

## **CHAPTER I: INTRODUCTION**

Suicide is the act of intentionally causing one's own death. Suicide is the tragic and untimely loss of human life, all the more devastating and perplexing because it is conscious and volitional act.

There is no specific reason why a person commits suicide. For many it is response to loss, separation, financial problems, psychological problems, and despair. For some individuals it represents relief from helpless existence and hopeless future. For some it may be an impulsive act or a revenge for rejection. Suicide can be response to distorted thinking, and cognitive distortion. It is also difficult to explain why certain people take this decision while others in similar or even worse situations do not. Suicide is the result of biological, genetic, psychological, social, cultural and environmental factors.

Every year over one million people commit suicide in the world. Suicide and attempted suicide carry a huge social and economic cost for the individual, family, friends and society. Most religions have considered suicide as sinful act, morally wrong and usually considered unpardonable. Another view has been that suicide is a criminal act, to be punished under the law. Many societies considered it as social crime, which was reflected in the social discrimination against survivors of suicide and even the families of suicide victims. Another view is that suicide is a weakness or madness, which is to be pitied or treated. Yet other cultures considered suicide a great death, like *Sati* in our country or *Hara-kiri* in Japan. In addition to all these approaches there are many people in all cultures who consider suicide to be a rational alternative to life in certain exceptional circumstances.

A culture may have high or low solidarity and an individual may have strong or weak integration with the culture or society. The interaction between the social integration and the degree of cultural solidarity is the crucial index for suicide. The cultural control over the individual will depend on these two factors. A

disorganized culture has low solidarity and hence does not exert control over the individuals. Similarly, if the individual is weakly integrated with the culture, even a solid social structure can exert little control over the individual. Such situations of lowered group control increase the chances of suicide.

This happens in the case of individuals who do not have enough involvement with societal norms such individuals have a tendency to go their personal way until cultural constraints can no longer reach them. Similarly at times of social upheaval or social change, the cultural solidarity weakens and the culture can no longer exert adequate control over individuals. In both these situations, probability of suicide increases. Paradoxically, too much control by society may also increase the chances of suicide. A strongly integrated person in a high solidarity culture is particularly vulnerable to this form of suicide.

- **Suicide:** It is an act of intentionally causing one's own death.
- **Suicide attempt:** It is an attempt where a person tries to die but survives. It may be referred to as a failed suicide attempt or nonfatal suicide attempt.
- **Suicide survivors:** The individuals who have survived a prior suicide attempt.
- **Suicidal Ideations:** It is any self-reported thoughts of engaging in suicide-related behavior.
- **Self-harm:** It is self-inflicted, potentially injurious behavior for which there is evidence that the person did not intend to kill himself /herself.
- **Suicidal Behavior:** Behaviors related or clinical depression.
- **Anxiety Disorder:** A mental health disorder characterized by to suicide, include preparatory acts, as well as suicide attempts and death.
- **Depression:** Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. Also called major depressive disorder, feelings of worry, anxiety or fear that are strong enough to interfere with one's daily activities.

- **Self-immolation:** It is the act of killing oneself by burning in front of public.

#### *Method adopted for suicide*

Individuals choose from a variety of acts to end their lives. The choice of a method for suicide or attempted suicide is related to a person's culture and tradition and depends upon the intent, seriousness, situation, motive, availability of means, age and sex. Many studies show that majority of suicide victims including males and females took their lives by hanging, followed by consuming insecticides and other poison. Most females committed suicide by self-immolation and drowning.

Factors like feasibility, accessibility, credibility and rapidity of action and degree of suicide intent could be behind the choice of method for committing suicide. The availability of methods becomes more important when the suicidal act is impulsive in nature. In our state, because of limited mobility outside home as majority are housewives they have more accessibility to native poisons, medicines, corrosives, kerosene etc. however in both genders stronger suicidal intention might have led them to choose more lethal method like hanging as sure means to commit suicide. It has been revealed in Indian studies that domestic burns as a method of completing suicide by young women and most lethal one with a promise of a high degree of success. Burns in general have reported more in younger women.

Is suicide a crime now?

In past years attempting suicide is punishable under the Section 309 of Indian Penal Code (IPC) 1860 it states that "Whoever attempts to commit suicide and does any act towards the commission of such offence, shall be punished with simple imprisonment for a term which extends to one year or with fine, or with both." But now suicide attempt is not considered as a crime. According to the Article 21 of Constitution of India, "no person shall be deprived of his life or

personal liberty except according to procedure established by law". In this Constitution Right to live would however means right to live a life of dignity up to the end of natural life. Thus, right to live would include right to die with dignity at the end of life and it should not be equated with right to die an unnatural death curtailing natural span of life.

### ***Causes of Suicides***

There are various causes for suicide from an individual to other. The causes are family problems, illness, bankruptcy or sudden change in economic status, dowry disputes, poverty, physical abuse, professional/career problem etc and other causes which are not known. Sometimes we can't predict one specific cause for that particular individual's death. It can be a sum of all above causes. Mainly the causes seen in women suicide is family problem and dowry death.

Children's suicide behavior and their motives are impulsive, which are interpersonal that can be similar to adults. Some reasons for the suicide in children are attempt to regain control in life, harassment from parents, depression, fear of getting scolded from parents when failed in exam, feeling loneliness, prolonged illness, and objection of buying their needs by parents etc.

According to the National Crime Record Bureau (NCRB) the percentage of various causes of suicide during the year 2018 is given in circular graphic (pie chart).

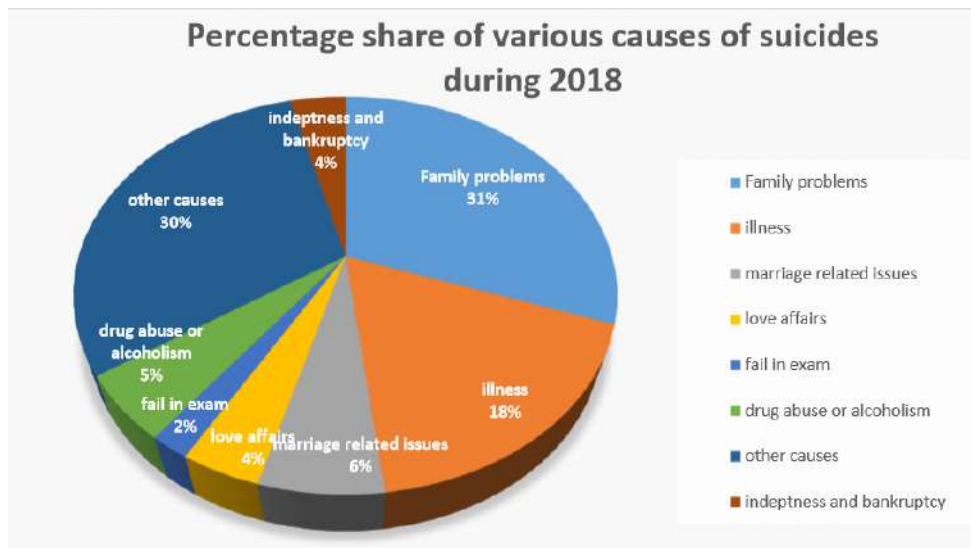


Figure1: Percentage share of various causes of suicide during 2018

According to State- wise suicide rate during 2018, the States having highest suicide rate is Kerala, Telangana and Chattisgarh. The suicide rate means number of suicides per one lakh population.

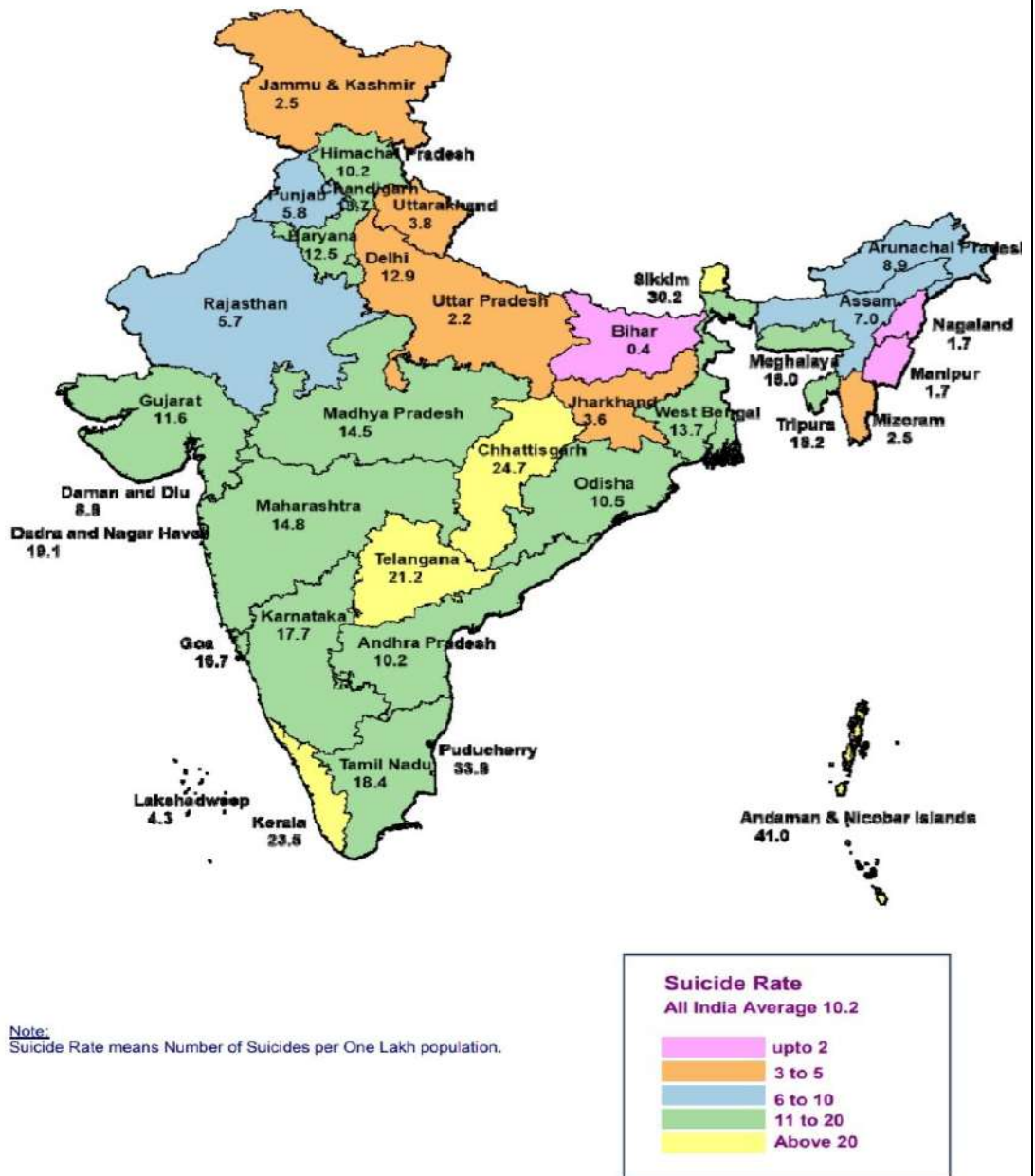


Figure2: State wise suicide rate in India during 2018

Suicide represents a significant category of preventable death in India and many other countries and cases occupy considerable amount of time in forensic practices. Sometimes in some specific cases it is difficult to accurately designate the manner of death as suicide. In only a minority of cases suicide notes are present which help the investigating officer to proceed the case faster.

Mainly in many communities hanging is the most common method used to commit suicide. But seeing the scene of crime and corpus delicti we can't come into conclusion that it is a suicide. Sometimes the victim is killed and hanged by the culprit, or the death occurred due to asphyxia.

In other cases there may be many difficulties in the assessment and classification to differentiate suicide from murder suicide; it include complex suicides where more lethal methods are used and the scene of crime is altered by the relatives to hide the true nature of the event mostly for insurance purpose.

## **CHAPTER II: LITERATURE REVIEW**

EK Moscicki- Annals of epidemiology 1994-Elsevier

“The author researched on Gender differences in completed and attempted suicides”. This article presents an overview of findings on gender differences from epidemiologic studies of completed and attempted suicides with a focus on suicide attempts among women and discussed possible reasons for gender differences in suicidal behavior.

P Nordstrom ,M Samuelsson – ActaPsychiatrica -1995

The author researched on “Survival analysis of suicide risk after attempted suicide.” This study was studied in a cohort of 1573 suicide attempters referred to the Psychiatric emergency room at the Karolinska Hospital from 1981 to 1988. The possible usefulness of sex and age as risk factors for the prediction of suicide risk after attempted suicide was analyzed.

RS Spicer ,TR Miller – American journal of public health,2000

The authors researches on “Suicide acts in 8 states: incident and case fatality rates by demographics and method”. This study examined incident rates of medically identified suicide acts (self-inflicted injuries, either fatal or nonfatal) and case fatality rates by age,sex ,race, and method used. They collected data from hospital admitted individuals in 8 states.

K Praveenlal – Kerala Research Programme, Thiruvananthapuram,2001

The author researched the topic on “Family suicide in Kerala: An explorative study into pattern, determinants and consequences. He compares the rate of suicide in India and Kerala per lakh of population. He conclude that when compared ,the rate of suicide in Kerala is high than the corresponding figure of India



Peter Mayer , TaherehZiaian – Crisis: The journal of Crisis Intervention and Suicide Prevention 23(3),98,2002

The author researched on the topic “Suicide, gender, and age variation in India: Are women in Indian society protected from suicide?”. He conclude that suicide rate were nearly equal to for young women and men, a contrast with the pattern of suicide sex ratios in eight developed countries.

AL Beautrais- American Journal of Psychiatry,2003- Am Psychiatric Assoc

The author researched on “ Suicide and Serious suicide attempts in youth: a multiple group comparison study . This study compared risk factors for suicide and medically serious nonfatal suicide attempts among youth under 25 years of age. The method used was they examined three groups like individuals who committed suicide individuals who made serious suicide attempts, and nonsuicidal comparison subjects were compared in terms of socio demographic ,childhood , family, psychosocial, and psychiatric factors.

PNS Kumar- Indian journal of psychiatry,2004

The author researched the topic on “An analysis of suicide attempters versus completers in Kerala”. This study attempted to differentiate suicide attempters from completers based on their psycho- socio- demographic profile. Suicide attempters admitted in hospital during a specific period were evaluated using a specially designed profoma and for the same period, data of completers were collected using retrospective chart review. The parametric and non-parametric variables between these two groups were compared using appropriate statistics.

CT Sudhir Kumar ,Rajesh Mohan, GopinathRenjith, R Chandrasekaran- Psychiatric Research 144(1),79-86,2006.

The authors studied on the topic “Gender differences in medically serious suicide attempts: A study from South India”. They aimed to identify gender-specific characteristics associated with attempted suicide in a general hospital sample in

South India. Two hundred and three patients admitted to medical wards following suicide attempts were assessed using a detailed clinical interview, measures of suicide intent, lethality, depression and recent stress.

CR Soman ,S Safraj ,V Ramankutty ,K Vijayakumar, K Ajayan – Indian Journal of Psychiatry 51 (4),261,2009

The authors researched on the topic “Suicide in South India: A community based study in Kerala”. The purpose of the analysis is to estimate the rates and age – specific incidence of suicide in a rural community in Kerala, under continuous observation for the last five years. Their analysis shows that the level of underreporting of suicides in rural Kerala is much less than that reported in Tamilnadu.

Lakshmi Vijayakumar- Indian Journal of Psychiatry 52(suppl1),S291,2010

She done on “Indian Research on Suicide”. The study revealed that suicidal behaviors are much more prevalent than what is officially reported. Poisoning, hanging and self -immolation were the methods to commit suicide. Physical and mental illness, disturbed interpersonal relationships and economic difficulties were the major reasons for suicide. The vulnerable population was found to be farmers, students, and women. A social and public health response in addition to a mental health response is crucial to prevent suicidal behavior in India.

### **CHAPTER III: AIM AND OBJECTIVES**

#### **Aim:**

To analyze the method adopted for suicide and age group of adolescents and women by using the Statistical data.

#### **Objectives:**

- i. To determine the most common method used in suicide case by adolescents and women in Pathanamthitta District.
- ii. To determine whether suicide rates in Pathanamthitta District, Kerala showed temporal variation from 2010 to 2019.
- iii. To estimate the suicide mortality rates in the women population in Pathanamthitta District.

## **CHAPTER IV: MATERIALS AND METHODOLOGY**

### **Materials Required:**

1. Database of suicide from District Crime Record Bureau (DCRB) Pathanamthitta,
2. MS Excel

### **Methodology:**

The number of cases reported from 22 Police Station of Pathanamthitta District is already stored in the District Crime Records Bureau of Pathanamthitta. They provided the suicide rate of people in Pathanamthitta District of 2018 and 2019. Gender, age, method adopted and reported reasons were collected in the year 2018 and 2019 are recorded. The database of children who committed suicide is also collected directly to Mastersheet.

The collected information was compiled manually and converted into tabular format and in graphical representation.

## **CHAPTER V: OBSERVATION**

Pathanamthitta District is situated in Southern part of Kerala having Area of 2,642sq.km. Under Pathanamthitta District there are 22 police stations. And there are four major wings which are controlled by District Chief of Pathanamthitta.

- District Crime Records Bureau (DCRB)
- District Crime Branch (DCB)
- Special Branch and
- Narcotic Cells

There are 7 DySP's in Pathanamathitta District. The cases reported in the 22 police stations are directly got registered into the Crime drive in the DCRB's system. All documents related to one case will be get stored and maintained in the Crime drive.

The women suicide rate during 2010 to 2019

Year	Suicide Rate
2010	68
2011	59
2012	66
2013	72
2014	47
2015	49
2016	40
2017	42
2018	116
2019	61

Table1: Suicide rate with corresponding year

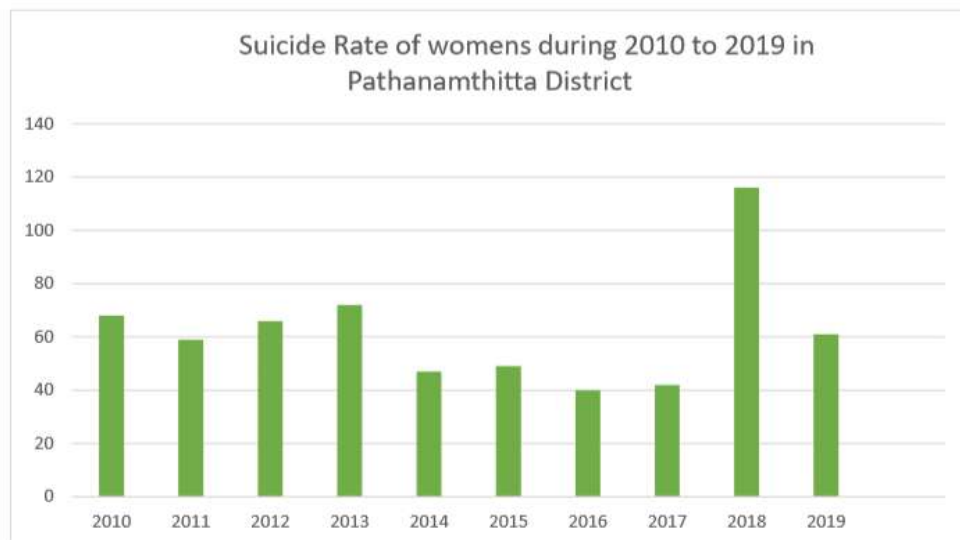


Figure 3: Suicide rate of women during 2010 to 2019 in Pathanamthitta District

The age group of women who completed suicide during 2018 and 2019

Age group	Suicide rate
20-30 years	9
31-40 years	4
41-50 year	14
51-60 years	3
61 -70 years	7
Above70 years	4

Table2: Suicide rate with corresponding age group

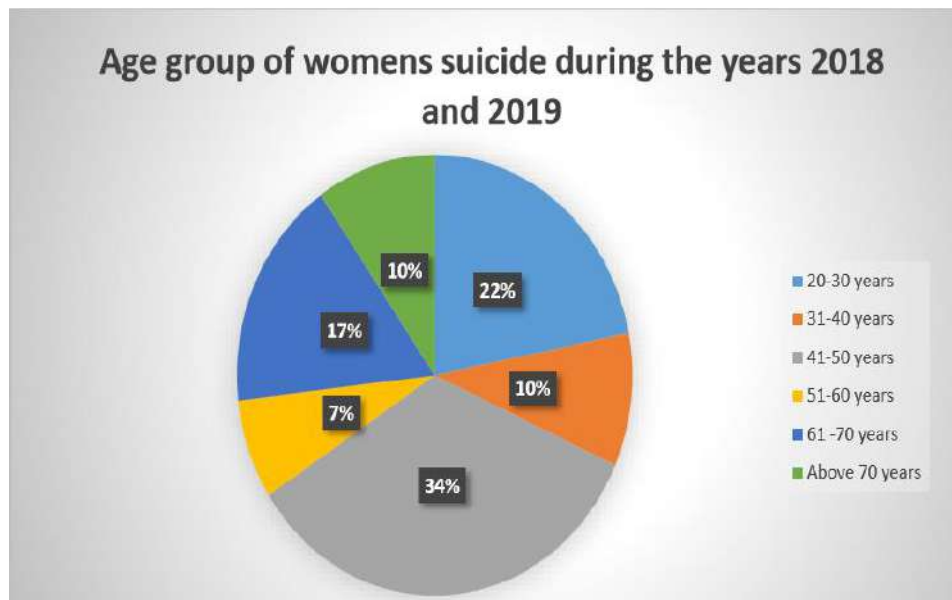


Figure 4: Age group of women suicide during 2018 and 2019

Age group wise distribution of adolescent's suicide rate during the years from 2011 to 2019

AGE GROUP	BOY	GIRL
9-12 years	0	4
13-14 years	0	6
15-17 years	9	23

Table3: Age group with respective ratio

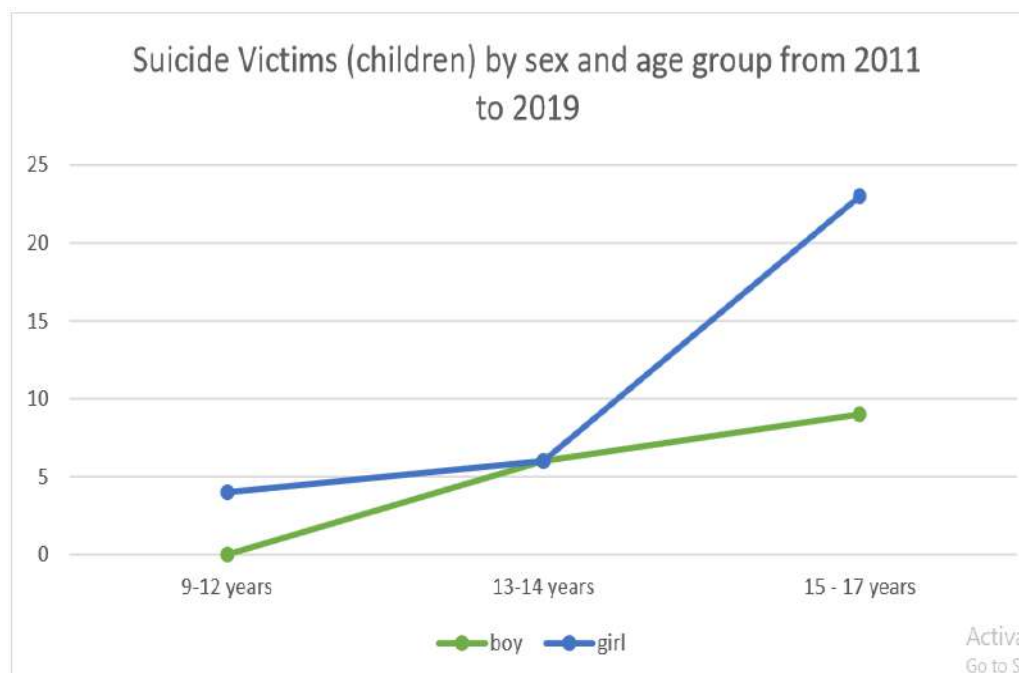


Figure 5: The suicide victims (children) by gender and age group from 2011 to 2019



The methods adopted to suicide by the suicide victims during 2018 and 2019

Sr. No.	Methods adopted for suicide	Suicide rate
1	Hanging	270
2	Poisoning	25
3	Burning	7
4	Drowning	7
5	Fell into well	4
6	Cutting vein	3

Table 4: Method adopted for suicide with suicide rate

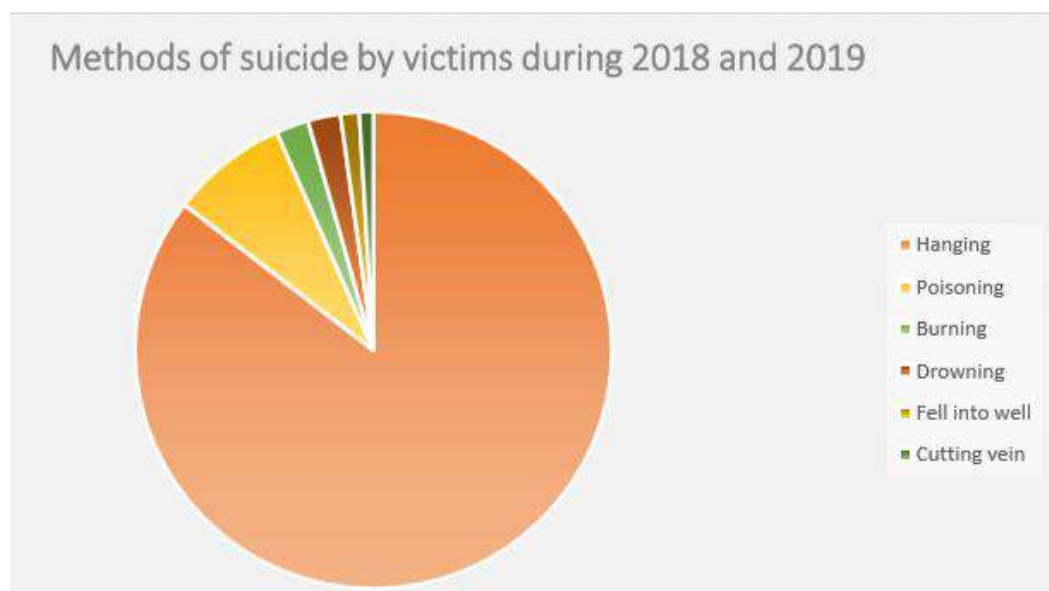


Figure 6: Methods of suicide by victims during 2018 and 2019

## **CHAPTER VI : DISCUSSION**

Some preventive measures to reduce the suicide rate in Pathanamthitta District in the future.

Preventive Measures are:

1. Recognition and treatment of Psychiatry disorders especially depression.
2. Development of community –based outreach services.
3. Public health initiatives to reduce the availability of lethal methods.
4. Authorized persons should conduct awareness programs and counselling for needy people.

In children the preventive measures to be:

1. Should conduct awareness program in schools for students, and parents.
2. The parents should listen to their children in any situations.
3. Don't be aggressive to children.
4. Remove means for self-harm.
5. Conduct life-skill classes in schools.
6. Parents should be friendly and be communicative with children.

## **CHAPTER VII: RESULT AND CONCLUSION**

### **Result:**

The mean of suicide rate of women in Pathanamthitta District is taken in between the year 2010 to 2019 is 62. By the keen observation, identified that 2018 has the highest suicide rate and 2016 has the lowest suicide rate.

Out of the reported cases the highest suicide rate of women were from the age group 41-50 years forming 34% and the lowest suicide rate of women were from the age group of 51-60 years forming 7%. The highest suicide rate of adolescents was from the age group of 15-17 years with 23 and the least suicide rate of adolescents from the age group of 9-12 years with 4.

Out of the reported 316 cases majority of them opted hanging (270) followed by poisoning. This remained true for men, women and adolescents.

### **Conclusion:**

In the present study it was done with the statistical analysis of suicide rate of women and adolescents in Pathanamthitta District. It is mainly done with the method adopted by suicide victims and their age group.

The study needs to analyze the causes for committing suicide and also can compare them with other Districts of Kerala.

## **CHAPTER VIII: REFERENCES**

1. EK Moscicki, (1994). Gender differences in completed and attempted suicide. *Annals of epidemiology*,4,152-158
2. P Nordstrom,M Samuelsson.(1995).Survival analysis of suicide risk after attempted suicide. *ActaPsychiatr Scand* , 336-40
3. RS Spicer, TR Miller (2000). Suicide acts in 8 states: incident and case fatality rates by demographics and method. *American journal of public health*.90, 1885-91
4. K Praveenlal (2001).Family suicide in Kerala: An explorative study into pattern, determinants and consequences. *Indian journal of psychological medicine*, 108-112
5. Peter Mayer ,TaherehZiaian (2002). Suicide, gender, and age variation in India: Are women in Indian society protected from suicide. *The journal of Crisis Intervention and Suicide Prevention*, 51,98
6. AL Beautrais (2003). Suicide and Serious suicide attempts in youth: a multiple –group comparison study - *American Journal of Psychiatry*, Am Psychiatric Assoc,420-36
7. CT SudhirKumar ,Rajesh Mohan, GopinathRenjith, R Chandrasekaaran (2006). Gender differences in medically serious suicide attempts: A study from South India - *Psychiatric Research* ,54,79-86.
8. CR Soman ,SSafraj ,V Ramankutty ,K Vijayakumar, K Ajayan,2009 ,Suicide in South India: A community based study in Kerala – *Indian Journal of Psychiatry* 51 (4),261
9. Suicide book.file.doc
10. <http://link.springer.com/>
11. [ncrb.gov.in](http://ncrb.gov.in)
12. [who.int/bulletin/volumes](http://who.int/bulletin/volumes)
13. <http://ourworldindata.org>
14. [ncbi.nlm.nih.gov](http://ncbi.nlm.nih.gov)