

## **Prevention, Treatment of Alcohol and Suicidal Behaviour of Commercial Sex Workers in Bengaluru: a Joint Venture of a Government Hospital and an NGO**

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### **ABSTRACT**

The purpose of this study was to explore the pattern of alcohol use, mode of suicide and extent of depression among 200 female commercial sex workers (CSWs) in Bengaluru, India and use *Karma yoga* principles of Shrimad Bhagavad Gita as a tool for Cognitive Behaviour therapy (CBT) for a period of 6 weeks to maintain abstinence after a short detoxification programme of 2 weeks and lower their depression. A 3 month follow up indicated they had maintained abstinence for that period and had not attempted suicide also.

**Keywords:** *Commercial Sex Worker, Suicide, Alcohol Dependence.*

Commercial sex work is widespread in India, although it is currently a contentious issue [1]. There are 6 million female sex workers in India, with 35.47 percent of them entering the trade before the age of 18 years [9]. There is an increasing evidence that the volume of alcohol consumed, the pattern of the drinking [2] and extent of Depression is relevant for mode of suicide in this population.[7].

There is an increasing evidence that the volume of alcohol consumed, the pattern of the drinking [2] and extent of Depression is relevant for mode of suicide in this population.[7]. CSW's undergo lot of trauma in their lives frequently showing signs of Depression, anxiety and post traumatic stress disorder leading to symptoms of worthlessness, hopelessness, extreme guilt, death wishes and finally attempting suicide. Substance abuse has seen to play a significant role in the life of these sex workers; they try to procure these for themselves as a means to cope with their psychological conditions of depression [3].

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## DESIGN

This longitudinal study was conducted at the Outpatient Department of Psychiatry, Bangalore Medical college and Research Institute , Bengaluru, India.

150 Female Commercial Sex Workers were chosen for this study.

## HYPOTHESIS

There will be a difference in the mode of suicide attempt depending on the pattern of alcohol use among the two categories of commercial sex workers.

CBT using Karma yoga principles will help them maintain abstinence and lower their depression.

### Inclusion Criteria

Written consent was taken from all the subjects.

Women above the age of 18 years up to 50 years

Women should be engaged in Commercial sex activity

They should be consuming alcohol and must have attempted suicide.

### Exclusion Criteria

Women should not have any other physical co-morbidities

Women with HIV and STD's were ruled out.

## METHODOLOGY

Women in sex trade since 1 year or less named as *Beginners* and those who were into this trade for more than 1 year onwards termed *Established*.

150 Women who were classified as Beginners and Established were chosen for this study after a written consent all of them had completed education up to 10<sup>th</sup> standard they were from a low to middle socio economic status and majority of them belonged to Hindu religion. The quantity and type of alcohol consumed by them was taken on a proforma. To ascertain the number of suicide attempts, mode of suicide and severity of Depression **Columbian Suicide History Form (CSHF)** and **Hamilton Rating scale for Depression (HAM-D)** was administered consecutively[3].

## RESULTS

70 CSW'S were identified in the Beginners group which was again subdivided into 2 groups based on drinking pattern and mode of suicide attempt.

**Age group was 18 to 28 years**

Alcohol history and pattern suggested that they were consuming Beer 2-3 bottles /day, there was no binge drinking. This group had 58 women who had attempted *suicide atleast once* in the past 1 year and the mode was drowning as per (CSHF).

While, the remaining 12 CSW's in this group drank wine 2 bottles/day, had drinking pattern from afternoon and had attempted *suicide two times* in the past 1 year through the use of poison and insecticides as per (CSHF) table I.

**TABLE I**  
Indicates the Alcohol Pattern and Mode of Suicide Attempt among Beginners CSW's Age 18-28 Years

No	ALCOHOL	DRINKING PATTERN	SUICIDE
58	BEER 2-3 BOTTLES/DAY	NO BINGE	1 ATTEMPT HANGING
12	WINE 1-2 BOTTLES/DAY	NO BINGE	2 ATTEMPTS ORAL POISON

The **80 Established CSW'S** ranged between the age of 30 to 45 years. Alcohol history and pattern suggested that they were consuming 2-3 quarters of Whisky, Rum or gin /day, there was binge drinking. There had been *3-4 attempts* in the past 2 years and the mode was hanging, unknown tablets as per (CSHF) Table II.

**TABLE II**  
Indicates the Alcohol Pattern and Mode of Suicide Attempt among Established CSW's Age 30-45

No	ALCOHOL	PATTERN	SUICIDE
80	WHISKY , RUM, GIN	2-3 QUARTERS/DAY	3-4 ATTEMPTS
		BINGE DRINKING	HANGING, UNKNOWN TABLETS

## **PRE COGNITIVE BEHAVIOUR THERAPY (CBT) INTERVENTION ASSESSMENT**

Pre CBT intervention assessment for Severity of depression was done using HAM-D .

The scores for both the groups Beginners and Established were significantly higher, the score was 16 respectively.

A short detoxification programme of 2 weeks was planned by the psychiatrist using pharmacological medicines and after that they were taken up for Cognitive Behaviour Therapy (CBT)[10].

## **COGNITIVE BEHAVIOUR THERAPY WITH KARMA YOGA**

Karma yoga principles of Shrimad Bhagvad Gita[11] that every man is destined to do some karma or work and that these women have been destined for the work they have chosen was explained to them[7].

There is no shame or guilt in the work they do but they are not destined to loose their life by consuming alcohol and atmahatya (suicide) a greatest sin according to Karma Yoga[11].

These were told in the form of stories from the puranas, especially Garuda purana (scripture of Hinduism) as a main CBT technique which lasted for 4 weeks. They were met twice a week and each session lasted for 45 minutes. These techniques were used to maintain abstinence. A three month follow up showed that there was abstinence and no suicide attempt[8].

## **POST INTERVENTION ANALYSIS**

The HAM-D scores post CBT intervention for both groups was 10 were analysed using a simple t test and the values were significant at 0.001 level which indicated that there was a significant improvement in the levels of severity of depression.

## **PRE AND POST CBT INTERVENTION HAM-D SCORES FOR BOTH THE GROUPS WITH “t” ANALYSIS**

**TABLE III**

**Indicates the Level of Significance of Pre and Post Intervention Ham-D Scores**

<b>PRE INTERVENTION</b>	<b>POST INTERVENTION</b>	<b>SIGNIFICANCE</b>
16	10	0.001 level

## **DISCUSSION**

*There was a very strong relationship between the drinking pattern and the number of years into CSW activity.*

### **ALCOHOL**

Beginners were consuming beer and wine while Established group were consuming whisky, rum and gin and binge drinking was seen.

Drinking pattern had a significant effect on the mode of suicide attempt and the number of attempts.

CBT using Karma yoga principles helped them maintain abstinence and lower their depression.

### **SUICIDE ATTEMPT**

Beginners had 1 or 2 attempts and their mode was drowning or oral poisoning.

Established group had 2-4 attempts by hanging or unknown tablet consumption

Both the groups were cautious not to use burns as a mode of attempt which was significant.

During interview, they expressed this concern that if they fail to complete suicide due to burns then their life is scarred permanently as they would not be able to carry out their commercial sex activity being their primary concern.

### **NGO**

An NGO which had referred them to our Government Hospital for treatment of Alcohol and Suicide prevention followed up the cases and later appointed them as “OUT REACH WORKERS” to help identify and counsel the CSW’S who were into alcohol and depression to seek the help for Treatment and Prevention modules for CSW’s.

### **OUT REACH WORKERS**

Nearly 150 CSW’S who have quit alcohol have been appointed as outreach programmers in various areas of Bengaluru through the NGO and they create awareness about Alcohol and it’s ill effects through organising street plays, dance- drama etc.

Out Reach workers create awareness about diseases like HIV, AIDS, STD’s treatment for the same. ART treatment etc.

Hygiene required for a sexual worker.

Use of protection methods for safe sex.

## MAJOR FINDINGS

The Beginners Commercial Sex workers group consumed Beer and wine and had 1 -2 suicide attempts, while Established Commercial Sex workers group consumed whisky, rum ,gin and had 2-4 suicide attempts which was different from the Beginners group. Cognitive behaviour therapy using karma yoga principles was taken up for both the groups and this helped them maintain abstinence and the severity of depression[6] had also lessened with no attempts on life which lasted till a 6 month follow up.

## CONCLUSION

This study enhanced the hypothesis that there is a strong relationship between the pattern of alcohol and mode of suicide attempt among female commercial sex workers.

HAM-D scores post CBT had a significant decrease in the scores [10] in both the groups indicating the decrease in the severity of depression.

After 6 week of CBT using Karma yoga principles, they maintained abstinence.[11]

A follow up of 3 months duration ensured they were abstinent from alcohol and had not attempted on life during that period.

Despite the differences in the pattern, type of alcohol consumption and mode of suicide among the Beginners and Established categories of Commercial sex workers, the Cognitive Behaviour Therapy with karma yoga principles was effective in maintaining abstinence and lowering depression suggested by no further suicide attempts among both the groups.

## LIMITATIONS

The sample was mainly from the urban areas and those who visited the Outpatient unit of the psychiatry department.

Information revealed during the interview was taken on face value there was no other method of cross verification.

## DISCLAIMER

There was no funding received for this study from any agency.

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