

## An Insight into the Minds of Future Doctors Regarding Mental Health: A Cross-Sectional Study

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### Abstract

*Background:* Negative attitude of interns toward psychiatry has been highlighted by multiple studies all over the world and there has been significant education about mental illnesses at various stages of under graduation in the recent times. The objective of this study is to identify the situation in this region by studying the attitude of interns toward various areas of psychiatry and to study the gender differences if any. *Objectives and Methodology:* Aim was to assess the attitude of medical interns towards psychiatry and to know the gender differences in the attitude. This was a cross-sectional study. Participants consisted of interns working in a private medical college and hospital. Subjects were given specially designed socio-demographic proforma and ATP-30 questionnaire which is a five-point attitude scale for assessing the attitude. The data collected was analyzed with the help of SPSS version 16. *Result:* The sample consisted of 84 subjects of which 34 were males and 50 were females. In total, 90.5% (n=76) subjects reported to have positive attitude towards psychiatry. Female interns had more positive attitude than male. *Conclusion:* Even though the interns overall shared a positive attitude towards psychiatry. Adequate modification is still required in the existing medical curriculum by encouraging more exposure to the subject. More number teaching sessions is very much essential for improving the attitude of tomorrow's doctors towards psychiatrists and mental illnesses so to fight stigma and eventually promote the human rights of the mentally ill.

**Keywords:** Interns; Mental Disorders; Psychiatry; Social Stigma.

### Introduction

WHO defines health as a "state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity" [1]. But still, the mental health has always been subjected to negligence and undue suppression. Several studies done worldwide have confirmed the high levels of discrimination and ignorance toward mentally ill amongst health professionals [2-5]. Amongst medical students, studies have shown a mixed scenario some pointing toward positive attitude [6,7]. While many others pointing toward a more negative one [8,9]. In

India, the problem of negative attitude toward psychiatry (ATP) is on a higher side because of the existing stigma toward psychiatric illnesses in the society at large and also in other health care professionals [10] and more religious, less scientific, supernatural causal and superstitious treatment approaches for mental illness, more so in rural areas [11].

Our medical curriculum at undergraduate level does not contain enough importance to psychiatry teaching classes and clinical postings. Hence, a MBBS doctor educated in India has only a limited exposure to clinical psychiatry. In Karnataka,

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RGUHS recommends only 15 days of clinical posting under psychiatry in the second year of under-graduation and 15 days of psychiatry posting as part of compulsory rotational internship programme. Many previous studies have been done regarding attitude of interns toward psychiatry highlighting the importance of studying this area in detail across different regions of India. The results of those studies have been miserably low, majority of them pointing toward a preoccupied negative attitude towards psychiatry [12-15]. One of the various reasons to this miserable negative picture could be the disinterested way the psychiatry subject is introduced in the undergraduate curriculum.

Even though the government of Karnataka has brought so many programs like District Mental Health Program for educating the public with regard to mental illnesses, a lot of hindrances exist at the medical practitioner's level too with regards to referral of patients to psychiatrists. Hence, better way is to bring about the change right from the beginning of the MBBS course. This beginning in professional medical field is the period of internship. Relevant clinical knowledge of psychiatry, if imparted to students, can help them in other branches of medicine too and the stigma toward psychiatry will also be taken care of. It is of great importance to know the attitude of interns toward psychiatry as these interns are currently involved indirectly or in the future, directly toward the delivery of healthcare. If the doctor himself has any misconception or the negative attitude about psychiatric illnesses, then it will be harmful not only to the psychiatric patients, but also to the society because a common man will always listen and get influenced by what these young doctors convey the message to them. In the current scenario, a large number of patients suffering from psychiatric illnesses are not receiving the expert care either due to lesser availability of trained professionals or lack of knowledge about existence of mental illnesses.

As of now, there are no such studies done in northern part of Karnataka city specifically in our area, assessing the attitude of interns towards psychiatry and also the gender differences in the ATP. This study attempts to evaluate the attitude of interns and improve if found deficient, an utmost necessity as this problem can only be tackled by having a strong motivation along with a positive outlook toward mental illnesses.

#### **Aims**

- To study the attitude of interns towards psychiatry.

- To study the attitude in various aspects related to psychiatry like psychiatrists, psychiatric illnesses, psychiatric hospitals and treatments.
- To assess the gender differences if any.

#### **Methods**

It is a cross-sectional study conducted at a tertiary care teaching medical college and hospital in our city. It was carried out during July-August 2016. The study involved the distribution of study questionnaire to the participants which included the graduates currently undergoing their compulsory rotatory residential internship.

#### **Participants**

A non-probability convenience sample with a quantitative descriptive method was used. Selection criteria for participants required that they should fulfill the inclusion and exclusion criteria. A total of 89 students were enrolled in the study, but 5 questionnaires were subsequently discarded as they were incomplete. Hence, 84 completed questionnaires were analyzed.

#### **Inclusion Criteria**

1. Age between 21-30 yrs.
2. All interns working in private medical college and hospital.
3. Those who give written informed consent.

#### **Exclusion Criteria**

1. Not giving informed consent.

#### **Instruments**

##### *Demographic data survey instrument*

The socio-demographic form elicited information on several aspects of the participants' background: age, gender, religion, residential background, personal or family history of mental illness and few other questions which are not covered in ATP-30 scale whether one accepts a psychiatric patient as their life partner, whether psychiatrists turn insane after some period of time and few others, were also included as in Table 5.

**ATP-30 Questionnaire**

It consists of 30 items [16] that has been validated and standardized in the UK. It has adequate construct validity, face validity, and high test retest reliability. It has been widely used in studies on medical students [17]. It covers eight related attitudinal areas pertaining to psychiatry as depicted in table 3 and 4. It examines the viewpoint of a participant towards multiple areas of psychiatry. Responses are expressed from agreement or disagreement for each statement on a 5-point Likert scale ranging from 1 (agree strongly) to 5 (disagree strongly). Fifteen items are positively phrased and reverse scored. The total score for each respondent is the sum of the scores on all the thirty statements. Higher scores are taken as positive attitude whereas lower score is taken as negative as neutral attitude coincides with score of ninety which is taken as cut-off [16,17].

**Procedure**

Both the data survey instrument and ATP-30 questionnaires were distributed to the interns individually at various times. One author verbally explained the aims and method of the research and how to complete the questionnaires. The

willing participants then completed both questionnaires.

**Ethical Considerations**

Permission was obtained from the institutional ethical committee where the study was conducted. Participants were informed of the study's aims and procedures so that they could decide if they were willing to participate. It was explicitly explained that students' responses would have no influence on their postings in psychiatry. Written informed consent was taken from all study subjects, before enrolment in the study. After students agreed to participate verbally the researcher gave them the confidential questionnaire. Data collection tools contained no identifying information and thus kept individual responses confidential.

**Statistical Analysis**

The data were tabulated in Microsoft excel and analyzed using SPSS software version 16. Results were presented in narratives and tables. Descriptive (frequency and percentage) and inferential statistics (chi-square test) were used to interpret the data. Statistical significance was assumed at  $p < 0.05$ .

**Table 1:** Socio-demographic Details (N-84)

Variable	Numbers (%)
Gender	Male 34 (40.5%)
	Female 50 (59.5%)
Religion	Hindu 73 (86.9%)
	Muslim 09 (10.7%)
	Others 02 (2.4%)
Residential Background	Village 17 (20.2%)
	Taluk 23 (27.4%)
	District 40 (47.6%)
	NRI 4 (4.8%)

**Table 2:** Correlation of socio-demographic parameters with attitude towards psychiatry

Gender	Attitude Towards Psychiatry		Chi-Square Value
	Positive (>90)	Negative (<90)	
Male	26(76.5%)	08(23.5%)	$X^2(1) = 13.00$ , Chi-square = 15.56, $p < 0.001$
Female	50(100%)	00(0%)	
Religion:			$X^2(2) = 20.09$ , Chi-square = 9.57, $p = 0.012$
Hindus	67(91.8%)	06(8.2%)	
Muslims	09(100%)	00(0%)	
Others	0(0%)	02(100%)	
Residential Background:			$X^2(3) = 4.333$ , Chi-square = 4.08, $p = 0.216$
Village	15(88.2%)	02(11.8%)	
Taluk	23(100%)	0(0%)	
District	34(85%)	6(15%)	
NRI	04(100%)	0(0%)	

## Results

Total number of participants was 84 in which 50 were females and 34 were males. Other socio-demographic details are as in Table 1. Total 90.5% (N=76) of the participants showed positive attitude towards psychiatry and 9.5% (N=08) had negative attitude towards psychiatry. Mean score is 109.58 (SD=13.13). Among them, all females and 76.5% of males showed positive attitude towards psychiatry and the difference implying more number of females have positive attitude, was significant ( $p < 0.001$ ) as depicted in Table 2.

Mean score for female participants and male participants was 105.98 (SD=13.45) and 100.99 (SD=14.24) respectively. Minimum and maximum score for males was 81 and 130 respectively.

Minimum and maximum score for females was 75 and 139 respectively. Mean age is 23.08 (SD=0.93) Minimum age 22 years and maximum age 25 years. None of the participants reported of having personal or family history of psychiatric illnesses. When we evaluated whether all religions had equal attitude towards psychiatry, it was found that Hindus had more positive attitude towards psychiatry ( $p < 0.05$ ) as depicted in Table 2. Further analysing about equality of the attitude among the residential background, we did not find any significant difference as p value was more than 0.05. The responses for the various questions on ATP-30 are as per the Table 3, 4 and 5.

We tried to analyze the gender difference in with respect to their attitude towards patients suffering from mental illnesses. Seventy six percent of female interns compared to nearly fifty nine percent of male

**Table 3:** Gender differences with respect to attitude towards psychiatry patients, psychiatry teaching, psychiatric illnesses and psychiatrists:

Questions	ATP-30 Responses						P-Value
	Agree N (%)	Male N=34 Neutral N (%)	Disagree N (%)	Agree N (%)	Female N=50 Neutral N (%)	Disagree N (%)	
<b>Psychiatry Patients</b>							
If we listen to them, Psychiatric patients are just as human as other people.	20(58.8)	10(29.4)	4(11.8)	38(76)	4(8)	8(16)	0.045
Psychiatric patients are often more interesting to work with than other patients.	26(76.5)	4(11.8)	4(11.8)	43(86)	4(8)	3(6)	0.522
<b>Psychiatry Teaching</b>							
Psychiatric teaching increases our understanding of medical and surgical patients.	4(11.8)	6(17.6)	24(70.6)	0(0)	12(24)	38(76)	0.049
The majority of students report that their Psychiatric undergraduate training has been valuable.	12(35.3)	10(29.4)	12(35.3)	15(30)	5(10)	30(60)	0.032
These days Psychiatry is the most important of the curriculum in medical schools.	22(64.7)	8(23.5)	4(11.8)	45(90)	0(0)	5(10)	0.001
Psychiatry is so amorphous that it cannot really be taught effectively.	20(58.8)	12(35.3)	2(5.9)	39(78)	6(12)	5(10)	0.040
<b>Psychiatric Illnesses</b>							
Psychiatric illness deserves at least as much attention as physical illness	6(17.6)	20(58.8)	8(23.5)	3(6)	16(32)	31(62)	0.001
It is interesting to try to unravel the cause of a psychiatric illness.	8(23.5)	8(23.5)	18(52.9)	20(40)	21(42)	9(18)	0.004
<b>Psychiatrists</b>							
Psychiatrists talk a lot but do very little.	10(29.4)	4(11.8)	20(58.8)	4(8.0)	6(12)	40(80)	0.04
Psychiatrists seem to talk nothing but sex.	16(47.1)	6(17.6)	12(35.3)	12(24)	19(38)	19(38)	0.052
Psychiatrists tend to be as stable as the average doctor.	10(29.4)	16(47.1)	8(23.5)	3(6)	16(32)	31(62)	0.001
Psychiatrists get less satisfaction from their work than other specialists.	24(70.6)	4(11.8)	6(17.6)	40(80)	8(16)	2(4)	0.129
There is very little that Psychiatrists can do for their patients.	16(47.1)	12(35.3)	6(17.6)	23(46)	23(46)	2(4)	0.119
At times it is hard to think of psychiatrists as equal to other doctors.	24(70.6)	6(17.6)	4(11.8)	44(88)	6(12)	0(0)	0.026

interns agreed that psychiatric patients are just as human as other people and twenty nine percent of male interns were neutral to this question and result was significant( $p<0.05$ ). As depicted in Table 3, overall the attitude of female interns compared males have more negative perception towards psychiatry teaching and the difference is significant( $p<0.05$ ). When asked questions related to psychiatric illnesses, 62% of females compared to 23.5 % of males disagree that psychiatric illness deserves similar attention as

physical illness( $p<0.05$ )and 52.9 % of males compared to 18% of females does not think it is interesting to try to unravel the cause of a psychiatric illness( $p<0.05$ ).

Nearly 29% of male interns compared to 6% of female interns still perceive whether psychiatrists tend to be at as stable as the average doctor. 88% of female interns compared to 70.6% of male interns hesitate to consider psychiatrists as equal to other doctors. Regarding perception about psychiatric

**Table 4:** Gender differences with respect to attitude towards psychiatry treatments, psychiatry as career, psychiatric hospitals and psychiatry knowledge

Questions	ATP-30 Responses						P-Value
	Agree N (%)	Male N=34 Neutral N (%)	Disagree N (%)	Agree N (%)	Female N=50 Neutral N (%)	Disagree N (%)	
<b>Psychiatric Treatments</b>							
It quite easy for me to accept the efficacy of Psychotherapy	4(11.8)	10(29.4)	20(58.8)	0(0)	2(4)	48(96)	0.00
The practice of psychotherapy basically is fraudulent since there is not strong evidence that it is effective.	12(35.3)	12(35.3)	10(29.4)	4(8)	12(24)	34(68)	0.001
With the forms of therapy now at hand most Psychiatric patients improve.	12(35.3)	12(35.3)	10(29.4)	21(42)	19(38)	10(20)	0.658
Psychiatric treatment causes patients to worry too much about their symptoms.	20(58.8)	12(35.3)	2(5.9)	35(70)	15(30)	0(0)	0.173
In recent Years Psychiatric treatment has become quite effective.	26(76.5)	0(0)	8(23.5)	38(76)	6(12)	6(12)	0.058
<b>Psychiatry as career choice</b>							
Psychiatry is unappealing because it makes so little use of medical training.	10(29.4)	6(17.6)	18(52.9)	0(0)	10(20)	40(80)	0.00
I would like to be a Psychiatrist.	12(35.3)	8(23.5)	14(41.2)	2(4)	25(50)	23(46)	0.00
On the whole, People taking up psychiatric training are running away from participation in real medicine.	8(23.5)	12(35.3)	14(41.2)	2(4)	7(14)	41(82)	0.00
If I were asked what I considered to be the three most exciting medical specialties, psychiatry would be excluded.	20(58.8)	2(5.9)	12(35.3)	28(56)	11(22)	11(22)	0.09
The practice of Psychiatry allows the development of really rewarding relationships with people.	22(64.7)	4(11.8)	8(23.5)	45(90)	0(0)	5(10)	0.004
<b>Psychiatric Hospitals</b>							
Psychiatric hospitals have a specific contribution to make to the treatment of the mentally ill.	18(52.9)	6(17.6)	10(29.4)	41(82)	9(18)	0(0)	0.000
Psychiatric hospitals are little more than prisons.	8(23.5)	8(23.5)	18(52.9)	4(8)	20(40)	26(52)	0.07
<b>Psychiatry Knowledge</b>							
Psychiatry is respected branch of medicine.	8(23.5)	14(41.2)	12(35.3)	0(0)	4(8)	46(92)	0.000
Psychiatry has very little scientific information to go on.	6(17.6)	14(41.2)	12(41.2)	3(6)	31(62)	16(32)	0.101
Psychiatry is so unscientific that even Psychiatrists can't agree as to what its basic applied sciences are.	14(41.2)	14(41.2)	6(17.6)	25(50)	20(40)	5(10)	0.559
Most of the so- called facts in Psychiatry are really just vague speculations.	18(52.9)	6(17.6)	10(29.4)	44(88)	6(12)	0(0)	0.000

treatments, 80% of the interns are not ready to accept the efficacy of psychotherapy and 19% still believe that the practice of psychotherapy basically is fraudulent doubting the evidence for its effectiveness but majority disagree for this statement with females having positive perception than male about psychotherapy. Even though 44% of the interns do not want to be psychiatrists and more of male interns compared to females want to perceive psychiatry as their career choice as in Table 4, sixty nine [69%] percent of interns do not agree with the statement that psychiatry is unappealing because it makes so little use of medical training and nearly

80% of the subjects say that the practice of psychiatry allows the development of really rewarding relationships with people. 69% of the interns (females > males) think psychiatry is not a respected branch of medicine and 74% of the interns feel that most of the so-called facts in psychiatry are really just vague speculations (Table 4). Fifty-five percent of the interns disagree for the statement that psychiatrists take up the course because they themselves are deviant from norms and 48% of females compared to 23.5% of males are ready to accept a person with family history of psychiatric illness as their life partner as in Table 5.

**Table 5:** Gender differences in the responses to the questions in Proforma

Questions	Male N=34			Female N=50			P-Value
	Agree N (%)	Neutral N (%)	Disagree N (%)	Agree N (%)	Neutral N (%)	Disagree N (%)	
Would you accept a person who has completely recovered from psychiatric illness as life partner?	10(29.4)	18(52.9)	6(17.6)	17(34)	17(34)	16(32)	0.197
Would you accept a person with family history of psychiatric illness as your life partner?	8(23.5)	18(52.9)	8(23.5)	24(48)	7(14)	19(38)	0.001
Psychiatrists over the course of time would turn insane.	10(29.4)	8(23.5)	16(47.1)	9(18)	12(24)	29(58)	0.442
Psychiatrists take up the course because they themselves are deviant from norms.	4(11.8)	16(47.1)	14(41.2)	8(16)	9(18)	33(66)	0.02
Psychiatrists are better than others as life partners as they understand other person's mind well.	16(47.1)	6(17.6)	12(35.3)	23(46)	13(26)	14(28)	0.614

## Discussion

Psychiatry is an emerging field in India and mental disorders are still under recognized and untreated in India. The prevalence of 'serious mental disorders' in India is 6.5% which is nearly 70 million people [18]. But, Psychiatrists in India are 0.301 per one lakh population [19]. It implies that there is roughly one psychiatrist per three lakh population. Consequently, the need for psychiatrists is enormous. Another study found the average national deficit of psychiatrists in India to be 77% [18]. This suggests that the current number of psychiatrists needs to be double in 10 years [20]. Worldwide, the shortage of psychiatrists might be due to the emphasis given for psychiatry at the undergraduate level. But, the medical students all over the world seem to be reluctant in selecting psychiatry as their career because of the stigma and misconceptions about the specialty and also psychiatry is given less emphasis during the teaching of undergraduate medical students. This study was thought because of the growing concerns regarding psychiatric disorders along with the lack of awareness about the same in the budding doctors. The MBBS course curriculum decided by the Medical Council of India consists of four and a half years of teaching duration with one year of training as house

surgeons, during which there are mandatory postings to various clinical departments. As far as psychiatry posting is concerned, it is not taken seriously. Even the medicine staff and college management may not be interested in posting the students to psychiatry on compulsory basis. Earlier studies report that the probable reason for poor awareness and prevalent negative attitude amongst Indian students could be due to lack of proper exposure and training in psychiatry [13-14]. In Denmark where psychiatry is a full-fledged subject, with approximately 240 hrs of teaching, it is the third major clinical subject of choice [21]. In USA, there is 60 hrs of teaching during the first two years, 30 hrs of practical teaching in the third year and 8 weeks of clinical postings in the final year. In Sri Lanka and Nepal, passing in psychiatry examination is mandatory to be qualified for a medical degree [22]. The duration of clinical postings and lectures in psychiatry in India is much less compared to actual requirements [14]. Some studies found that internships, contact with the mental health professionals improved interest in psychiatry [23,24]. Hence, we selected interns as our study population.

As per our knowledge, this is first of its kind study conducted in this city. Our study depicted positive attitude towards psychiatry which is having similar

findings with many other previous studies [28] but in contrast to many other studies as they have shown negative attitude [27,31].

According to our study, females are having more positive attitude than males. Our results corroborate with reports of earlier studies [28,31]. Ours is a private medical college and majority of participants in our study were females. Studies have shown that female graduates from private medical college have a more positive attitude of psychiatry [27-29].

After evaluating interns' attitude towards teaching in psychiatry, we found that 73.8% disagreed that psychiatric teaching increases our understanding of medical and surgical patients and 62% interns said their psychiatric undergraduate training has been not valuable. 70% opine that psychiatry is so amorphous that it cannot really be taught effectively. But 79.8% of them believe that psychiatry is the most important of the curriculum in medical schools these days. Such findings were also obtained in other study done in Gujarat [31].

While analysing the attitude about psychiatrists, most of the interns had positive attitude and this at least is the recent change in the opinion about psychiatrists. Seventy five percent of our interns do not agree with the statement that psychiatrists talk a lot but do very little and nearly 76% of the interns feel that psychiatrists get less satisfaction from their work than other specialists. From the results about perception regarding treatments, lack of belief in efficacy of psychiatric treatment was clearly evident in almost in one fourth of the sample unlike earlier study saying majority had a positive opinion on the treatment efficacy which is in line with the recent study [23]. It is evident from previous search that awareness can be improved by educating the budding doctors [32].

Nearly half of the interns doubt the science related to psychiatric illnesses. But still the findings are better than earlier studies [12,25,30]. There has been an unfavourable attitude towards career of psychiatry, with around 40% having a negative perception. It might be that they consider psychiatry as having low prestige, were uncomfortable with mentally ill patients, and were discouraged by friends and family from entering psychiatry as depicted in earlier studies [23,26].

A study done in South India [30] found that 13% Interns have psychiatry as their career choice. Our results are in line with recent studies [33,34]. The one by Tharyan et al., found that 20% chose Psychiatry [27] and another study found that 32.8% of students selected psychiatry as their career [35].

The study by Kodakandla et.al., say that the reason for the variation across the studies could be due to differences in the amount of academic and clinical exposure of the students to psychiatry, the attachment setting of the institution - private medical college's students have positive attitude and the percentage of female respondents. The unfavourable attitude towards the reward and social aspects of psychiatry, discouragement by the family members and the negative opinion about psychiatric disorders possibly due to suboptimal academic exposure could be the reasons for less interns showing interest in psychiatry as career [30].

To address these aspects, general hospital psychiatry units should be strengthened with special focus on Consultation Liaison psychiatry to reduce stigma among other medical professionals and attendance for psychiatry lectures and postings should be made mandatory for ensuring optimal exposure to psychiatry. Psychiatry questions need to be more in theory paper and mental status examination should be a mandatory part of medicine examination.

### Limitations

Our study had limited sample size and limited to only one medical college. Hence, it is difficult to generalize our results to other areas. It is better to study this at multiple medical colleges at a time with single scale and to have interventional study than a cross-sectional one. Another limitation was that the participants' response might have been affected by a few months of residency.

### Conclusion

Our study revealed that female interns exhibited a significantly more positive attitude towards mental illness compared to male interns. But the overall result of this study conveys a good attitude towards psychiatry among the house surgeons. Efforts must be made to improve the attitudes of interns not in contact with mental illness, through raising awareness of mental health issues, providing educational sessions, and making time for discussion. Hence, the researchers strongly suggest the curriculum be revised to make it mandatory to incorporate educational sessions about mental illness, in order to combat stigma and discrimination, and potentially promote the human rights of the mentally ill.

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