

A COMPARISON OF THE KNOWLEDGE OF PSYCHIATRIC PROBLEMS AMONG MEDICAL STUDENTS , DOCTORS AND UNIVERSITY TEACHERS AND STUDENTS IN LAHORE, PAKISTAN

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ABSTRACT

Objectives: Comparison of the medical and non-medical group for the knowledge of mental illness and its treatment.

Design: Cross sectional study.

Place and duration of study: The study was conducted between March to september 2004 in two medical colleges and their attached hospital (King Edward Medical college, Allama Iqbal Medical College and Mayo Hospital) and in Punjab University, Lahore Pakistan.

Subjects and Methods: We compared the knowledge of the medical students and doctors with those of the university students and teachers using a standardised questionnaire. Of the medical group, 294 (59%) of the 500 survey forms sent out were returned, while in non medical group 194 out of 300 (64.66%) survey forms were returned.

Results: A total of 488 participants (medical students and doctors =294, university students and teachers= 194), returned their completed survey forms. The non medical group (University Teachers and Students) were less familiar with the mental disorders such as Schizophrenia, compared to medical group (73 vs. 176).

Conclusion: Strikingly similar patterns of knowledge were found between the two groups apart from medical matters, e.g.; knowledge about illnesses, treatments and type of therapies. There is a need for wider community education and information geared towards improving the knowledge of the people about mental illness. It also appears that the medical curriculum needs changes, so that the future doctors have better understanding of mental illness.

Key words: Knowledge, Psychiatric disorders, Medical students.

INTRODUCTION

Studies of stigma in the West have revealed that in general people hold negative attitudes towards mentally ill¹⁻⁵. Minhas et al (2000)⁶ studied attitudes of the medical students towards psychiatry in Rawalpindi. In a survey of medical students in Karachi, Niaz et al (2003)⁷ found that the students showed positive perception about Psychiatry as a subject. Realistic knowledge of the illness

and treatment can form the basis of right attitude towards mentally ill. We conducted a survey to look at knowledge of mental illness and its treatment among people in Lahore. For this purpose we chose two groups of people who are likely to be exposed to a variety of sources of information (print and electronic media) and are likely to understand English language to fill in the questionnaire in English. The groups were the medical students and doctors and university students and teachers.

Doctors can play an important role in reduction of stigma of mental illness. It should be relatively easy to focus education and other strategies to change their attitude towards mental illness. This has important implications both for the future training and policy development.

The university students and teachers are likely to have exposure to similar information in the public domain as medical group. They however don't have the opportunity to have formal education and training about the mental illness. We believed that these groups will be

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interesting for comparison. These groups are likely to be influential in helping the rest of the population to form their opinions about the mental illness.

Following the methodology used by Crisp et al^{1,2} we decided to assess knowledge of the common mental illnesses and related issues, as well as attitudes towards these among these groups. In this paper we describe the knowledge of mental illness in the two groups.

SUBJECTS AND METHODS

In the first stage, the main items of the survey were discussed with a small group of medical students and doctors (number=10) and students and teachers (number 15), to see whether they are familiar with the psychiatric terminology and to explore the areas of concern expressed by them regarding people with mental disorders. Questions were asked to ensure that all the respondents were aware of the disorders and terminology used. Since more than 90% of the respondents said they were aware of the disorders and understood the questions we decided to use the questionnaire for study in the groups represented by these respondents. We however excluded some conditions like eating disorders which most people did not have any knowledge of.

The survey form consisted of two parts. The first part consisted of questions related to assessment of knowledge and attitudes. These questions have been used for evaluation of the attitude towards mental illness in general public before. They proved to be useful in focus groups discussions in West^{1,2}. The second part consisted of information on demographic variables, such as age, gender, marital status, as well as professional background and experience.

The survey forms were distributed to 500 medical students and doctors by hand. The surveyors went to the lecture theatres and the form was given to every third medical student. In the case of doctors, lists were obtained of all the doctors, and the survey forms were handed over to every third doctor. The completed surveys were then returned in pre paid envelopes. Two hundred and ninety four forms were returned.

Three hundred survey forms were distributed by hand randomly to both the university students and the teachers. The completed survey forms were then returned in pre paid envelopes.

STATISTICAL ANALYSES

Analyses were carried out using SPSS 10.0. Since most of the variables were categorical, non-parametric tests were used. When measuring normally distributed data, such as age or years of experience, parametric analyses were carried out. For most non-parametric calculations comparisons were made using cross tabs. Where significance testing was needed, chi square test was used. We decided to run our analyses on original data without any adjustment for missing values.

RESULTS

A total of 488 participants (medical students and doctors =294, university students and teachers=194), returned their completed survey forms. Initial analyses showed that the participants of the non medical group were significantly older than the medical group, [medical group, mean age in years= 22.36 (SD= 4.28), non medical group, mean age in years= 27 (SD= 9.92), ($t=0.69$, $df=233$, $P= 0.000$). In medical group 51% were males and 88 % were single. In non-medical group 61 % were males and 68% were single.

When asked whether they had heard of common mental illnesses, the following responses were obtained; depression [medical group no=2 (0.7%) yes=184 (61.5%), non medical group no=8 (4.1%) yes 114 (58.5%)], schizophrenia [medical group, no=11 (3.7%) yes=176 (58.9%), non medical no=55 (28.2%) yes=73 (37.4%)], alcohol abuse [medical no=6 (2.0%) yes=168 (56.2%) non medical no=24 (12.3%) yes=95 (48.8%)], drug abuse [medical no=2 (0.7 %) yes=165 (55.2%), non medical, no=14 (7.2%) yes=104 (53.3%)].

To explore their ideas about psychiatric training, we asked whether it would take same time to be trained as a psychiatrist, as it might to become a surgeon or a physician. The responses were similar in two groups; medical, no =121 (40.5%) yes=144 (48.2), non medical no=83 (42.6%) yes=79 (40.5%). In response to the question, do you know someone with mental illness; following responses were obtained, medical group, no=80 (26.8%), yes=170 (56.9%), non medical no = 54 (27.7%), yes=119 (61%). The differences were not statistically significant.

The respondents were asked to give their opinion regarding the medically trained mental health professionals. Opinion was obtained regarding, psychiatrists, psychologists and counsellors. Majority of respondents in all groups recognised that apart from psychiatrists, the rest were not medically trained. However, statistically significant differences were found only for Psychologist ($X^2=10.78$, $df=2$, $P=0.005$), when medical group was compared with the non medical group.

When asked whether any doctor can treat psychiatric problems, important differences existed. The medical group no= 242 (80.9%) yes 44 (14.7%), Non medical no 131 (67.2%) yes 39 (20.0%) ($X^2=11.08$, $df=2$, $P=0.003$). The medical group is more likely to think that all the doctors are not able to treat the mental illness.

Table 1 describes the results of the responses, when participants were asked whether psychiatrists can treat depression, schizophrenia, dementia, alcohol abuse, drug abuse, multiple sclerosis, meningitis, statistically significant differences were observed for opinions regarding schizophrenia, drug and alcohol problems, dementia and marital problems only [schizophrenia ($x^2=35$, $df=2$, $P=0.000$)], alcohol problems ($x^2=37$, $df=2$,

Table 1*
Can psychiatrists treat these illnesses?

		Medical (n=294)		Non medical (n=194)	
		Frequency	Percent	Frequency	Percent
Depression	No	119	40.5	82	42.3
	Yes	142	48.3	79	40.7
schizophrenia	No	42	14.3	72	37.1
	Yes	222	75.5	105	54.1
Sex abuse	No	111	37.8	92	47.4
	Yes	153	52	85	43.8
Alcohol problem	No	75	25.5	102	52.6
	Yes	189	64.3	75	38.7
Drug problem	No	91	31	110	56.7
	Yes	173	58.8	67	34.5
dementia	No	78	26.5	122	62.9
	Yes	186	63.3	55	28.4
Marital problem	No	130	44.2	139	71.6
	Yes	134	45.6	38	19.6
Multiple sclerosis	No	247	84	164	84.5
	Yes	16	5.4	13	6.7
Meningitis	No	256	87.1	174	89.7
	Yes	7	2.4	2	1.0

Table 2*
Which of these medicines are addictive?

		Medical (n=294)		Non medical (n=194)	
		Frequency	Percent	Frequency	Percent
Anti psychotics	No	181	61.6	91	46.9
	Yes	72	24.5	71	36.6
Anti depressants	No	107	36.4	52	26.3
	Yes	146	49.7	111	57.2
Anxiolytics	No	107	36.4	123	63.4
	Yes	146	49.7	39	20.1
Hypnotics	No	112	38.1	135	69.9
	Yes	141	48	27	13.9

* We have not separately reported missing values in the text and tables. Some of the numbers and percentages do not add up as a result.

P=0.000)], drug problem ($\chi^2=32$, df=2, P=0.000)] dementia [$\chi^2=67$, df=2, P=0.000)] and marital problems [$\chi^2=39$, df=2, P=0.000)].

To measure knowledge regarding psychiatric treatments, we asked which treatments are commonly used by psychiatrists. Statistically significant differences were noted between medical and non medical respondents on following variables: tablets ($\chi^2=33$, df=2, P=0.000), psychotherapy ($\chi^2=16$, df=2, P=0.000), hypnosis ($\chi^2=15.42$, df=2, P=0.000), electro convulsive therapy ($\chi^2=48.2$, df=2, P=0.000), injection ($\chi^2=17.83$, df=2, P=0.000) brain surgery ($\chi^2=29.91$, df=2, P=0.000). Non medical professionals were less likely to recognize the treatments used by psychiatrists such as psychotherapy, E.C.T. and medication.

We asked participants whether they thought commonly used drugs in psychiatry are addictive, statistically significant differences were noted for the following, [antipsychotic ($\chi^2=11.18$, df=2, P=0.004), anxiolytics ($\chi^2=45$, df=2, P=0.000) hypnotics ($\chi^2=65$, df=2, P=0.000). (table 2)

DISCUSSION

In this study we found that nearly half of the participants in both groups admitted that they had not heard the name of depression, schizophrenia, alcohol abuse, drug abuse etc. Understandably more people in medical group had heard about Schizophrenia.

For other conditions there was no difference in the two groups. Similarly, nearly half of the participants in both groups admitted to knowing someone with mental illness. There were many missing responses (we assume that it indicated lack of clear knowledge of the issues). This may be result of unfamiliarity with terminology used in the survey. We may need to start with asking people about their understanding of mental illness through in depth interviews, to identify the issues which they feel relevant. This information then can be utilised to develop questionnaire for further study of knowledge and stigma.

The difference in responses between the two groups reflected the advantage the medical group had of having the knowledge of medical issues. As an example the medical students were more able to recognise that psychologists were not medically trained. Medical group successfully recognised that psychiatrists treat depression, schizophrenia, alcohol and drug abuse, dementia. They were also less likely to say that psychiatrists treat multiple sclerosis or meningitis.

When the knowledge was assessed regarding psychiatric treatments, statistically significant differences

were seen only for counselling and brain surgery; where medical students recognised that psychiatrists did not undertake brain surgery and that they were more likely to counsel.

Finally to assess the knowledge about addictiveness of the medicines used in psychiatry, respondents were asked about antipsychotic, antidepressants, anxiolytics and hypnotics. While most of the non medical group members thought anxiolytics and hypnotics were dependence producing, medical students' considered antidepressants as dependence producing while antipsychotic as non dependence producing.

Lack of difference in knowledge between the medical trainees and professionals (bar the issues of factual medical knowledge) and the other group is worrying. The training of medical students can address this. The university teachers and students are seen as influencing the opinion of the rest of the population. Targeted education can improve their knowledge and understanding of mental illness.

This is only preliminary work. The study was based on a questionnaire developed in west, which was modified slightly. we feel there is a need to develop the questionnaire locally for future studies.

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