

## Research Report

# CHANGE IN ATTITUDE TOWARDS SUICIDE WITH CURRENT UNDERGRADUATE TRAINING IN PSYCHIATRY: A CROSS-SECTIONAL STUDY

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### ABSTRACT

**Background:** Teachers in the field of psychiatry has the responsibility to impart changes in students' attitude towards important areas of the subject. Suicide is the psychiatric emergency that a primary care practitioner is most likely to encounter in day to day practice. In this cross-sectional study, we looked into the change in the attitude of an undergraduate student towards suicide with his/her training in psychiatry with the present undergraduate curriculum. **Materials and Methods:** We recruited undergraduate medical students doing their MBBS course from a medical college of South India. Their responses to Eskin's Attitudes towards Suicide Scale (E-ATSS) and Eskin's Social Reactions to Suicidal Persons Scale (E-SRSPS) were collected. The students were divided into groups of students completed undergraduate training in Psychiatry and those who are yet to get exposed to it. Responses in E-ATSS and E-SRSPS from both groups were compared. **Results:** The overall attitude of students towards suicide and suicidal person were favourable compared to many previous studies. There was a significant difference in the factor 'suicide as a sign of mental illness' when responses from both groups were compared.  $2.72 \pm 1.11$  in the exposed group compared to  $3.16 \pm 1.11$  of unexposed group.  $p$ -value  $< 0.001$ . Also, there was a significant difference in responses to the disapproval of suicidal disclosure.  $2.83 \pm 0.65$  in the exposed group and  $2.67 \pm 0.67$  in the unexposed group. ( $p$ -value - 0.01). **Conclusion:** The current undergraduate medical curriculum by Medical Council of India is successful in bringing attitude change in some important domains of the subject of suicide. Domains remain under-covered by the curriculum should be looked into in the future curriculum revisions.

**Keywords:** undergraduate, medical student, curriculum, attitude, suicide

### INTRODUCTION

Medical Council of India (MCI) rolled out the new competency-based curriculum for undergraduates in India in 2018 after many debates and discussions. It will be tried and tested from the academic year of 2019 onwards. The new curriculum aims to make a competent practitioner out of Indian medical graduate

(IMG) than a subject expert. It focuses on the change in knowledge attitude and practice. Psychiatry has been allotted 19 topics and 117 outcomes. This is almost equal to that of community medicine (20 topics and 107 outcomes).<sup>1</sup>

Were we able to bring about those competencies in psychiatry in the current curriculum? How would that

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have affected students' attitude towards various psychiatric conditions? How would that have affected their practice of modern medicine? What influence might that have had on their patient and in the end society as a whole? Yadav T et al. (2012)<sup>2</sup> in a study conducted among 452 undergraduate medical students in India opined that their attitude would affect the quality of service they provide to these patients and their families. It may also influence how individuals seek professional help for psychiatric problems. Many studies have reported undergraduate training to be a critical period for changing the attitudes of medical students toward mental illness.<sup>3,4</sup> Practice of mental health demands destigmatising attitude towards illness and the patient. Suicide is a common psychiatric emergency. About 800000 suicide deaths occur every year all over the world, to which India contribute to 17% of them.<sup>5</sup> So it's of utmost importance for IMG to be competent enough to handle suicidality, which has many social, religious and biological dimensions. For that, the right attitude towards a condition like suicide is required. Stigmatising attitudes of health care professionals towards mental illness can impede treatment provided for patients suffering from psychiatric problems.<sup>6</sup>

N. Nebhimani et al.<sup>7</sup> in their study among final year medical students in Haryana, found that only one-third of the students had favourable attitudes towards suicide attempters. M. Nebhimani et al.<sup>8</sup> had conducted a similar study among nursing students and found favourable attitudes towards suicide attempters in the majority of students. It should be noted that nursing syllabus gives allots more time and space for behavioural science. Poreddi et al.<sup>9</sup> concluded that an important proportion of medical and nursing students have negative attitudes toward mental illness. It is necessary to review and adapt the current curriculum to favour the positive attitude of future professionals toward people with various types of mental health issues.

Rishi Desai et al. in 2019<sup>10</sup> had conducted a six month follow up study among undergraduate students in western India regarding their attitude towards psychiatry. They found significant improvement in positive attitudes and a reduction in negative attitudes. Naveen Grover et al.<sup>11</sup> in 2019 studied attitude towards psychiatry a group of 235 nursing students in Delhi.

They also found improvement in attitude towards psychiatry after one-month psychiatry posting. But in these studies, the same group of students are exposed to the same scales before and after posting. This can lead the students to anticipate and pick up points related to the purpose of the study during the training period. Jilowa et al.<sup>12</sup> compared attitude towards psychiatry in second-year students and interns, and they found more favourable attitudes in second-year students compared to interns! They attribute this unfavourable outcome to a negative attitude towards psychiatry among teachers of other medical specialities.

Few studies in India have addressed a change in attitude towards suicide with undergraduate psychiatry training. We had attempted to assess the sufficiency of the current undergraduate curriculum in inculcating attitude change using attitude towards suicide as an indicator. Thus, this investigation aimed to test whether or not exposure to psychiatric training will lead to changes in attitudes towards suicide and suicidal persons in Indian medical undergraduates.

## MATERIALS AND METHODS

This descriptive cross-sectional study was conducted at P.K. Das Medical College, Vaniyankulam, Kerala, situated in rural South India. Institutional ethics committee clearance was taken. We recruited undergraduate medical students doing their MBBS course who obtained admission before the academic year of 2019. So, all students following the new curriculum were excluded. After obtaining informed consent, sociodemographic details and their responses to Eskin's Attitudes towards Suicide Scale (E-ATSS) and Eskin's Social Reactions to Suicidal Persons Scale (E-SRSPS) were collected. Sociodemographic pro forma included age, gender, history of mental illness and history of suicide attempts.

MBBS curriculum includes two weeks of clinical posting and 20 hours of lecture classes in Psychiatry. We divided the students into groups of students completed undergraduate training in Psychiatry [Exposed] and those who are yet to get exposed to it [Unexposed]. Responses in E-ATSS and E-SRSPS were compared using appropriate statistical methods.

### **Eskin's Attitudes towards Suicide Scale**

Eskin's Attitudes towards Suicide Scale (E-ATSS) is a

validated instrument used for quantitative assessment of attitude towards suicide. It consists of 24 statements about students' opinions and attitudes towards suicide and psychological issues. Participants responded to these statements on a 5-point Likert scale ranging from "Completely disagree (1)" to "Completely agree (5)". These 24 items give information under six factors. Factors are acceptability of suicide, punishment after death, suicide as a sign of mental illness, communicating psychological problems, hiding suicidal behaviour and open reporting and discussion of suicide. Total score under each subscale is calculated by summing the total score of all items under that factor and then dividing it by the number of items. The subscale scores range from 1 to 5, higher scores indicating higher levels of subscale content.

### **Eskin's Social Reactions to Suicidal Persons Scale**

Eskin's Social Reactions to Suicidal Persons Scale (E-SRSPS) measures attitude towards a suicidal person. Items are framed as statements about an imaginary friend who is suicidal. There are a total of 20 items under four factors, i.e., social acceptance, helping the suicidal person and disapproval of suicidal disclosure and emotional involvement. Total score under each subscale is calculated by summing the total score of all items under that factor and then dividing it by the number of items. The subscale scores range from 1 to 5, higher scores indicating higher levels of subscale content.

## **RESULTS**

Out of the total 453 students, 287 students were in the unexposed group and 166 in the exposed group. There were 313 females in the unexposed group and 148 in the exposed group.

We analysed data using SPSS software. Independent sample t-test was conducted for comparing responses from two groups.

### **1. Attitude towards suicide:** [Table 1]

Acceptability of suicide scores was almost similar in both groups. So were responses to questions related to punishment after death. There was a significant difference in the factor 'suicide as a sign of mental illness' when responses from both groups were compared. Regarding communicating psychological problems, again, both groups responded almost similarly. Coming to hiding suicidal behaviour, both groups had similar

responses. Related to open discussion of suicide also responses from both groups did not have any significant difference in their attitudes.

### **2. Social reactions to suicidal person** [ Table 2]

In social acceptance, both groups responded similarly. In helping the suicidal person also responses were similar.

There was a significant difference in responses to the disapproval of suicidal disclosure. Both groups responded similarly in emotional involvement with a suicidal person.

## **DISCUSSION**

The sample was taken from a single institution approved by medical council of India. All the participants had enough attendance in classes as per the university requirement. Classes were conducted regularly and had enough faculty strength. So, both groups can be studied in terms of changes happening after a particular intervention, here exposure to psychiatry clinics and lecture classes. Of the total 453 students participated in the study, 313 were females (68%). This is in line with the recent trend of more female students preferring medicine as their career choice. [Rishad Khan et al. 2020]<sup>13</sup>

### **Attitude towards suicide and social reactions to the suicidal person**

In factors, communicating psychological problems, hiding suicidal behaviour, social acceptance of the suicidal person and helping suicidal person both exposed and unexposed group showed favourable attitudes. Nebhimani et al.<sup>7</sup> had found the majority of students had an unfavourable attitude in the group from Rajasthan they subjected to study. This can be a reflection of a high literacy rate and comparatively less stigma towards mental health issues in the state of Kerala.<sup>14</sup> The fundamental question asked in this study was whether we could bring about positive changes in the attitude of students in crucial mental health problem like suicide with our present undergraduate curriculum. Our study showed significant attitude change in viewing suicide as a sign of mental illness. Students exposed to psychiatry were seeing suicide more as a sign of mental illness compared to students in the unexposed group. This is a very positive finding because the more primary care physician sees suicidal acts as a sign of

Table 1. Comparison of mean responses given by students to Eskin's Attitudes towards Suicide Scale (E-ATSS)

| Factors in Eskin's Attitudes towards Suicide Scale (E-ATSS) | Subjects who had training in Psychiatry (N=166) (mean $\pm$ SD) | Subjects who did not have training in Psychiatry (N=287) (mean $\pm$ SD) | p-value** |
|---|---|--|-----------|
| Acceptability of suicide                                    | 1.43 $\pm$ 0.50   | 1.46 $\pm$ 0.51  | 0.60      |
| Punishment after death                                      | 2.86 $\pm$ 1.19   | 2.95 $\pm$ 1.19  | 0.43      |
| Suicide as a sign of mental illness                         | 2.72 $\pm$ 1.11   | 3.16 $\pm$ 1.11  | 0.00*     |
| Communicating psychological problems                        | 4.20 $\pm$ 0.81   | 4.26 $\pm$ 0.73  | 0.42      |
| Hiding suicidal behaviour                                   | 2.82 $\pm$ 1.01   | 2.69 $\pm$ 1.06  | 0.20      |
| Open reporting and discussion of suicide                    | 3.07 $\pm$ 0.93   | 2.97 $\pm$ 1.05  | 0.28      |

\*p<0.001, \*\*independent sample t-test

Table 2: Comparison of mean responses given by students to Eskin's Social Reactions to Suicidal Persons Scale (E-SRSPS)

| Items of Eskin's Social Reactions to Suicidal Persons Scale (E-SRSPS) | Subjects who had training in Psychiatry (N=166) (mean $\pm$ SD) | Subjects who did not have training in Psychiatry (N=287) (mean $\pm$ SD) | p-value* |
|---|---|--|----------|
| Social acceptance   | 4.25 $\pm$ 0.68   | 4.34 $\pm$ 0.60  | 0.11     |
| Helping   | 4.25 $\pm$ 0.56   | 4.28 $\pm$ 0.53  | 0.59     |
| Disapproval of suicidal disclosure                                    | 2.83 $\pm$ 0.65   | 2.67 $\pm$ 0.67  | 0.01*    |
| Emotional involvement   | 3.60 $\pm$ 0.73   | 3.79 $\pm$ 0.72  | 0.97     |

\*p<0.001, \*\*independent sample t-test

mental illness the more is the chance, he/she will guide the patient to seek help from a mental health professional.<sup>15,16</sup> Guiding patients to mental health services may not be enough, but also help-seeking is crucial for successful prevention and treatment of people with suicidality.<sup>17,18</sup>

Another attitude change we observed was disapproval of suicidal disclosure. Students exposed to psychiatry scored had significantly low compared to the unexposed group. This is another positive sign that with exposure to psychiatry education students tend to approve suicidal disclosure more. This is a critical issue because disapproval of suicidal disclosures during medical or psychiatric examination and/or risk assessment may discourage patients from seeking mental health services. As stated above, the availability of and referral to such services together with the willingness to seek is the backbone of suicide prevention.<sup>19,20</sup>

Acceptability of suicide, open reporting of suicide, communicating suicidal problems, hiding suicidal behaviour and emotional involvement with suicidal person showed no significant change in responses from both groups despite the score being unfavourable.

These factors can be considered basic personal attitudes towards life and existential issues, and hence they may not be amenable to change through simple exposure to psychiatry education.

Contrary to the findings of Jilowa et al. [2018]<sup>12</sup>, we did not observe any worsening of attitudes from favourable to unfavourable in any of these factors as the undergraduate course progress. This is another positive sign.

### Limitations and future directions

We did not take factors like gender and religiosity in this study for analysis. Also, we didn't take their inherent differences in attitude towards suicide. Although we detected meaningful changes in two subdimensions of suicidal attitudes between medical students exposed and not exposed psychiatry education, our data from this cross-sectional study design do not permit us to draw causal inferences. Other factors than exposure versus non-exposure to the psychiatric curriculum (such as differential exposure to material in social media, mental health issues, experiences in other departments than psychiatry and mental health service use) may have caused observed changes. Future studies

may benefit from controlling for these potential confounding variables.

### Conclusion

The current undergraduate medical curriculum by Medical Council of India is successful in bringing attitude change in some important domains of the subject of suicide. But many other domains remain under-covered by the curriculum. Future committees should have their focus on this.

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### Conflict of interest:

None declared.

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