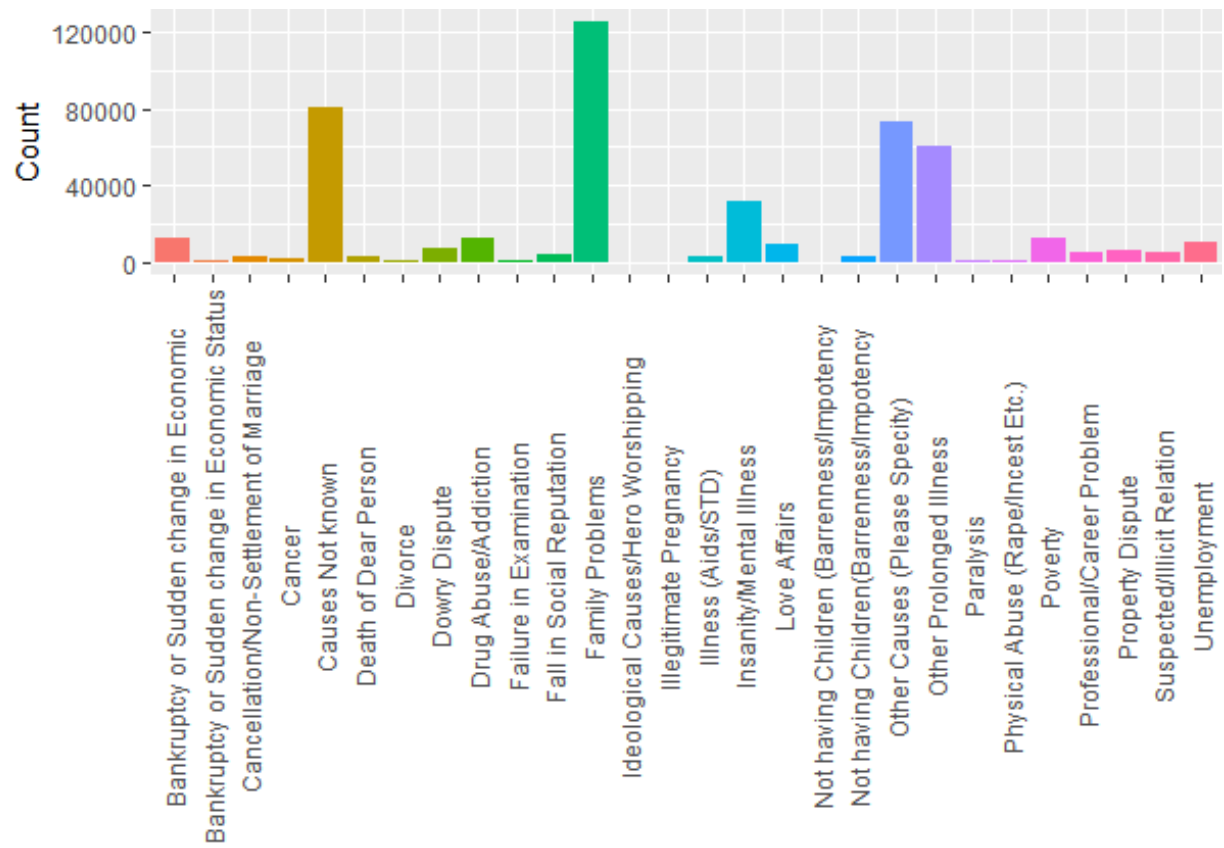
### 1.7.1. Major Causes: Age (0-14):





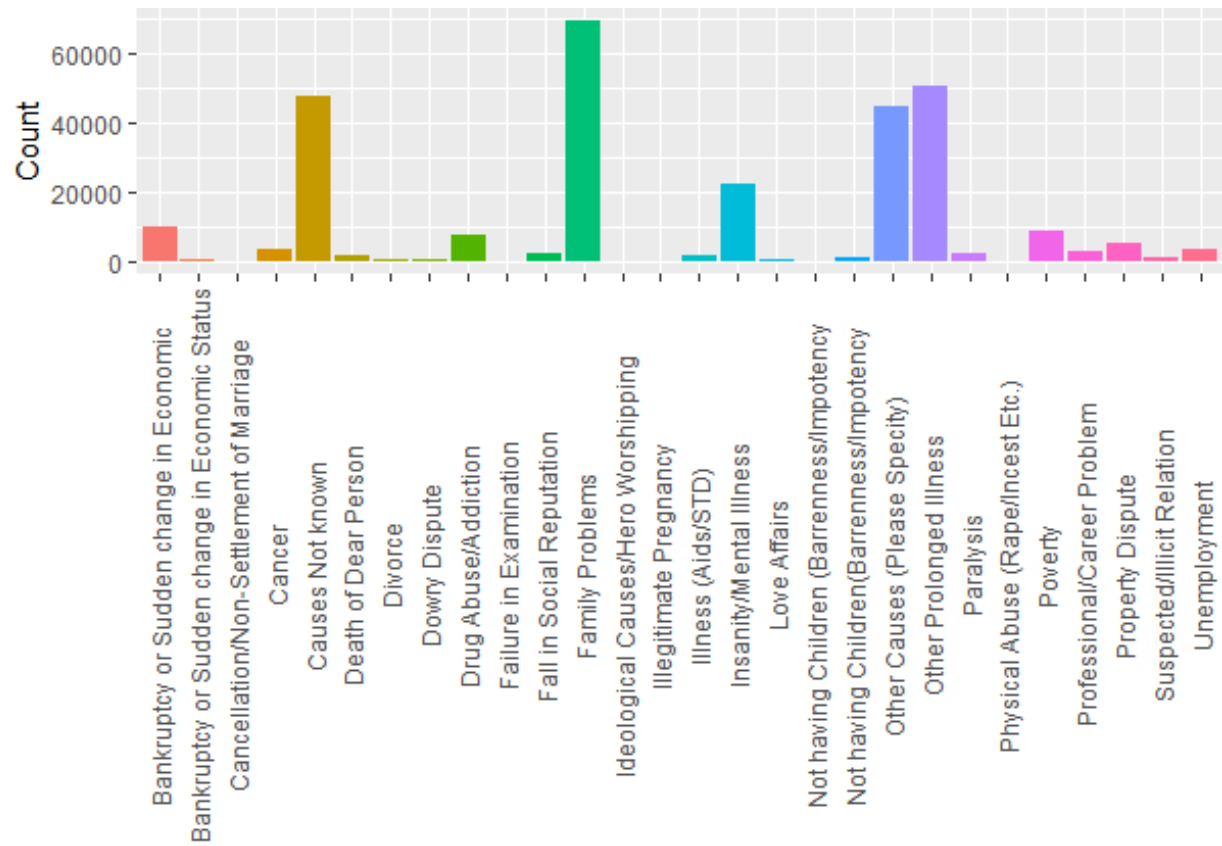
Major causes-Age 15-29





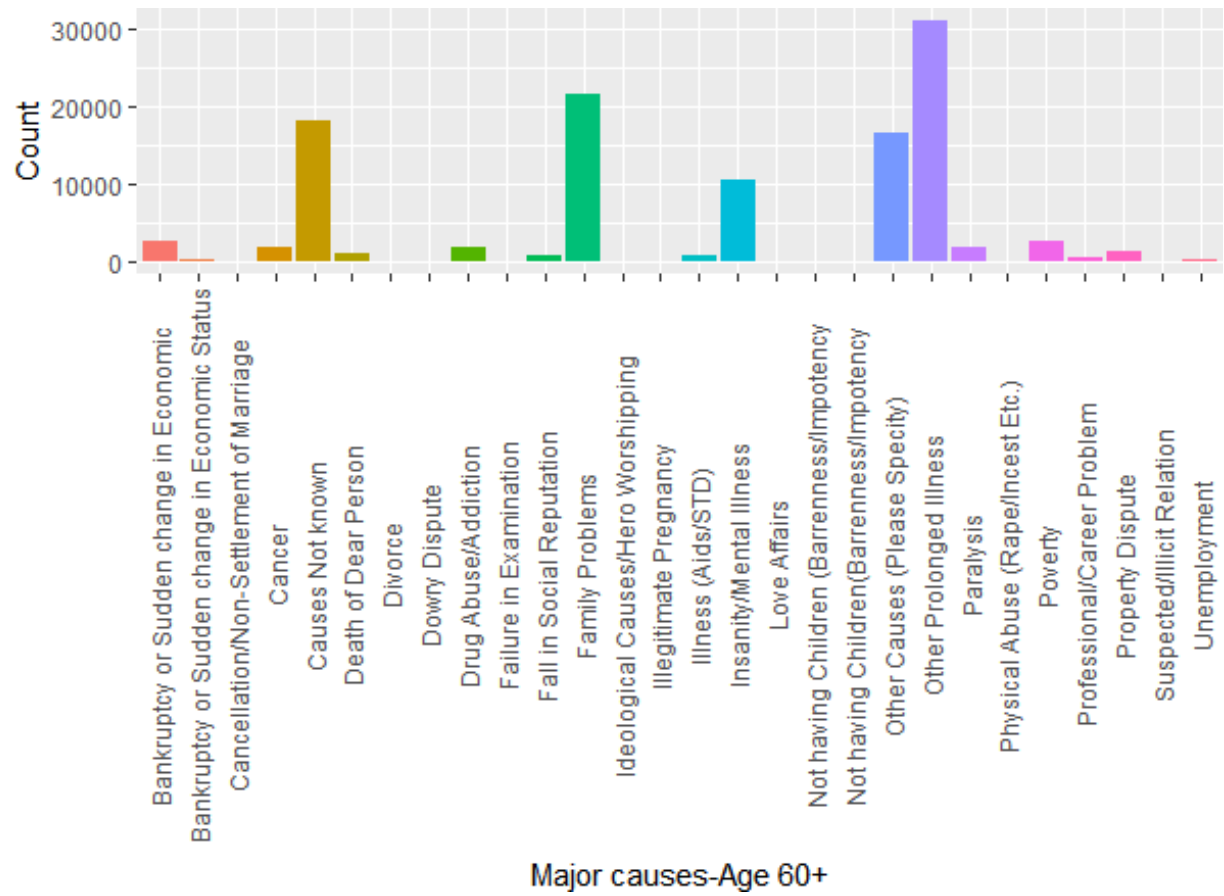
Major causes-Age 30-44

#### 1.7.4. Major Causes – Age (45-59)

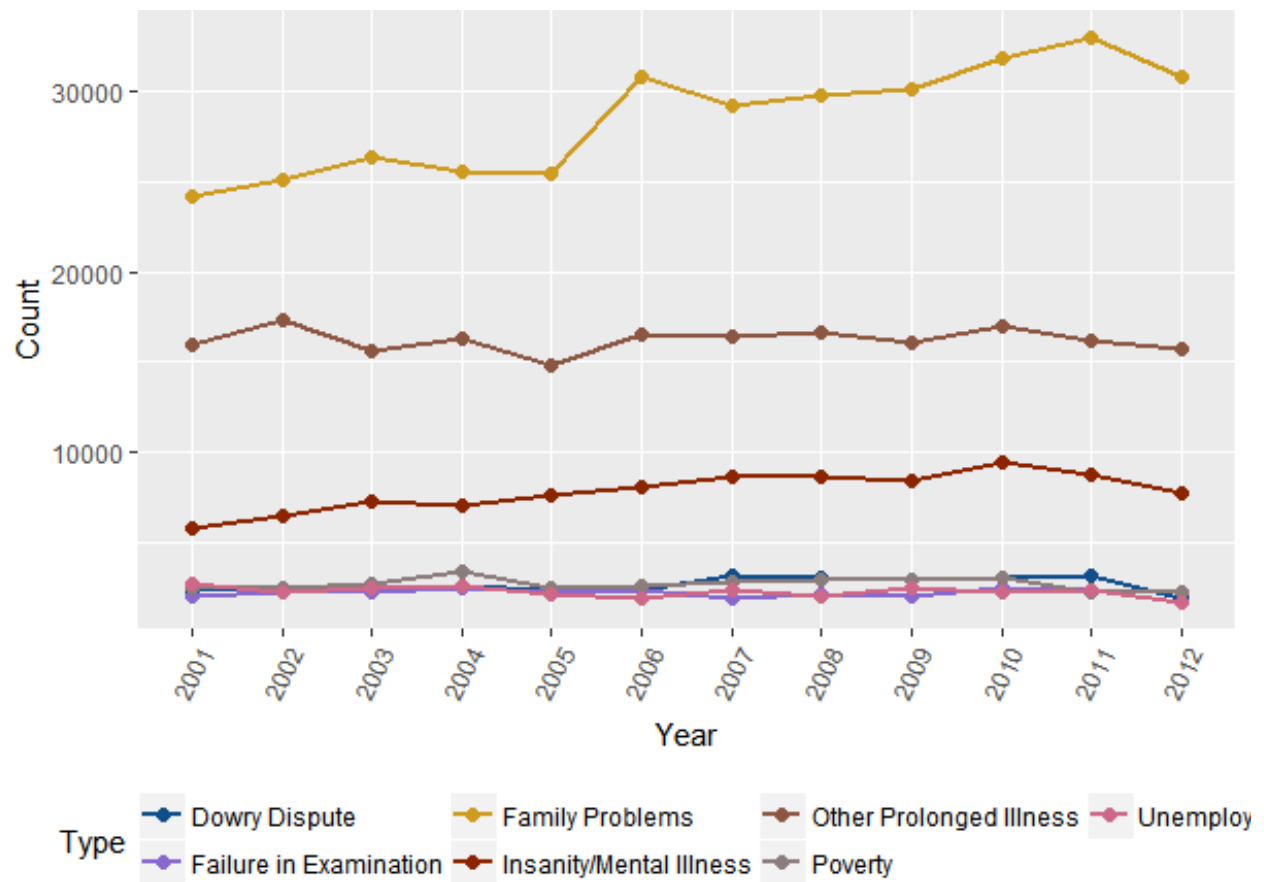


Major causes-Age 45-59

### 1.7.5. Major Causes – Age (60+)



### 1.7.6. Others

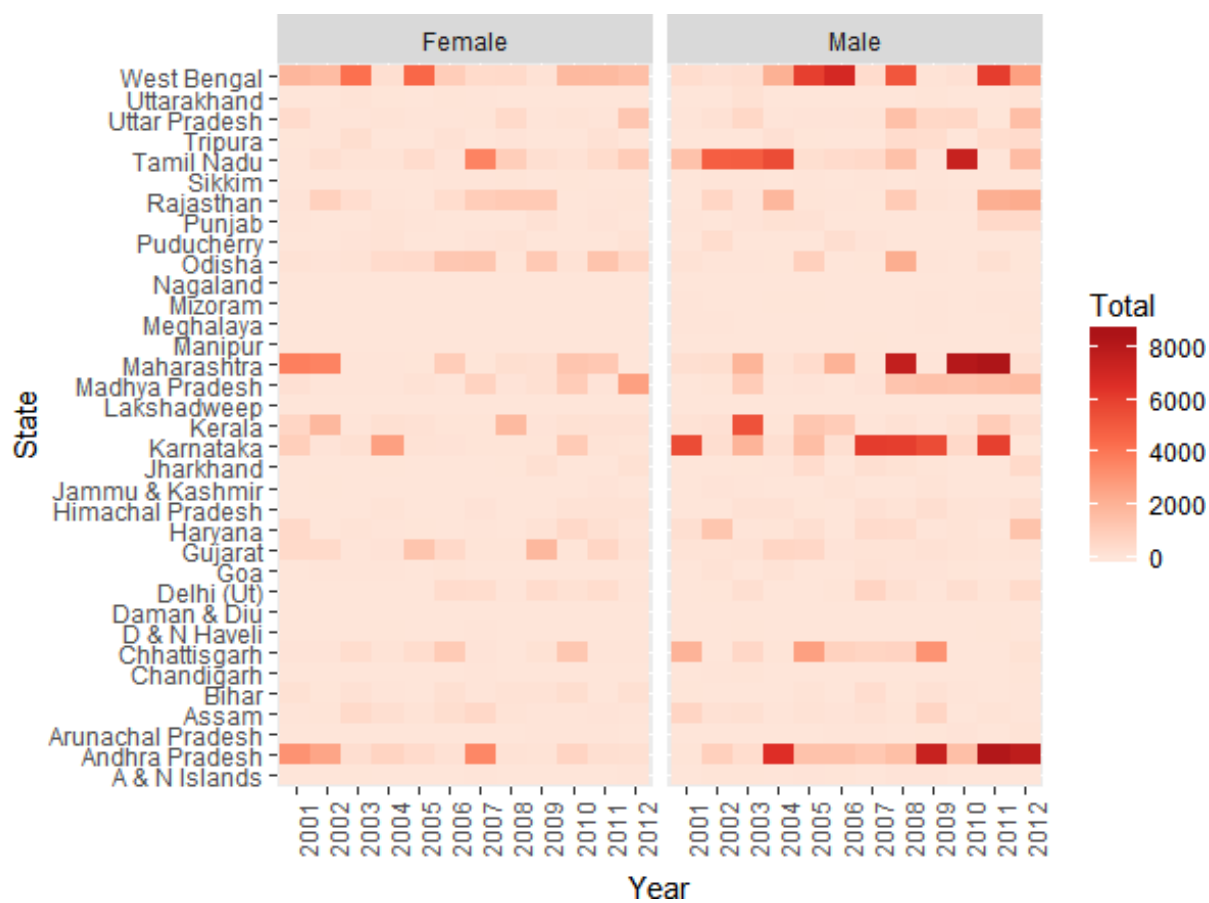


**Conclusion:** At all age groups \*\* family Problems\*\* seems to be the major cause for suicide, next stands prolonged illness/mental illness.

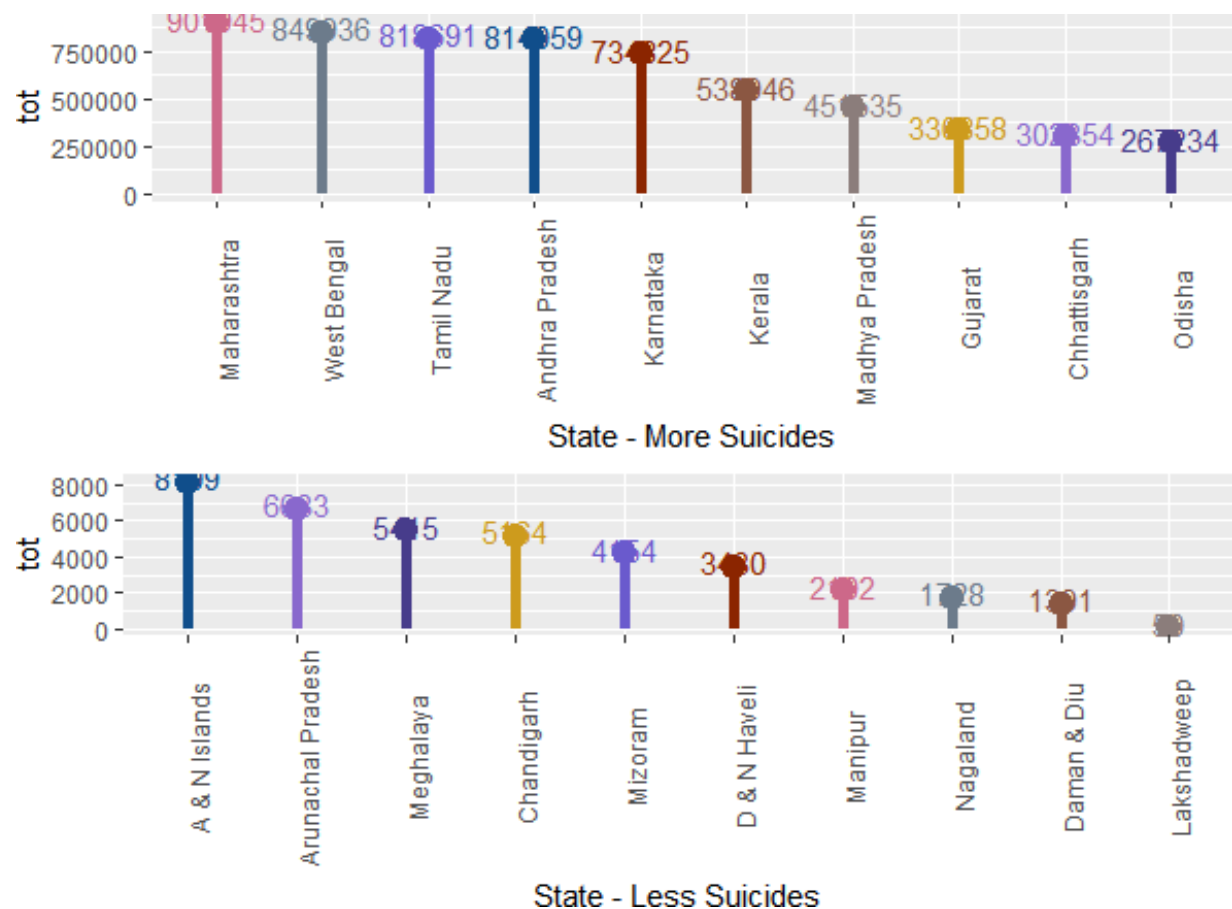
At age group of 0-14, failure in examination was one of the main cause.

Analysing the trend for the major causes for the suicides, from the graph given in section 5.7.6, left the Reason unknown and other causes, which are two major causes but it didn't give any specific meaning.

### 1.8. State Wise analysis



## 1.9. TOP 10 AND BOTTOM 10 STATES



**Conclusion:** Finding the top 10 and bottom 10 states based on number of suicides, Maharashtra is the state which has highest number of suicides, Next comes West Bengal, Tamilnadu, Andhra Pradesh and Karnataka.

So we have to find what was the main causes in those states.

Farming/Agriculture is the major occupation across all states of India, due of shortage of rainfall. Farming was impacted more which causes more suicide attempts.