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Letter to Editor
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# Integrated Health Care Services for Schizophrenic Patients in India: Need of the Hour

*Dhruvika G Kharadi and Barna Ganguly**

*Department of Pharmacology, Pramukhswami Medical College, India*

## Letter to Editor

A US author compiled a report on the reasons on the alarming trend of increased deaths due to coronary heart disease (CHD), as well as their implications for patients with schizophrenia indicating that the leading causes of premature death in patients with schizophrenia are suicide (10-fold increase e.g. ≈10% *vs.* 1%) and CHD (2-fold increase e.g. ≈66% *vs.* 33%) compared to general population. This increased risk of CHD related deaths can be linked to significantly higher prevalence of risk factors such as smoking (75% *vs.* 25%), body mass index (BMI) ≥ 27 kg/m$^2$ (42% *vs.* 27%), diabetes mellitus (13% *vs.* 3%), hypertension (27% *vs.* 13%) and metabolic syndrome (41% *vs.* 22%) compared to general population. This is further complicated by lower access to medications reducing cardiovascular risk compared to general population e.g. dyslipidemia treatment (12% *vs.* 33%) and antiphypertensives (37.6% *vs.* 50%). This indicates that the choice of antipsychotic drug therapies of comparable efficacy and a lower likelihood of adversely affecting the major risk factors of CHD is an important consideration for patients with schizophrenia. Further, US veteran affairs study [1,2] revealed that people with schizophrenia (hazard ratio 1.25, $P < 0.001$) and other psychosis (hazard ratio 1.41, $P < 0.001$) are more likely to die of CHD than people without mental illness.

The second-generation antipsychotics vary in their propensity to induce weight gain; clozapine and olanzapine produce the most weight gain; quetiapine and risperidone produce intermediate weight gain; ziprasidone and aripiprazole produce the least weight gain. The American Diabetes Association and American Psychiatric Association (ADA/APA) Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes, on the basis of differential weight gain in clinical trials and data from cohort studies, ranks clozapine and olanzapine as most associated, risperidone and quetiapine as less clearly associated, and ziprasidone and aripiprazole as probably not associated with an increased risk of diabetes [2]. Nonetheless, because patients with schizophrenia represent a high CHD risk group, the ADA/APA Consensus Development Conference recommends metabolic monitoring for all patients taking second-generation antipsychotics as follows [3].

Despite growing awareness of this higher risk of CHD in psychotic patients amongst USA psychiatrists, 97% of whom rated it as serious to very serious concern while prescribing antipsychotics, number of surveys reveal a broad disparity between this awareness of the need for adequate monitoring and the actual performance of the monitoring e.g. 60% to 65% of patients do not have regular glucose monitoring and 70% to 75% do not have regular lipid monitoring [2]. Department of Psychiatry, Post-graduation Institute of Medical Education and Research, Chandigarh undertook an email survey amongst 168 Indian psychiatrists on their antipsychotic prescribing patterns, which indicated that the use of typical anti-psychotics is waning as compared to atypical anti-psychotics. Subsequently in 2010, the same authors [2] conducted an audited computerized registry of their department revealing that most commonly prescribed antipsychotics were olanzapine (approximately 41%), risperidone (approximately 22%) and paliperidone (approximately 10%) with conventional antipsychotics mentioned in about 8% of prescriptions. The percentage of atypical antipsychotic prescribed noted in this study is much higher than that reported in studies on patients with schizophrenia from other eastern countries [3]. Department of Pharmacology, Assam Medical College and Hospital undertook a retrospective, cross sectional analysis of prescribing patterns of antipsychotics which revealed that most commonly prescribed antipsychotics included olanzapine (approximately 51%), risperidone (approximately 17%) and chlorpromazine (approximately 13%) with the average no. of antipsychotic drugs per prescription at 2.20, which is higher than 1.6-1.8 per encounter recommended by WHO guidelines [2]. Department of Pharmacology at Chirayu Medical College, Bhopal analyzed prescribing patterns in 520 patients attending Psychiatric OPD as per the WHO drug indicators, which revealed the average number of psychotropic drugs per prescription at 2.1 ± 0.8. Subsequently in 2015, the same department published another study on antipsychotic drug

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***Correspondence:***
*Barna Ganguly, Department of Pharmacology, Pramukhswami Medical College, India;*
*E-mail: dgkharadi@yahoo.co.in*

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**Table 1**: Monitoring protocol for patients on Second Generation Antipsychotics.

| - | Baseline | 4 weeks | 8 weeks | 12 weeks | Quarterly | Annually | Every 5 years |
|---|---|---|---|---|---|---|---|
| Personal/family history | √ | - | - | - | - | √ | - |
| Weight (BMI) | √ | √ | √ | √ | √ | - | - |
| Waist circumference | √ | - | - | - | - | √ | - |
| Blood pressure | √ | - | - | √ | - | √ | - |
| Fasting plasma glucose | √ | - | - | √ | - | √ | - |
| Fasting lipid profile | √ | - | - | √ | - | - | √ |

prescribing pattern in 132 schizophrenia patients of the Psychiatry Department. This time the most commonly prescribed drugs included antipsychotics (olanzapine, risperidone and haloperidol) and centrally acting anticholinergic (trihexyphenidyl) with average number of drugs per prescription at 2.2 ± 0.6. Most recently in 2015, Atal S & Atal S [3] from two medical colleges of Indore undertook a prospective analysis of prescribing patterns and cost analysis of antipsychotics in 304 prescriptions of the psychiatry department of Modern Institute of Medical Sciences, Indore with olanzapine (28.6%), risperidone (25.84%) and haloperidol (23.03%) being the most commonly prescribed antipsychotics with the average number of psychotropic drugs/prescription prescribed at 3.17.

When we look at the risk of the metabolic syndrome from such shift to atypical antipsychotics and their combined prescriptions, it is quiet alarming as per the recommendations of joint statement of the APA and the ADA [4].

However, when we conducted "Study of Adverse Effects Monitoring of Newer Atypical Antipsychotic Drugs" to prospectively assess the occurrence and severity of adverse effects with "newer" atypical antipsychotic drugs asenapine and iloperidone under actual practice conditions at psychiatric clinics and hospitals at Ahmedabad, we observed that the treating psychiatrists of India do not practice monitoring of metabolic side effects of antipsychotics through regular laboratory investigations and electrocardiogram (ECGs) during antipsychotic treatment for detecting events related to increased CHD risk.

- The solution for this issue of under-monitoring and under treatment of schizophrenic patients for increased CHD risk has already been recommended as follows [5-11]Reorganization of mental health service delivery in a way so that Mental health providers attend to all health care needs of patients with serious mental illness, enhance their coordination and coordination with family physicians of the patients to develop a case-management policy directed specifically towards physical health needs of the patient (Table 1).

- Promotion of patient-sanctioned communication and collaboration between health care providers by offering incentives for the provision of functional clinical information systems.

- Preparation of the health care workforce to provide coordinated care by increasing mental health staff competencies in physical health screening and developing patient self-care skills. By increasing General Practitioners' practical knowledge of severe mental illnesses. By stressing on interdisciplinary teamwork and providing appropriate skills at a professional and postgraduate level. By altering professional licensing and certification procedures to reflect the needs of integrated models of care.

- Elimination of policies and practices that offer no incentives for, or discourage, integrated care.

- Strengthening of the accreditation process for health care institutes where National Accreditation Board of Hospitals requires them to demonstrate coordinated and integrated general heath metrics.

- Health authorities shall develop coordination research to assess feasibility and effectiveness of coordinated health care programs implemented on the basis of evidence-based medicine, and quality improvement initiatives.

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