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Study of prescription practice for Antipsychotic drugs by Psychiatrists- A Survey

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Abstract

This study was revealed with prescribing patterns of antipsychotic and monitoring practices of psychiatrists in Pune region. We were surveyed 100 psychiatrists in Pune region out of that 50 gave a positive response. This survey includes the study of antipsychotic types prescribed its frequency, the age of the patients and the diagnosis of patients for whom they prescribed these medications. We were prepared a questionnaires format and were distributed to various psychiatrists in the form of hard copy within the Pune region. Questionnaires formats were collected after fulfillment by psychiatrics in the form of hard copy. In that 88 % of psychiatrics prescribed ATAs, most commonly risperidone (67 %). Patients diagnosis was include psychotic, mood, anxiety, externalizing, and pervasive developmental disorders. Symptoms persist in patients were aggression, low frustration tolerance, and affect dysregulation was also common. Percent of all prescriptions were for years. Most clinicians monitored patients, but there were wide variations in the type and frequency of tests performed. Our study reveals that there exists considerable variation in patterns of prescribing psychotropic medications and a significant increase in the number of patients suffering from psychiatric illnesses seeking treatment. Prescribing patterns vary due to differences in diagnosis, the discomfort that some psychiatrists feel toward prescribing, differing levels of awareness and recognition due to cultural variances, the perceived negative stigma of mental illness, and insufficient education regarding the etiology and management of psychiatric disorders.

Key words: *Anti-psychotic drugs, prescribing pattern, mental illness*

INTRODUCTION

In the last 2 decades, the treatment of psychosis has been revolutionized by the widespread adoption of ATAs.[1–3] These agents, presently available in India include risperidone, olanzapine, quetiapine, and clozapine, have fewer propensities to cause extrapyramidal side effects and carry a significantly lower risk of tardive dyskinesia than do typical agents.[4] For adults, monitoring guidelines and established indications for the use of these medications exist, but not for children, with some exceptions. Some data exist to support the use of clozapine to treat refractory schizophrenia in patients aged under 18 years[5] and to reduce aggression in this population[6]; the review by Kranzler and colleagues[7] cites it as the drug of choice for this indication. Olanzapine has been reported to provide good response in early-onset schizophrenia. The adoption of ATA's as first-line drugs is primarily based on a similar practice for treating adults. The more acceptable side effect profile and the safety of ATAs have broadened the indications for their use. ATAs are being used increasingly to treat various nonpsychotic disorders, not only in adults but also in children and adolescents.[8–14] As is often the case, controlled trials are rare and are characterized by small sample sizes, diagnostically heterogeneous samples, retrospective designs, short follow-up, and the lack of control groups.[15–18] Some data support short-term, sustained efficacy in reducing aggression,[19–24] tics,[25] and mania.[26,27] Other uses for ATAs, for example, as adjunctive treatment for anxiety and depression, are only supported by data for adults. Unfortunately, these medications are not without their shortcomings. Most studies of adults and children find weight gain to be a side effect of ATAs.[28–31] Although this is to some extent a class effect, weight gain is generally more common and greater with olanzapine and clozapine.[31] Prior to treatment, adults

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with psychosis have a higher risk of glucose intolerance than do control subjects without psychosis; these medications increase that risk.[32,33] Medications such as olanzapine and clozapine, which cause more weight gain in adults, are generally more likely to disturb glucose metabolism, but this change has been found with use of all these medications in adult populations to differing extents. Finally, undesirable effects on lipid metabolism have also been identified in adults.[33–35] Weight gain with ATA use is by no means universal or inevitable. Awareness of this side effect, warning patients about it, and early intervention with diet and exercise have been advised.[36] The use of ATAs in treating psychotic disorder has been increasing exponentially, raising concerns as to the appropriateness of this practice.[37], Evidence-based guidelines on frequency and type of monitoring do not exist. To better appreciate current practices, we surveyed psychiatric to quantify their prescribing of this class of medications, the disorders and symptoms being treated, and the type and frequency of monitoring being used currently. With respect to this in present study we had surveyed the psychiatrists to study the use of atypical antipsychotic, their patient compliance to different formulations.

METHOD

We surveyed child and adolescent psychiatrists, developmental pediatricians after obtaining approval from their professional organizations.

Questionnaire

We developed a questionnaire asking whether the physicians prescribed these medications, for which indications, and in which age groups. Questionnaires format were given to various psychiatrics in the form of hard copy within the Pune region. Questionnaires were collected from the psychiatrics after their fulfillment as a hard copy.

Analysis

Student t test was used to compare differences in categorical outcome variables. Instat software was used for analysis.

RESULT

The survey of antipsychotic agent prescribing by psychiatrists was conducted in a 100 psychiatrists out of them 50 gave a positive response. The survey was conducted on questionnaire basis. Questionnaire formats was given to psychiatrics and collected in the form of hard copy. The survey was conducted from August to January on a weekly basis. Some of the questions were found to be ineligible due to misinterpretation.

Respondents were asked, which dosage forms you generally preferred. The most commonly used dosage forms are injectables, depot injections, oral dosage forms, liquid preparations out of which 34% were injectables, 58% of oral dosage forms, 2% of liquid preparations and 6% of depot injections were generally preferred by psychiatrists. The various types of psychiatric patients were visited to hospital as, Neurosis, depression, mood disorders, anxiety, bipolar disorders, and schizophrenia. Out of which 61% of the patients suffered from schizophrenia 9% of the patients suffered from depression, 1 % of the patients suffered from neurosis, 13 % from anxiety and 7% from mood disorders. Regarding long acting dosage form only 10% of psychiatrist prefers long acting preparations and in contrast to that 80% of the psychiatrists think that mouth dissolving tablet is the best option for psychotic patients

Fig.1: Percentage of Prescribers by Age of Patients

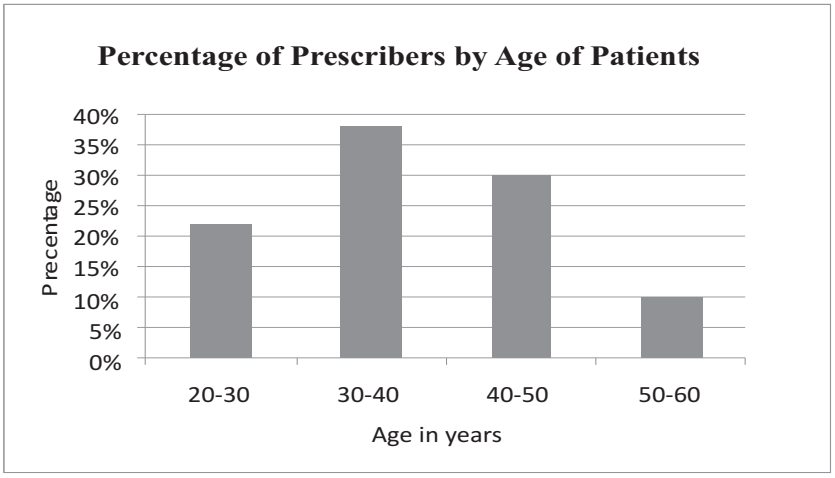

Table.1: Percentage of prescribers by medication

Medication	Percentage
Risperidone	67
Olanzapine	23
Quetiapine	24
Clozapine	0.5

Table.2: Percentage of prescribers by indication

Indication	Percentage
Schizophrenia	79
Bipolar mood disorder	80
Depression	28
Tourette syndrome	72
Eating disorder	24
Obsessive–compulsive disorder	53
Posttraumatic stress disorder	33
Other anxiety disorders	29
Pervasive developmental disorder	88
Mental retardation	48
Attention-deficit hyperactivity disorder	51
Oppositional defiant disorder	51
Conduct disorder	59
Impulsivity	65
Poor frustration tolerance	73
Affective dysregulation	83
Insomnia	33

as a drug delivery medium. 30 % of patients have age more than 50 year. 79% the psychiatrists answered that they use tranquilizers before giving anti- psychotic agents while 21% answered that they are not used tranquilizers before giving anti- psychotic agents. The most commonly used methods for reducing catatonia in patients were ECT, Anti-psychotic agents and exercise show that 60% use of ECT, 25% use of antipsychotic agents, 14% use of benzodiazepines and 1% exercise helped in reducing catatonia as reported by the psychiatrists. 79% the psychiatrists answered that they use tranquilizers before giving anti- psychotic agents while 21% answered that they are not used tranquilizers before giving anti-psychotic agents. The drug abuse was found to be 30% and drug dependence 70% as reported by the psychiatrists.

DISCUSSION

These data suggest a high rate of prescribing ATAs for various indications and symptoms. A significant proportion of these prescriptions are given to children aged under the age of 9 years. These medications are currently being used off-label without clear guidelines for indications, dosing, and monitoring. Subjects report that they monitor patients extensively and frequently, but the practices are not uniform. This situation may be due to lack of data and guidelines.

A 43.9% rate of AIMS testing is impressive; however, this means that 56.1% of patients under the age of 18 years who are being prescribed this medication are not being monitored in this way. Further, there are significant discrepancies in the timing of follow-up (3 months, 6 months, or 12 months.) Although these survey results do not establish the total number of patients being treated with ATAs, they do establish that the prescribing of ATAs by psychiatrics in Pune India is ubiquitous. There is an urgent need for more data regarding safety. reports suggests that most of the doctors found long acting preparations and oral dosage forms more compatible as

compared to injectables and liquid dosage forms.

CONCLUSION

This study reveals that there has been a significant increase in the number of patients suffering from psychiatric illnesses seeking treatment, which has precipitated an increase in the number of prescriptions written by psychiatrists for antipsychotic agents. However, there exists considerable variation in patterns of prescribing psychotropic medications, as well as a general lack of concordance between diagnosis and psychotropic medications prescribed in the medical field as a whole. Prescribing patterns vary due to differences in diagnosis, the discomfort that some psychiatrists feel toward prescribing, differing levels of awareness and recognition due to cultural variances, the perceived negative stigma of mental illness, and insufficient education regarding the etiology and management of psychiatric disorders.

These variations are particularly evident in the prescribing trends of primary care physicians with antipsychotic medications. In order to have a positive impact on patient populations, it is important for psychiatrist to make use of various newly introduced medications to manage the spectrum of these disorders that are so frequently appearing in their practices.

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