Psychotropic Drug Utilization Pattern among Schizophrenics

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Sir,

Schizophrenia is a chronic debilitating major psychiatric disorder which may require life long treatment. Treatment of such patients at an early stage may prevent loss of morbidity, mortality and productivity. Till date, pharmacotherapy remains the cornerstone of treatment in such patients. Serendipitous discovery of chlorpromazine and lithium in the fifties brought about a revolution in the field of psychopharmacology. Although highly efficacious, the side-effects (Kane, 1987) produced by these older conventional drugs were distressing leading to an active search for better agents. Advent of newer antipsychotic agents like olanzapine, risperidone and quetiapine has led to major changes in drug usage pattern in psychiatry, besides other considerations related to disease, patients, drugs and physician.

With a variety of antipsychotic agents that are presently available, it is difficult at times to select a particular antipsychotic drug on rational basis alone but on empiricism. They are increasingly used for a variety of indications at present. Keeping these factors in mind, a prospective study was conducted by Department of Pharmacology in Psychiatry OPD of Himalayan Institute Hospital, a tertiary care teaching hospital in Uttaranchal during the year 2002-2003. The aim of the study was to analyze the prescribing pattern of drugs in chronic stable schizophrenic patients and to correlate the availability of newer medicines in the market and its usage or impact on psychiatric practice in the present scenario. One hundred and eighteen adult stable schizophrenic patients diagnosed according to the DSM-IV criteria (APA, 1994) were included in the study. Individual data was collected in a preformed format and was analysed on parameters such as distribution of subsets of disease, demographic profile and psychotropic drug use pattern.

Results showed the distribution of different types of schizophrenics: paranoid schizophrenia 1.7% (61), disorganized schizophrenia 9% (7), catatonic schizophrenia 10.2% (12), undifferentiated 3.4% (4) and residual 11.8% (14) episodic i.e. interepisodic residual symptoms with prominent negative symptoms 10.1% (12) and episodic with no interepisodic symptoms or continuous with prominent negative symptoms 6.7% (8). As per the demographic profile, the number of patients below 30 years were 68 (57.62%) and above 30 years 50 (42.37%), number of males were 64 (54.23%) and females 54 (45.76%). Socio-economically, the number of patients in upper income group were 45, middle income group were 62 and 11 patients belonged to the low socioeconomic status. Of the 118 schizophrenic patients, 28 were professionals and 51 non-professionals, whereas students were 23 and labourers or farmers constituted 16. There were 84 (71.19%) hindus, 18 (15.25%) muslims, 12 (10.16%) sikhs and 4 (3.38%) belonged to other categories.

Table 1

| Drug Use Pattern of Schizophrenic Patients in Psychiatry OPD |
|-------------------------------------------------------------|
| 1. Total number of prescriptions (n) = 118                  |
| 2. Total number of drugs used = 338                         |
| 3. Average number of drugs per prescription = 2.8           |
| 4. Number of fixed dose combinations = 8                    |
| 5. Types of Psychotropic drugs used:                        |
| a. Antipsychotics = 189 (55.9%)                             |
| b. Antidepressants = 23 (6.8%)                              |
| c. Antimanics = 12 (3.5%)                                   |
| d. Anxiolytics = 18 (5.3%)                                  |
| e. Anticholinergics = 64 (18.9%)                            |
| f. Miscellaneous = 32 (9.4%)                                |

A total of 338 drugs were prescribed, out of which 316 were used orally and 22 given parenterally as depot formulations. Different antipsychotics used comprised of olanzapine 44.4%, haloperidol 28.5%, risperidone 9.5%, quetiapine 6.3%, aripiprazole 5.2%, ziprasidone 4.2% and thioridazine 2.6%. Out of 189 orally used antipsychotic medications, only one antipsychotic drug was prescribed to 58 patients, two to 49 patients and more than two to 11 patients. Among anticholinergics, trihexyphenidyl was prescribed to 64 schizophrenic patients, antidepressants to 23 patients, anxiolytics to 18 and anti-manic or mood stabilizer to 12 patients. Most commonly prescribed antipsychotic was olanzapine followed by haloperidol and risperidone.

A multi-drug therapy trend was observed. A shift towards the use of newer atypical antipsychotic agents was evident. Concomitant anticholinergics were used only in about half of the patients reflecting its reduced usage with increasing use of newer atypical antipsychotics. Fixed dose
combinations were also prescribed occasionally. Other psychotropic medications prescribed as adjunctive treatment were antidepressants i.e. venlafaxine and fluoxetine, anxiolytics i.e. clonazepam and sodium valproate as antimanic agent.

The treatment pattern observed correlates with the worldwide changing trends in the treatment of schizophrenia. In recent years, the introduction of newer atypical antipsychotic agents like olanzapine, risperidone, quetiapine and ziprasidone have provided a better control of symptoms and reduced adverse effects especially the extrapyramidal ones in contrast with older drugs. The newer atypical antipsychotics also proved to be better in improving of negative symptoms, cognitive dysfunction and may also be efficacious in neuroleptic-resistant schizophrenia (Robert Freedman, 2003; Serretti et al., 2004). With the recent introduction of yet another newer third generation antipsychotic agent aripiprazole with serotonin-dopamine system stabilising action, further improvement in the management of schizophrenic patients is envisaged with bright future.

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