



**Vidhyayana - ISSN 2454-8596**

An International Multidisciplinary Peer-Reviewed E-  
Journal

[www.j.vidhyayanaejournal.org](http://www.j.vidhyayanaejournal.org)

Indexed in: ROAD & Google Scholar

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**Suicidal ideation among farmers amid covid19 pandemic in  
India: A study**

**Tehseen Saleem**

Research Scholar

CT University Ludhiana

Punjab 142024

Tehseensaleem8@gmail.com

**Dr. DJ Singh**

Deptt. of Psychology

CT University Ludhiana

Punjab 142024

djsingh@gmail.com

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## Abstract

The aim of the study is to see the Suicidal ideation among farmers amid covid19 pandemic in India. The study was comparative in nature and the data was collected by using the questionnaire of suicidal ideation through survey method. The total sample of the study was 100 and among them, 50 were males and 50 were female farmers selected through random sampling. Results revealed that there is high level of suicidal ideation among female farmers as compared to males.

## Introduction

The covid19 has become now a global concern and has affected the people physically and mentally across the world. Apart from the anxiety, depression, and other mental disorders, Covid 19 is found to be related with suicidal behaviors (Sher,2020). Numerous cases was found where the individuals effected by covid 19 experienced stress and suicidal thoughts( Goyal et al,2020;Mamun and Griffiths, 2020;Sahoo et al., 2020).The rapid spread of covid19 has negatively affected general population and sub helpless population including infected patients, frontline health professionals, mentally ill patients and older adults and farmers (Teris et al 2021).The infection control measure like social distance, quarantine, lockdown, were believed effective in containing the virus, but these preventive measures also caused negative psychological response including fear of covid19, anxiety, uncertainty, post-traumatic stress disorder, depression and at worst suicidal ideation (Teris et al 2021). Unfortunately, in treating the covid19 there were still no signs of vaccine nor even evidence-based control measures to control the rapid spread of covid19. So the occurrence of suicide could reach a record high as the pandemic continuous to spread across the country (Teris et al 2021).

## Covid19 and suicidal ideation among farmers in India

With the spread of covid19 the world economy as a whole was negatively affected and production was disturbed in many business sectors (Duan,2021). The agriculture sector was also affected by these disturbances. In some regions, reductions in agriculture

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productions are expected due to passing of planting time and imposition of restrictions, employs work in this sector face the high risk of low income. Agriculture sector is known to be the sector with the high-risk rate as compared to other sectors even in pandemic time (Tomsu, 2008). Therefore, farmers are experiencing heavy economic crisis due to covid19. Due to restriction measure and covid19, the spread of its infection has seriously affected the agriculture sector which increases the risk of suicidal ideation among farmers (Bochtis,20121).

Suicidal behaviour is not new in India among farmers. Since 1995 a total 296,438 Indian famers attempt suicide(The national crime record bureau, 2019).Earlier the government has reported that in 2014 near about 5,650 farmers commit suicide and in India the rate of farmers suicide had ranged between 1.4 and 1.8 per 100,000total population (Sen gupta and Gruere,2017).It has been estimated that nearly 16000 farmers die by suicide in each year(Nagraj et al., 2014).India is an farming country and nearly 70% of population totally depend on agriculture and in 2017 agriculture provided 15.4% share to Indian economy. Around 41.49% labours are associated with agriculture in 2020.Farmers suicide accounts for 11.2% of all suicides in India. As per the study are concerned 109 farmers ending their lives during the nation worldwide lock down to tackle the spread of covid19. Several studies offered a number of conflicting reasons for farmer's suicide such as anti-farmer law, poor government policies, crop failure, lock down and covid19(schurman,2014; Das,2011).

Covid19 will adversely affect the agriculture sector and farmers in India. The sector facing a lot of problems with labourers and movement of the farm produced goods. During the lockdown several farm machines are not available for harvesting so farmers are worried about their standing crops as how to harvest. Also, the fleeing of farmers to their homes due the fear of covid19 increases the risk of suicidal ideation among farmers. Covid19 directly impacts mental health of individuals as well as population, and however infection prevention measure like lockdown effect the socioeconomic status and psychological wellbeing of farmers that increases the risk of suicidal ideation (Heremath et al,2020).A lack of

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unavailability of labours amid covid19 lockdown was also a severe challenge for farmers where they had been living with debt and had already lost one crop and are associated with psychological stress(Telegraph,2020).Pre-existing psychological stress followed by adverse life events amid covid19 may have influence the suicidal ideation. Also, acute financial distress brought on by the covid19 lockdown also leads to suicide behaviour (Sunil,2020).

Various studies has shown that farmers with serious economic losses during pandemic have become more at risk to mental health problems (Lei et al.,2020).Although there are studies examining economic effect of pandemic outbreak of farmers(Hossian et al.,2020).There are studies which investigated that socioeconomic factor plays an important role in farmers suicide during covid19 (Hossain et al.,2020).A study found that farmers are higher level of anxiety than general population and were at risk of various Psycatric diseases (Rudolphi et al.,2020).Other studies found that psycho-social factors increases the risk of suicidal ideation among farmers during pandemic( Telegraph,2020). Moreover, a continued decline of wellbeing and psychosocial health often leaves them miserable and helpless making it hard for them to manage the acute stressors, which often leading to suicidal behaviour (Merriott, 2016; Nagaraj et al., 2014). Sher,2020 found that sleep disturbance among farmers during covid19 also lead to suicide behaviour. A study found that stress related to family responsibilities and alcohol addiction also sometimes leads to suicidal ideation (Behera and Bhise,2009). Apart from this, high occurrence of depression and low level of resilience has also been observed among farmers which can leads to suicidal ideation (Deepak et al.,2019). A study found that during the pandemic, prevalence of depression, poverty and debt were the main cause of farmers suicide (Solanga,2020). Raju, (2020) identified that the examination of psychological aspect of distressed farmers revealed that suicide ideation among working people such as farmers is the outcome of a complex interaction between worker vulnerabilities (mental health problems) and stressful working and living conditions (social and environment stressors).Additionally, (Rayan and Patrick,2010) found that farmers report common characteristics not encouraging to help-seeking behaviour also results in suicidal ideation .

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## Objectives

To study the difference between male and female farmers in relation to suicidal ideation during covid19.

## Hypothesis

There is no significant difference between male and female farmers in relation to suicidal ideation during covid19.

## Methodology

The study was comparative in nature and the data was collected by using the suicidal ideation scale through survey method.

## Participants

The sample of the study was 100 farmers selected through random sampling. Among them 50 were male and 50 were females' farmers.

## Psychological tools used

Following psychological tool were employed for the study

Modified scale of suicidal ideation was developed by Miller, Norman, Bishop and Dow in 1986. It is a revised version of the suicidal ideation scale which was developed by beck in 1979. The modified suicidal ideation scale is an 18 item scale that contains 13 items from suicidal ideation and 5 additional items. In this scale each item is rated on 0-3 point scale and the rating are summed to yield a total score ranging from 0-54. This scale takes 10 minutes' to administer. The modified suicidal ideation scale has high internal consistency with cronbach alpha coefficient ranging from .87 and good item total correlation. The modified suicidal ideation scale also has test retest reliability. Concurrent validity of the modified suicidal ideation has been established.

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## Statistical tools used

T-test has been used for the study.

## Result

After the data was kept in SPSS software the researcher hypothesis was analysed by using the T-test. The result was presented in the following table.

### *Summary of t-test for difference in suicidal ideation between males and female's farmer*

Construct	Male		Female		t-test	level of significance
	N=50		N=50			
	Mean	SD	Mean	SD		
Suicidal ideation	25.82	9.17	31.94	21.25	1.87	significant at 0.01

The above table revealed that the mean score of suicidal ideations among male and female farmers are 25.82 and 31.94 respectively. The t-ratio is calculated as 1.87 with df 98 which is significant at 0.01 level. This shows that a significant difference exists between the mean scores of suicidal ideation among males and females farmers. Also, the mean scores of female farmers on suicidal ideation were found to be significantly higher than mean score of male farmers. Hence it may conclude that female farmers have more thoughts of suicide as compared to male farmers. As a significant difference was found in mean score of male and female farmers on suicidal ideation. Therefore, the hypothesis stated that "There is no significant difference between male and female farmers in relation to suicidal ideation during covid19 stands rejected.

## Discussion

The present study includes 100 participants out of which 50 were males and 50 were females. The study has involved through different age group and has different years of experience. In this study significant difference has been found between male and female farmers in relation

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to suicidal ideation during covid19. The result of the study shows that there is a significant difference on suicidal ideation between male and female farmers. It indicates that female farmers have higher suicidal ideation than male farmers. The outcome of our study entailed with the finding of victoria et al., (2018) evaluated that social, environment and individual factors are linked with suicidal thoughts among females' farmers. On the other hand, Fennell et al (2018) relate that shame and reduced help seeking in female farmers leads to suicidal ideation. Furthermore Kunde et al., (2017) indicates that relationship back down to be a key factor of suicidal ideation among female farmers. Also van et al., (2010) examined that social isolation has been shown to be one of the strongest factors of female farmers suicidal behaviour. Likewise, Anju, (2021) found that female farmers have high level of economic distress and family pressure which increases the suicidal ideation. Moreover, Manik and Pakash (2016) observed suicidal ideation among female farmers that arises from high level of psychological distress.

## Conclusion

The rate of suicidal ideation among female farmers during covid19 is quit high. Though male farmers were able to cope up with the problem but female farmers were unable to cope up, which results in high level of suicidal ideation. Our study revealed that it is because of disturbance in relationship, economic distress, family pressure and isolation that are seen in female farmers.



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