

## **AWARENESS ABOUT PSYCHIATRY IN UNDERGRADUATE MEDICAL STUDENTS IN NEPAL**

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### **ABSTRACT**

*Undergraduate medical students in developing countries have a number of misconceptions and misconceptions about psychiatry. Carefully planned teaching programmes providing more interactions of students with faculty during a short span may be helpful in increasing students' awareness and positive attitude towards psychiatry. This study was conducted to assess the impact of a two weeks training programme on the awareness of medical students about psychiatry, its scope and treatment modalities. The subjects included a batch of 29 third year medical students in a medical college in Nepal. A pre and post-test was done before and after conducting the training programme for two weeks using a 20 item semi-structured questionnaire. Students' awareness about psychiatric disorders like anxiety disorders, somatoform disorders, personality disorders, delirium and mania, psychological manifestations of physical illnesses, electroconvulsive therapy and psychological methods of treatment improved significantly after the teaching programme. The findings show that teaching programme on psychiatry even for a brief period of two weeks is useful in increasing awareness and correcting the misconceptions about the speciality.*

**Key words:** *Psychiatry, medical curriculum, under graduate teaching.*

Psychiatry is a growing speciality in most of the developing countries. It is now well established that prevalence of psychiatric morbidity in developing countries is similar to that in the developed countries. Number of psychiatrists to deal with the problem is grossly inadequate (National Mental Health Programme, 1982). It is important to impart basic knowledge and skills in diagnosis and treatment of the common psychiatric disorders in the medical students so that they are able to deal with these disorders efficiently when they go in clinical practice (Sharma, 1984).

The speciality of psychiatry has a number of misconceptions, misconceptions and stigma attached to it which often need to be corrected even in the medical students. An adequate exposure to the speciality in form of lectures, clinical postings and case discussions are

necessary to rectify the wrong notions (Bhaskaran, 1990). Creating awareness that psychiatric disorders are just like other medical and surgical disorders and can be efficiently treated is quite helpful in changing these attitudes.

It is important that steps taken should be started early in the clinical training programme, so that these lead to an effective and relatively long lasting changes in the attitude (Rajagopalan & Kuruvilla, 1994).

Different educational programmes have also highlighted the need to introduce behavioural sciences and psychiatry spread over the period of whole medical training (Rajagopalan & Kuruvilla, 1994). Some of the medical institutions in India have followed this approach with an introductory course on behavioural sciences in the first or second year

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of M.B.B.S. curriculum and a gradual exposure to clinical psychiatry during the clinical postings and lectures in the later years of undergraduate medical training. But at most of the medical collages in India, the undergraduate students receive a course of 10-12 lectures and two weeks clinical posting during four and a half years course (Rajagopalan & Kuruvilla, 1987). This is grossly inadequate to make them competent to deal with psychiatric disorders which constitute 20-30% of total morbidity seen in routine clinical practice.

The first author (RKC) was invited to conduct a teaching schedule on psychiatry and behavioural sciences for M.B.B.S students of second and third year at a new medical college in Nepal. The present study reports about changes in general awareness about psychiatry in students following a teaching programme in the speciality.

### MATERIAL AND METHOD

The study was carried out at B.P. Koirala Institute of Health Sciences, Dharan, Nepal. The students of third year medical students who had to undergo a lecture schedule on psychiatry formed the study subjects. The batch consisted of twenty nine students. Clinical training in psychiatry consisted of twelve lectures and two weeks clinical posting at a stretch in groups of seven to eight students each. The author (RKC) undertook a lecture schedule consisting of twelve lectures of the full batch and trained them on various aspects of psychiatric history taking, diagnosis and management through clinical case discussions.

The students were assessed regarding their general awareness about psychiatry, its scope and treatment aspects before and after the teaching programme using a 20-item semi-structured questionnaire. Pre-test was done on the first day of the lecture schedule during which lecture was also given and post-test was done on the last day of the schedule. Students were not informed beforehand for conducting the tests.

The items covered preliminary questions on the background of psychiatrist, clinical

psychologist, prevalence of psychiatric disorders in the general population, names of some common psychiatric disorders, common psychiatric symptoms, common drugs used in psychiatry, physical symptoms in psychiatric disorders, common psychological methods of treatment in psychiatry and choice of psychiatry as career. They were also asked to put their comments, if any.

The students were explained that the purpose of the study was to assess their awareness about the speciality before starting the teaching programme and to assess the effectiveness of the teaching programme after the post-test and that it was not linked with their examination assessment. All the students volunteered to participate in the study.

The data was analysed by comparing the awareness of the students on various aspects of psychiatry before and after the teaching programme. McNemar's test was used to find out the significant differences between pre-test and post-test awareness on different categories of items. 'p' value less than 0.05 was considered as significant.

### RESULTS

The study sample consisted of 29 undergraduate medical students. All of them were in the third year of their medical curriculum. Table-1 shows the comparison of students' awareness on some aspects of psychiatry between pre and post-test. All the students were aware of psychiatrist being a medical doctor. However, they had misconceptions about clinical psychologist. Only 31% students in pre-test were aware about the nature of job and background of clinical psychologists. Awareness improved significantly during the post-test ( $p<0.05$ ). The teaching programme also helped in increasing the knowledge of the students regarding the prevalence of psychiatric disorders in the general population.

A large proportion of the students in pre-test (89.7%) responded that certain psychiatric disorders present with physical symptoms while

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none of them could name the psychiatric disorders correctly. The responses were in terms of symptoms like weakness, palpitation, aphasia and dysarthria or neurological diseases like parkinsonism, Wilson's disease, Huntington's chorea, etc. During post-test, the students became aware of some psychiatric disorders with physical symptoms like somatoform disorders (57.1%), generalised anxiety disorder (42.9%), depression (42.9%), psychosomatic disorders (25%) and hysteria (10.7%). Students also mentioned mania (17.9%) and schizophrenia (10.7%) in the group.

Regarding psychiatric manifestations in physical illnesses, 75.9% students in pre-test expressed awareness about them while 27.6% could correctly identify few of them. In post-test, all the students became aware of this fact and

82.1% could name some physical illnesses with psychiatric manifestations correctly. Majority of the students (96.6%) during pre-test and all students in post-test responded that psychological factors play a role in physical illnesses. The roles included prognostic (37.9%), causative (27.6%), therapeutic (13.8%) or combination of these (10.4%) during pre-test. The responses during the post-test did not vary significantly from that of pre-test.

Majority of the students (93.1%) in pre-test had heard about electroconvulsive therapy (ECT), but only 44.8% could name two indications of ECT correctly. Majority of them (92.9%), however, could respond correctly about it during post-test. Knowledge about some psychological methods of treatment increased significantly in post-test (96.4%) than in pre-test (34.5%) ( $p < 0.001$ ). The opinion regarding helpful nature of traditional methods of treating mental disorders was not significantly different during pre-test (58.6%) and post-test (46.4%).

**TABLE 1**  
**COMPARISON OF STUDENTS' AWARENESS ON  
SOME ASPECTS OF PSYCHIATRY DURING  
PRE AND POST-TEST (DATA IN PERCENT)**

Corrects items	Responses		
	Pre-test (n=29)	Post-test (n=29)	'p' value
Psychiatrist is a medical doctor	100.0	100.0	NS
Clinical psychologist is trained in clinical psychology, studies human behaviour and gives advice	31.03	71.4	<0.01
Prevalence of psychiatric disorders is 10-15% in the general population	27.6	53.6	<0.05
Certain psychiatric disorders present with physical symptoms	89.7	100.0	NS
Certain physical illnesses have psychiatric manifestations	75.9	100.0	<0.01
Psychological factors have a role in physical illness	96.6	100.0	NS
Psychiatric disorders can be treated with medicines and psychological methods	100.0	100.0	NS
Identified at least two indications of electroconvulsive therapy	44.8	92.9	<0.001
Identified some psychological methods of treatment	34.5	96.4	<0.001
Traditional methods of treatment are helpful for psychiatric disorders	58.6	46.4	NS

Awareness of students regarding common psychiatric disorders is shown in table-2. During pre-test, 82.7% students were aware about schizophrenia while none of them knew about somatoform disorders, personality disorders and delirium. Awareness regarding mania and anxiety disorders increased significantly during

**TABLE 2**  
**STUDENTS' AWARENESS REGARDING  
COMMON PSYCHIATRIC DISORDERS**  
(Data in percent)

Psychiatric disorders	Awareness	
	Pre-test (n=29)	Post-test (n=29)
Schizophrenia	82.7	92.9
Depression	72.4	78.6
Mania	41.4	78.6*
Dementia/Alzheimer's disease	41.4	57.1
Obsessive compulsive disorder	44.8	-----
Hysteria	42.1	-----
Anxiety disorder	20.7	67.9*
Phobia	10.3	-----
Somatoform disorders	-----	39.3
Personality disorders	-----	35.7
Delirium	-----	32.1

\* p<0.01

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**TABLE 3**  
**STUDENTS' AWARENESS ON COMMON PSYCHIATRIC SYMPTOMS**  
(Data in percent)

Psychiatric symptoms	Awareness	
	Pre-test (n=29)	Post-test (n=29)
Hallucinations	41.4	71.4*
Delusions	37.9	46.4
Depression	20.7	35.7
Illusion	20.7	21.4
Insomnia	17.2	21.4
Mood disturbances	13.8	----
Anxiety	10.3	25.0
Behavioral disturbance	20.7	21.4
Headache/other pains	----	28.6

\*p<0.05

**TABLE 4**  
**COMPARISON OF STUDENTS' KNOWLEDGE REGARDING CORRECT INDICATIONS OF COMMON PSYCHOTROPIC DRUGS**  
(Data in percent)

Names of Psychotropic drugs	Correct responses	
	Pre-test (n=29)	Post-test (n=29)
Chlorpromazine	41.4	53.6
Haloperidol	34.5	35.7
Lithium	31.03	57.1*
Fluoxetine	17.2	28.6
Diazepam	65.5	50.6
Alprazolam	3.5	----
Imipramine	----	75.0

\*p<0.05

post-test.

Students were less aware of various symptoms of psychiatric disorders during pre-test (Table-3). During post-test, the awareness increased significantly for mood disturbances and headache/other pains.

Comparison of students' knowledge regarding correct indications of some common psychotropic drugs between pre and post-test is shown in table-4. Knowledge of the students increased significantly during post-test for lithium carbonate and imipramine while a marginal increase was seen for other drugs except alprazolam and diazepam.

Choice of psychiatry as a career among the students increased marginally after the teaching programme (17.9%) as compared to their response during pre-test (13.8%).

## DISCUSSION

Psychiatry is taught to medical undergraduates for a short period of two weeks during the third or fourth year of medical curriculum in South Asian countries like India and Nepal. During this period the students are given intensive training on psychiatric disorders through lectures, clinical demonstrations and case discussions. Ours is the first study of its kind which assessed the awareness of medical students in Nepal about psychiatry, psychiatric problems and their attitudes in choosing psychiatry as a career before and after teaching sessions.

We observed that a large number of students (69%) had misconceptions about the background and role of a clinical psychologist before attending the teaching session. Similarly, awareness about the magnitude of psychiatric disorders and various treatment modalities for psychiatric disorders like drugs, psychological methods and ECT showed substantial improvement following the teaching programme. Marked improvement in the awareness was observed for psychiatric disorders like somatoform disorders, anxiety disorders, mania, personality disorders and psychiatric symptoms like hallucinations and somatic presentation of psychiatric disorders and also for drugs like lithium and imipramine. The marginal improvement in awareness about other disorders and drugs may be due to the short span of teaching sessions.

There is a paucity of information on studies related to awareness of medical students regarding psychiatry and mental disorders from developing countries. Most of the studies have dealt with change in attitudes of the students before and after conducting teaching programme in psychiatry (Rajagopalan & Kuruvilla, 1987; Araya et al., 1992;

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Alexander & Kumaraswamy, 1993; Baptista et al., 1993; Prabhakaran et al., 1989; Rao et al., 1989; Ghadirian & Engelsmann, 1982).

Previous studies from developing countries like India showed that a two weeks training programme in psychiatry was inadequate in changing attitudes of medical students towards the speciality (Rajagopalan & Kuruvilla, 1994; Prabhakaran et al., 1989). A favourable attitudinal change in students was observed after four weeks training by Rajagopalan & Kuruvilla (1987) and after six weeks training (Ghadirian & Engelsmann, 1982; Wilkinson et al., 1983; Shelley & Webb, 1986; Creed & Goldberg, 1987; Alexander & Eagles, 1990; Araya et al., 1992). This shows the fact that longer duration of training leading to more interaction with psychiatric faculty members and patients creates a positive and favourable attitudes of students towards psychiatry. Duration of psychiatric training for two weeks as recommended by medical councils of developing countries like India and others needs further reviewing considering the daunting nature of psychiatric problems and lack of trained specialists to manage them.

Alexander & Kumaraswamy (1995) observed that perceived low career reward and low social status of psychiatry in India are some of the factors hindering the development of a positive attitude towards psychiatry by medical students. They also reported that criticism by non-psychiatry faculty and fellow students dissuading the interested students from opting psychiatry had a negative impact on a quarter of the students studied. Other factors contributing to the hindrance in the growth of the discipline are inadequacy of staff, young and poorly trained faculty in teaching methodology like curriculum planning, use of audio-visual aids, etc. (Bhaskaran, 1990).

It is encouraging to note that choice of psychiatry as a career increased to 18% after teaching sessions from 14% during pre-test in our study. This figure is much higher than earlier reports where only 3.9%-4% students preferred to opt psychiatry as their first choice for post

graduation (Nielson, 1979; Brook, 1983; Rao et al., 1989; Alexander & Kumaraswamy, 1995).

It has been observed that planning to pursue a career in the United States of America or United Kingdom by the students seemed to favour the choice of psychiatry (Alexander and Kumaraswamy, 1995). Involvement of an experienced senior faculty member and the smaller group of students facilitating the teaching-learning process with more interaction and non-formal discussions within and outside the classroom or clinics might have contributed in arousing the interest of students in psychiatry in our study.

The generalisability of results in our study is limited because of small sample size. However, the results point towards the fact that exposure of medical students in psychiatry for a brief period of two weeks had to some extent, created a positive image of psychiatry and better awareness about various psychiatric problems, symptoms, drugs and treatment modalities.

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## REFERENCES

- Alexander, P.J. & Kumaraswamy, N. (1993) Senior medical students attitude towards psychiatry. Relationship with career interest. *Indian Journal of Psychiatry*, 35, 221-224.
- Alexander, D.A. & Eagles, J.M. (1990) Changes in attitudes towards psychiatry among medical students: correlation of attitude shift with academic performance. *Medical Education*, 24, 452-460.
- Alexander, P.J. & Kumaraswamy, N. (1995) Impact of medical school experiences on senior medical students' interest in psychiatry. *Indian Journal of Psychiatry*, 37, 31-34.

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- Araya, R.I., Jadresic, E., Wilkinson, G.** (1992) Medical students' attitudes to psychiatry in Chile. *Medical Education*, 26, 153-156.
- Baptista, T., Perez, C.S., Mendez, L. & Esqueda, L.** (1993) The attitude towards psychiatry of physicians and medical students in Venezuela. *Acta Psychiatrica Scandinavica*, 88, 53-59.
- Bhaskaran, K.** (1990) Undergraduate training in psychiatry and behavioural sciences-the need to train the trainers (editorial). *Indian Journal of Psychiatry*, 32, 1-3.
- Brook, P.** (1983) Who's for psychiatry ? United Kingdom medical schools and career choice of psychiatry, 1961-75. *British Journal of Psychiatry*, 142, 361-365.
- Creed, F. & Goldberg, D.** (1987) Students' attitudes towards psychiatry. *Medical Education*, 21, 227-234.
- Ghadirian, A.M. & Engelsmann, F.** (1982) Medical students' attitudes to psychiatry: a ten year comparison. *Medical Education*, 16, 39-43.
- National Mental Health Programme** (1982) Ministry of Health and Family Welfare, Government of India.
- Nielson, A.C.** (1979) The magnitude of declining psychiatric career choice. *Journal of Medical Education*, 54, 632-637.
- Prabhakaran, R.R., Murugappan, M., Devar, J.V.** (1989) Undergraduate psychiatric education: an attitude of medical students towards psychiatry. *Indian Journal of Psychological Medicine*, 12, 37-48.
- Rajagopalan, M. & Kuruvilla, K.** (1987) Medical students' attitudes to psychiatry: the effect of a four week posting. *Indian Journal of Social Psychiatry*, 3, 238-259.
- Rajagopalan, M. & Kuruvilla, K.** (1994) Medical students' attitudes towards psychiatry: effect of a two week posting. *Indian Journal of Psychiatry*, 36, 177-182.
- Rao, T.S.S., Rao, K.N., Rudrappa, D.A. & Reddy, D.R.** (1989) Medical students' attitudes to psychiatry. *Indian Journal of Psychological Medicine*, 12, 29-35.
- Shelly, R.K. & Webb, M.G.** (1986) Does clinical clerkship alter students' attitudes to a career choice of psychiatry. *Medical Education*, 20, 330-334.
- Sharma, S.D.** (1984) General hospital psychiatry and undergraduate medical education. *Indian Journal of Psychiatry*, 26, 259-263.
- Wilkinson, D.G., Greer, S. & Toone, B.K.** (1983) Medical students' attitudes to psychiatry. *Psychological Medicine*, 13, 185-192.

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