



## CLINICAL STUDY OF ATTEMPTED SUICIDE AMONG FIFTY OLDER PEOPLE.

### General Medicine

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### ABSTRACT

**BACKGROUND:** The older people in India are considered happiest as they live in well integrated surroundings and are respected in the family. However, the changing trends of family life, children leaving parents in search of job, elder abuse, being lonely, depression and lack of social support make the seniors attempt to end their life. This study attempted to know the incidence, pattern of attempted suicide, risk factors and its outcome among the older people (>60yrs) admitted in a tertiary care hospital.

**MATERIALS AND METHODS:** A prospective clinical profile of the fifty older people admitted to the hospital for having attempted suicide over five years are included to study the pattern of attempted suicide, risk factors, access to first aid, co morbid conditions, complications and outcome.

**RESULTS:** Majority of the older people (86%) were in age group of young old. Organophosphorus compound was commonly used by 70% of participants to end their life. Factors like Depression and Abuse were common precipitating factors. Many older people did not want to reveal the reason for this act of theirs. Respiratory failure was seen in 20% of the patients during treatment, with the overall mortality rate of 6%.

**CONCLUSION:** The older people attempting life is rising in India too. There is need to preserve joint family values, respect the older people in society which is their due. Counselling services and psychological support for the older people who are depressed, staying alone and are abused is the need of the hour.

### KEYWORDS

Attempted Suicide, Older People, Mental Health.

### INTRODUCTION

The older people (>60 years) when attempt suicide it becomes a serious matter of concern for the family and to the society as well. The attempted suicide is defined as "A person who has made deliberate act of self-harm consciously aimed at self-destruction, irrespective of his/her intention to die". The older people prefer not to discuss feelings of suicide ideas with family members or friends despite having strong intention to attempt life.

The older people keep requesting the clinician to let them die or give some pills so that they leave this world. The validity of such statements needs to be explored for suicide attempts in future.

The older people who attempt suicide are more premeditated and prefer for the most lethal means to end life hence the rates of completed acts of suicide is more than attempted suicide.

Older people have a higher risk of completed suicide than any other age group worldwide (1). The issues like depression, loneliness, being widower or widow, substance abuse, elder abuse and drastic changes in financial status are the risk factors in older people to attempt life.

Pesticides are commonly used by older people residing in rural India. Though it is said that easy availability of pesticides in the homes of the older people residing in rural area makes them more vulnerable and choicer of the compound to end life, it is ultimately the strong motive to end life and not mere availability. The older people during counselling though express guilt, refuse to inform the reason to attempt life as they want to maintain the dignity of their family members.

Bereavement is major risk factor in older people and is associated with attempted suicide in elderly (2). In bereavement, when grief is severe it may be associated with feeling of worthlessness, suicidal ideation or hopelessness. If hopelessness persists after remission of other depressive symptoms then it is associated with suicide attempts or completed suicide (3).

The clinicians need to be aware regarding the warning and the protective signs of attempted suicide in older people. The warning signs (4,5,6) in older people are neglect of personal care, intentional self-starvation, finalizing a will, distributing personal belongings to friends, family and charities, giving up of responsibilities and purchase of gun, while the protective factors (7) are feeling useful, achieving the goal, hobbies, successful adjustment to ageing, perceived social

support, close interpersonal relationship and high self-worthiness.

The older people who attempt suicide provide opportunities to further our awareness of the factors that contribute to suicide. In this regard the complex interaction between medical, psychological and social factors that impact upon older people's lives must be considered by the health professionals (8,9).

In Indian context, there is scarce literature and research on attempted suicide among older people (10).

The older people in India wish to maintain their dignity till end of life which is a strong protective factor against attempting life. The fast-growing economy and the children eyeing on parent property for financial gains has toll on their peaceful life. This also leads to elder abuse, which the older people accept and become prone for depression. The study on older people who have attempted suicide will lead to understanding the core issues they have in their own words, unlike the studies on completed suicide where assumptions of mental and social issues are done by means of psychological autopsy. The older people have strong intention to die when they attempt life. Many succeed in first attempt while those who do not complete the act reach the hospital. Hence, this study aims to know the clinical profile of older people admitted with attempted suicide.

### MATERIAL AND METHODS

The study included all the older people (>60yrs) admitted in critical care unit of BLDE (Deemed to be University) Shri B M Patil Medical College Hospital and Research centre, with attempted suicide from January 2013 to December 2017 irrespective of sex and type of method used to attempt life. The informed consent was taken and all the participants were assured about the confidentiality of the data. The sociodemographic data, reason to attempt life, presence of comorbid condition, time taken to reach hospital, first aid assistance, previous attempts of life, substance abuse, complications and the outcome were documented. Relevant investigations were carried out in all the patients. Stomach wash was carried out in patients with history of poisoning or drug overdose and the analysis of the stomach wash content was carried out in the Poison information and control centre of our institute. This study has got clearance from ethical committee of the institution. The patients who gave consent for consultation with psychiatrist at time of discharge were referred for diagnosis of mental illness and counselling. The mental illness was diagnosed using DSM IV criteria.

## ANALYSIS OF DATA

All the characters are summarized descriptively. For categorical data, sociodemographic data and psychological factors, the number and percentage were used in the data summaries and diagrammatic presentations. The data was analysed by IBM SPSS version 23 PC software system.

## RESULTS

A prospective analysis of fifty older people who were admitted over five years of study period with attempted suicide formed the study sample.

### AGE AND GENDER DISTRIBUTION (TABLE-1)

All the fifty patients had attempted suicide for the first time. The older people in young old age group (60 -74 years) were 43 (86%), 6 (12%) in old-old (75 to 84 Years) and 01 (2%) in very old group (>85 Years). The oldest person was a 90 years old male. The Male predominate in this study constituting 42 (84%) and females 8 (16%).

### MARITAL STATUS

The married person living with spouse attempting life were 45 (90%) while those in widowhood were 05(10%).

### TIME TAKEN TO REACH HOSPITAL

Seven (14%) older people reached hospital within one hour,39 (78%) in one to four hours and 04(8%) required more than five hours to reach hospital after having attempted suicide. The older people from nearby villages have reached late in view of non-availability of vehicles for transport and delay in noticing the incident by the family members.

### FIRST AID

Among fifty older people nine had access to first aid in their locality before being rushed to our hospital. It depends upon many factors, one of them being the timing of attempted life. If attempted in night hours they usually rush directly to tertiary care, while in day time they visit nearby health centre.

### Rural V/s urban

The older people residing in rural area attempting suicide constitute 78%.

### METHODS USED TO ENDLIFE (TABLE-2)

The common method used across all age groups to end life was consuming insecticide in 35(70%), by burns in 5(10%), partial hanging 4(8%), near drowning in 1(2%) and use of on the counter drugs or sleeping pills by 04(8%). The stomach wash content was analysed in all the patients with history of insecticide or drugs consumption in the Poison information Centre of our hospital at time of admission and the same were confirmed.

### RISK FACTORS (TABLE 3)

The factors that has led to take such a drastic step in life when analysed, it was found that the older people attempted life due to being psychologically and financially abused in 07(14%), substance abuse in 06(12%), having existing psychiatric illness in 04(08%) while newly diagnosed depression 5(10%) and Anxiety 10(20%). The number of older people who did not wish to reveal the reason were 15(30%) and 2 (4%) had discharged against medical advice.

### YEAR WISE DISTRIBUTION

In five years, maximum cases of 17(34%) were noted in the year 2015 while least cases 5(10%) in year 2017.

### COMORBIDITIES

The comorbidities that were present are Diabetes Mellitus in 20%, Hypertension in 28%, Depression in 08%, Stroke in 02%, combined multiple comorbidities in 30% and Alcohol Abuse in 12%.

### COUNSELLING

All the patients admitted were offered psychiatric counselling for which only 35(70%) gave consent. The counselling was done at time of discharge and it was found that 5 (10%) had depression and 10(20%) had anxiety which were diagnosed for the first time. The four patients who were already suffering from depression and were on treatment were also referred for counselling. The patients who succumbed and discharged against medical advice were not part of counselling process.

## COMPLICATIONS, MORTALITY AND OUTCOME (TABLE 4)

The commonest complication was respiratory failure in 10(20%) participants and all required ventilatory support. There were no repeat attempters during the study period. The mortality in this study was 3(6%). Two patients with severe burns were discharged against medical advice and their outcome was not known. The older people who had respiratory failure at time of admission had succumbed within twenty-four hours.

## DISCUSSION

The studies reveal a suicide attempt is a risk factor for completed suicide in elderly (11). As per literature it is obvious that men of all ages have a higher suicide rate than women, older men have a higher rate than any other age by sex group (12).

The male predominance which was 87% in our study, Kumar,et al (13) reported 56.8% and Packer et al (14) 70% in their studies respectively. The older people residing in rural areas attempt life in more numbers in a study by Kumar, et al (13), which is 97.3% while it is 39% in our study. The risk factor to attempt life in older people was psychiatric illness in 62% of study group by Kumar,et al (13).

The psychiatric comorbidities like depression and bipolar disorders was noted in suicide attempters by Wiktorsson et al (15). Similarly, Yang et al (16) also found that depressive disorders like major depression & dysthymic disorders were the most common diagnoses for older Taiwanese attempters. In, this study the psychiatric comorbidities were existing depression in four and newly detected depression in five older people.

The method used to end life was poisoning in 80.6%, burns or jumping in 11% and hanging in 8.3% while no case of drowning reported by Kumar et al (13). In our study it was 70%, 10% and 08% respectively and additional near drowning (2%) was seen.

Alcohol abuse or misuse leading to attempted suicide was reported in 54% by Purcell D et l (17) while it was 12% in this study.

The commonest complication that occurred at the time of admission and during treatment was respiratory failure especially among those who had consumed pesticides and with near drowning. Ventilatory support was initiated in all cases with respiratory failure.

This study adds information regarding time taken by the patients to reach hospital, accessibility to first aid and mortality which is lacking in studies published so far. The Occult Psychiatric illnesses and Elder Abuse were identified for first time in the patients.

## LIMITATIONS

The few limitations of this study are Small Sample size, follow up of cases was not done, the results may not be generalized to other places and psychiatric counselling was not carried out in all cases.

## CONCLUSION

Involvement of family members in helping to monitor the older people who have attempted life is vital in preventing another act. The motive behind the act of attempting suicide determines the act along with ease of availability of insecticides or weapons.

The instructions that should be given to the family members are to remove the organophosphorus compounds or harmful chemicals and weapons form the house, keep watch on use of anti-psychotic drugs, give more attention to comorbid conditions, spend more time with them and regular follow up with the psychiatrist. In hospital, the access to gallery or balcony, open stairs should be denied to the older people admitted with attempted life.

The clinician should make an attempt to ask directly about ideas to end life in older people living with multiple comorbidities, depression and staying alone. Though such an attempt will be challenging, it also requires skill in such communications.

Secondary prevention measures should be targeted to all the older people who attempt suicide. The preventive measures should not only treat mental disorders, it is also important to provide care at individual and community level too. The medical officers at primary care level needs to be trained to identify older people at risk and follow those who have attempted life as the older people in rural area prefer primary care

physicians for their health issues. Screening for hopelessness and suicide ideas in bereaved should be carried out by clinicians.

World suicide prevention day is observed on September 10, every year.

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**CONFLICT OF INTEREST:** Nil

#### TABLES

**Table-1. Age, sex and gender distribution**

Age (Yrs)	Male	%	Female	%
60-74	37	74	06	12
75-84	04	08	02	04
>85	01	02	00	00
Total	42	84	08	16

**Table 2 Methods used to end life**

Method	Age groups (yrs)			
	60-74	75-84	>85	%
Pesticides	29	05	01	70
Burns	04	01	00	10
Partial hanging	04	00	00	08
Tablet overdose	01	00	00	02
Near drowning	01	00	00	02
Others (Sleeping pills, Rat poison, Unknown compound)	04	00	00	08

**Table 3. Risk factors for attempted suicide**

Risk factors	No	%
Psychiatric Illness (Depression)	09	18%
Anxiety	10	20%
Substance Abuse	06	12%
Elder Abuse	07	14%
Did not wish to reveal	18	36%

**Table 4. Outcome, Mortality and Recovery**

Outcome	No	%
Complications	10	20
Death	03	06
Against Medical Advice	02	04
Recovery	45	90

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