Original Article

Preferred Antipsychotic by Mental Health Professionals of Sindh and Balauchistan

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ABSTRACT

OBJECTIVE: To determine the preferred antipsychotic drug of mental health professionals.
MATERIAL AND METHODS: This cross-sectional survey was conducted among mental health-care professionals of 25 public/private healthcare facilities of Sindh and Blochistan provinces form April 2007 to March 2008. After approval from ethical committee of Dow University of Health Sciences mental health professionals (trainees, consultants with experience only and consultant with postgraduate qualification) present on the day of visit to a facility were approached and asked to fill a semi-structured questionnaire to determine the preferred antipsychotic for patient as well as for themselves if they got ill and the factors they consider while choosing that antipsychotic. Descriptive analysis of the data was performed by SPSS v. 14.
RESULTS: One-hundred five mental health professionals were divided in 3 groups i.e. trainees (29), experienced doctors (24) and consultants psychiatrists (52). They have almost equal experience of using typical (48%) and atypical (49%) antipsychotic, but when asked to chose antipsychotic for themselves, atypical (81%) were preferred over typical (14%) antipsychotic with Risperidone as the most common choice (55%) followed by quetiapine, olanzapine and clozapine. Regarding the factors influencing prescription, efficacy and safety were most considered factor while choosing antipsychotic for themselves as compare to efficacy and cost while experiencing prescription for patients.
CONCLUSION: Clinical approach varies while prescribing anti-psychotic drug for the patients and for themselves between typical and atypical. Efficacy and safety were considered while choosing for themselves, whereas efficacy and cost while prescribing for patients.

KEY WORDS: Preference, anti-psychotic, mental health professionals, typical, atypical.

INTRODUCTION

Many studies have examined prescribing preferences for antipsychotic but only few have examined what professionals would choose for themselves if they got ill[1-4]. This professionals' choice of drug for themselves reflects the best drug in their mind based on their years of experience as well as removal of confounding factors affecting prescription e.g. cost, availability, etc. Such choice is in line with the latest evidence on comparative effectiveness of antipsychotic and therefore might be a sensitive indicator of the most effective antipsychotic. Furthermore this collective expert opinion form a powerful evidence that complement the data obtained from clinical trials and meta-analyses, by synthesizing that data through years of clinical experience[5]. The preference of psychotropic can be cited as support for use of particular drugs[6]. These preferences keep on changing as new drugs are being marketed[5] and on the basis of studies conducted different prescribing guidelines have been formed recommending medicines as first line agent for treatment of different disorders[7]. In developing country like Pakistan, the clinical experience is of a very different nature from that of the developed countries. Traditional antipsychotics are preferred over atypicals, as are tricyclics over SSRI. One possible way to obviate the considerations of these non-drug factors is to ask prescribers which drug they would like to be prescribed if, in a hypothetical situation, they had developed psychiatric illness like schizophrenia[1] or their partner or child became ill with schizophrenia[3,8].

This study was designed by considering the importance of professional choice based on years of clinical experience that is one of the powerful form of evidence; complimenting data were obtained from clinical trials and meta-analyses.

This study not only updates and replicates previous studies in setup of developing countries but also examine new aspects of treatment with antipsychotic.

MATERIAL AND METHODS

This cross-sectional survey was conducted among

mental healthcare professionals of 25 public/private healthcare facilities of Sindh and Blochistan provinces from April 2007 to March 2008. Professionals present on the day of visit were included in the study. As compared to developed countries, in Pakistan only doctors can make decision to start antipsychotic, so only they were approached including qualified psychiatrist, registered psychiatry trainees and medical officers/ practitioners working in psychiatry for more than two years. The questionnaire was piloted on fifteen mental health professionals working in psychiatric facility and necessary amendments were made in the questionnaire for clarity. The participants were interviewed in private and they were given the option of passing on any question they did not wish to answer.

For purpose of comparison these doctors involved in mental healthcare were divided into three groups. First group include doctors having basic medical qualification and having more than 2-year experience of working in psychiatry. Second group comprised of trainees enrolled for postgraduate psychiatric diploma. The third group was formed by consultants who are practicing after obtaining postgraduate diploma in psychiatry. The demographic data were collected including grade of professional, years since qualification, gender, age and the number of schizophrenic patients they dealt during last one year. A semi-structured questionnaire was designed to find out professional's first choice antipsychotic and the factors influencing the decision process in choosing that antipsychotic. Two questions were asked from participants, first question about the most often prescribed antipsychotic by them to the patients suffering from psychosis and in doing so they were asked to give a simple reason for their choice from seven available options: cost, efficacy, tolerability, dosing schedule, safety, pharmacokinetic profile and interaction potential or to be described if other then these options. In second question the professionals were asked to imagine a hypothetical situation in which they themselves developed schizophrenia and in that hypothetical situation which antipsychotic they will choose for themselves. They were also asked to mention initial and maintenance dose of selected medicine for themselves. In selecting medicine for themselves professionals were asked to give a simple reason for their choice from seven available options similar to question one. Data were analysed by SPSS V.11. Decriptive statistics calculated for qualitative variables were frequencies and percentages; means were calculated for continuous variables.

RESULTS

Total 105 Mental health professional working privately or attached to 25 different public/private institutions in different cities of two provinces were included in this study.

The group wise break-up of doctors working in mental health was as follows; 24 experienced medical officers, 29 trainees and 52 qualified consultants. No one refused to take part. Participant characteristics are shown in **Table I**.

Antipsychotic most often experienced by mental health professionals during last one year is shown in **Table II**. Typical antipsychotic were preferred by 41% of trainees 70% of experienced consultant 32% of qualified consultant with Haloperidol as the most common choice (34%), while atypical antipsychotic was preferred by 59% of trainees, 21% of experienced medical officers, and 67% of qualified consultants with Risperidone as the most common choice (50%). Detailed breakdown of the most prescribed antipsychotic is shown in Table II.

Table III is showing the results of antipsychotic chosen by health professionals for themselves in a hypothetical situation if they would suffer from psychotic illness. Typical antipsychotic was preferred by 7% of trainees, 29% of experienced consultants, and 6% of qualified medical officers, while atypical antipsychotic was preferred by 90% of trainees, 62% of experienced medical officers, and 92% of qualified consultant. Risperidone (n=58, 55.2%) was the most likely chosen antipsychotic followed by Haloperidol (n=11, 10.5%), Quetiapine (n=10, 9.5%), Olanzapin (n=9, 8.6%) and Clozapin (n=8, 7.6%). Only 12 participants (11.5%) would choose a conventional antipsychotic. Also of note is that 3 (2.9%) participants indicated they would not take any medication. Detailed breakdown of the most prescribed antipsychotic is shown in Table II.

Table IV shows the main factors that participant considered paramount in choosing an antipsychotic for themselves. Efficacy (61%) and safety (23%) were most considered factors while choosing antipsychotic for themselves as compare to efficacy and cost while experiencing prescription for patients.

Different prescribing patterns were observed from different professionals when they were posed different situations as shown in **Table V**. In response to 1st question it was revealed that there was not major difference in prescription of typical (48%) and atypical (49%) antipsychotic. The pattern of trainees and qualified consultant was similar while experienced professional prescribe more typical (70%) then atypical (21%) antipsychotic.

TABLE I: PARTICIPANTS' CHARACTERISTICS

	Group-1 Experienced Medical Officer (n=24)	Group-2 Trainees (n=29)	Group-3 Qualified Consultants (n=52)
Male Gander	15 (62%)	21 (72%)	49 (94%)
Age in years, mean (range)	40.50 (27-50)	36.86 (27-52)	46.52 (28-76)
Years since qualification, mode	Under 5	Under 5	11-15 & 16-20
Number of patients seen per year, mode	>100	>100	>100

DISCUSSION

There are many factors influencing prescription of drug. These factors include research paper, review articles, treatment guidelines, personal experience, peer opinion and the promotional influence of pharmaceutical companies. This study will help in exploring such factor in our local setup that influences prescription of antipsychotic.

The results of this study show that majority of the patients (>46%) were prescribed typical antipsychotic while only a few (11%) professionals chose typical antipsychotic for themselves. This disparity in selection of medication is due to the cost factor that comes out to be one of the important confounding factors in this study as reflected from the results of the reasons for selecting medication in two situations. Another

TABLE II: PREFERENCE OF ANTIPSYCHOTICS PRESCRIBED FOR PATIENTS

	Group-1 Experienced Medical Officer	Group-2 Trainees	Group-3 Qualified Consultants	Total
Drug	n (%)	n (%)	n (%)	n (%)
Fluphenazine	1 (4.2%)	1 (3.4)	1 (1.9)	3 (2.9)
Haloperidol	11 (45.8)	10 (34.5)	15 (28.8)	36 (34.3)
Trifluperazine	5 (20.8)	1 (3.4)	1 (1.9)	7 (6.7%)
Risperidone	5 (20.8)	16 (55.2)	32 (61.5)	53 (50.5)
Olanzapine	- -	1 (3.4)	3 (5.8)	4 (3.8)
No responce	2 (8.3)	- -	- -	2 (1.9)
Total	**24 (100)**	**29 (100)**	**52 (100)**	**105 (100)**

TABLE III: PREFERENCE OF ANTIPSYCHOTIC CHOSEN BY MENTAL HEALTH PROFESSIONAL FOR THEMSELVES IN A HYPOTHETICAL SITUATION

	Group-1 Experienced Medical Officer	Group-2 Trainees	Group-3 Qualified Consultants	Total
Drug	n (%)	n (%)	n (%)	n (%)
Fluphenazine	1 (4.2%)	- -	- -	1 (1.0)
Haloperidol	6 (25.0)	2 (6.9)	3 (5.8)	11 (10.5)
Carbamazepine	- -	- -	1 (1.9)	1 (1.0)
Risperidone	11 (45.8)	17 (58.6)	30 (57.7)	58 (55.2)
Olanzapine	1 (4.2)	3 (10.3)	5 (9.6)	9 (8.6)
Qutiapine	3 (12.5)	3 (10.3)	4 (7.7)	10 (9.5)
Clozapine	- -	2 (6.9)	6 (11.5)	8 (7.6)
Aripiprazol	- -	1 (3.4)	- -	1 (1.0)
Ziprasidone	- -	- -	3 (5.8)	3 (2.9)
No medication	2 (8.3)	1 (3.4)	- -	3 (2.9)
Total	**24 (100)**	**29 (100)**	**52 (100)**	**105 (100)**

TABLE IV: FACTOR CONSIDERED IN CHOOSING ANTIPSYCHOTIC FOR SELF

	Group-1 Experienced Medical Officer	Group-2 Trainees	Group-3 Qualified Consultants	Total
Factors	n (%)	n (%)	n (%)	n (%)
Dosing Schadule	1 (4.2)	1 (3.4)	1 (1.9)	3 (2,9)
Efficacy	19 (79.2)	12 (41.4)	33 (63.5)	64 (61.0)
Interaction	- -	- -	- -	- -
safety	2 (8.3)	12 (41.4)	10 (19.2)	24 (22.9)
Tolerability	- -	2 (6.9)	3 (5.8)	5 (4.8)
Kinetic profile	- -	- -	2 (3.8)	2 (1.9)
Cost	- -	1 (3.4)	3 (5.8)	4 (3.8)
others	- -	- -	- -	- -
Unable to answer	2 (8.3)	1 (3.4)	- -	3 (2.9)
Total	**24 (100)**	**29 (100)**	**52 (100)**	**105 (100)**

TABLE V: COMPARISON OF BOTH PATTERNS OF PRESCRIPTION

		Group-1 Experienced Medical Officer (n=24)	Group-2 Trainees (n=29)	Group-3 Qualified Consultants (n=52)	Total (n=105)
Typical Antipsychotic	Prescribed	70%	41%	32%	47.7%
	Chosen for self	29%	7%	6%	14%
Atypical Antipsychotic	Prescribed	21%	59%	67%	49%
	Chosen for self	62%	90%	92%	81.3%

reason for increased prescription of typical antipsychotic is that majority of the sample (72%) of study is from public sector that is serving the poor population and mostly typical antipsychotic are supplied by state to these public facilities. The cost factor is also reflected from the prescribing pattern of atypical antipsychotic as only those atypical antipsychotic were prescribed to the patients for which cheep generic was available while in choosing medicine for themselves costly atypical were also selected in 21% of the cases. Although professionals prescribe almost as many typical antipsychotic as atypical antipsychotic but this prescription pattern do not reflect the most suitable drug for treatment of psychosis in their mind as they select more atypical antipsychotic when the confounding factor were obviated by putting them in a hypothetical situation where they had to choose antipsychotic for themselves. This confidence in atypical antipsychotic reflects update knowledge of the professionals that is in line with international guidelines i.e. NICE[9] (National Institute of Clinical Excellence 2002) and Maudsley guidelines[10]. Amongst the atypical antipsychotics, Risperidone was the most frequently prescribed antipsychotic as shown in studies from UK[4].

Although with removal of confounding factor professional incline to prescribe atypical but still appreciable number of them (14%) would select typical antipsychotic for themselves. This selection shows their confidence on typical antipsychotic as these are prescribed as frequently as atypical antipsychotic. This is important finding as new NICE guidelines has removed the direction of using second generation antipsychotic as first choice in new patients. This is also reflected in the findings of most recent studies CATIEr7 (Clinical Antipsychotic Trials of Intervention Effectiveness) and CUtLASS 1r8 (the Cost Utility of the Latest Antipsychotic Drugs in Schizophrenia Study), both of these trials demonstrated large number of patents on first generation antipsychotic.[9]

Another interesting finding of this study is that only 2

of 105 participants claimed they would not take medication if diagnosed with schizophrenia. This is reassuring given that the prescription of antipsychotics is almost universal for this condition. It is also of note that many of the factors emphasized in the marketing of antipsychotics (dosing, interactions and cost) were not considered important when choosing for oneself.

In choosing an antipsychotic for themselves mental health professionals are likely to have taken into account their personal observations of the effects of the drugs as well as, perhaps to a lesser extent, published comparative data. This study asked healthcare workers to nominate what they consider to be the 'best' antipsychotic. In this study more people chose atypical antipsychotic (85%); this finding is similar to the finding of other studies[1,8] except more conventional antipsychotics were preferred in this study as compared to the study conducted by Taylor[1] where very few people chose conventional agents. This marked different pattern of preference of conventional antipsychotics is due to different nature of experiences of two samples. More prescription of typical antipsychotic for different reasons mentioned above provide more experience with conventional drugs that make professional confident enough to select these drugs for themselves. In this study efficacy and cost were found to be the factors in selection of antipsychotic prescription to the patients. The result of this study are in line with widespread data that typical antipsychotics are as effective as costly atypical[6,9]. In second question of this study professional considered tolerability along with efficacy for choosing antipsychotic for them. Due to the factor of tolerability atypical antipsychotic become the most commonly chosen drug for professionals themselves; these results support the widespread use of the second-generation antipsychotics in practice. Interestingly, the primacy of olanzapine and risperidone in this study is in agreement with recently published effectiveness studies[9,11-13]. Each of these drugs has been shown to have advantages over conventional antipsychotics and other drugs such as quetiapine and ziprasidone. Professionals' choice is thus very much in line with the latest evidence on comparative effectiveness: a measure which includes efficacy and tolerability. Importantly, however, this preference for olanzapine and risperidone pre-dates publication of the most compelling evidence supporting the use of these two drugs[13]. Professionals' choice of antipsychotic for themselves might therefore be a sensitive indicator of the most effective antipsychotics.

In this study aripiprazol was chosen by less then 1% of sample in contrast to 18% in Bleakley[1]. This high preference may be due to the influence of pharmaceutical industry[10] that is not the issue in our case as Aripiprazol has not been launched by parent company in Pakistan.

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