

**Research based treatment through neuroleptics (antipsychotics) in Pakistan:
Can it be trusted?**

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Madam, Schizophrenia is a mental illness where patients observe and interpret reality in an alternate fashion or perspective. The word is derived from Greek 'schizo' (splitting) and 'phren' (mind), with the term initially proposed by Eugen Bleuler (1908).¹ The debilitating illness usually has symptoms of hallucinations, delusions, and overall distorted versions of reality. Patients may also exhibit social withdrawal, disordered speech, disorderly movement and behavioural change. Schizophrenia affects less than one per cent of the global population, and not all Pakistani clinics are equipped to manage patients mentioned above.

Schizophrenia is a psychiatric illness commonly treated with antipsychotics to lessen the patients symptoms. More often than not, second generation antipsychotics (clozapine, asenapine, risperidone etc.) are used to provide a better result and adequately decrease the systematic side effects of these neuroleptics. However, what is a moment of caution for clinicians globally as well as in Pakistan, is that these second-generation antipsychotics may be causing problems bigger than just side effects like weight gain, diabetes, or hypertension. Research conducted by Mitchell et al. confirmed the high probability of second-generation antipsychotics causing metabolic syndrome in patients² by presenting with abnormal findings that put them at cardiovascular risk.

These findings include visceral adiposity, insulin tolerance, elevated triglyceride levels, and decreased high-density lipoprotein (HDL) cholesterol levels. These drugs are not only affecting first- world countries but are bringing about more significant influence in third- world countries. Pakistan lacks available treatments for schizophrenia, at around 96%, which is comparable to an approximately median of 32.2% globally and 69% in low-income and middle-income countries (LMICs).³

From 2010 to 2015, there was a progressive rise in the use

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of antipsychotics in Pakistan, most commonly risperidone and olanzapine.⁴ The onus ultimately falls on inadequate evidence and treatment protocol in first and third- world countries. However, a feasible suggestion could be knowing the minimum effective dosage of second-generation antipsychotics. Research conducted by Leucht et al. mentioned the exact dosages, to minimize lethal side effects of these drugs (aripiprazole 10 mg/1.33, clozapine 300 mg/40, risperidone 2 mg/0.27).⁵ To date, these drugs are still being prescribed in most countries without proper control on dosages. It is imperative for healthcare workers in Pakistan to implement an accurate administration plan for dosages considering the favourable outcomes in patients with schizophrenia.

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References

1. Hany M, Rehman B, Azhar Y, Chapman J. Schizophrenia. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022.
2. Mitchell AJ, Vancampfort D, Sweers K, van Winkel R, Yu W, De Hert M. Prevalence of metabolic syndrome and metabolic abnormalities in schizophrenia and related disorders—a systematic review and meta-analysis. *Schizophr Bull* 2013;39:306-18. doi: 10.1093/schbul/sbr148.
3. Lora A, Kohn R, Levav I, McBain R, Morris J, Saxena S. Service availability and utilization and treatment gap for schizophrenic disorders: a survey in 50 low- and middle-income countries. *Bull World Health Organ* 2012;90:47-54B. doi: 10.2471/BLT.11.089284.
4. Mahmood S, Hussain S, Ur Rehman T, Barbui C, Kurdi AB, Godman B. Trends in the prescribing of antipsychotic medicines in Pakistan: implications for the future. *Curr Med Res Opin* 2019;35:51-61. doi: 10.1080/03007995.2018.1513834
5. Leucht S, Samara M, Heres S, Patel MX, Woods SW, Davis JM. Dose equivalents for second-generation antipsychotics: the minimum effective dose method. *Schizophr Bull* 2014;40:314-26. doi: 10.1093/schbul/sbu001.