

# Atypical antipsychotic monitoring: A survey of patient knowledge and experience

Larkin Feeney, Mary Mooney

*Ir J Psych Med* 2006; 23(3): 100-102

## Abstract

**Objectives:** To examine the knowledge and experiences of side-effects and their monitoring in patients prescribed atypical antipsychotic medications.

**Methods:** A tick box survey was designed to ask questions of patients prescribed atypical antipsychotic medications about side-effects and monitoring for them. This survey was distributed anonymously to all suitable outpatient attendees over a three month period who had been prescribed atypical antipsychotic medication for at least one year.

**Results:** Seventy-four of the 90 surveys (82%) distributed were returned complete. Fifty-six (76%) of those surveyed said they were currently experiencing side-effects. Twenty-two (39%) said they had not told their psychiatrist about the side-effects. Weight gain was most commonly complained of (49%). Forty-five (61%) said that they had had no monitoring blood tests in the past year. Fifty-one (69%) did not know that certain monitoring blood tests were recommended.

**Conclusions:** Patients prescribed atypical antipsychotic medications are not currently being monitored as best practice dictates. It cannot be assumed that GPs will pursue this monitoring. More resources are needed for mental health services so that adequate monitoring services can be provided.

**Key words:** Atypical antipsychotics; monitoring; side-effects; psychiatry.

## Background

There is evidence of a worldwide epidemic of obesity, diabetes and cardiovascular disease.<sup>1,2</sup> Individuals with schizophrenia are, as a result of poorly understood mechanisms, at increased risk of obesity, diabetes and cardiovascular disease.<sup>3</sup> This risk appears to be augmented by the prescription of antipsychotic medications, particularly atypicals.<sup>4,7</sup> It is now recommended that certain baseline tests be carried out on individuals being prescribed these medications and that ongoing monitoring for development of side-effects takes

place.<sup>3,7-11</sup> Research carried out on a psychiatric inpatient sample on antipsychotic medications found that less than half had been tested for diabetes.<sup>12</sup> In an audit of inpatient and outpatient records of patients prescribed atypical antipsychotic medications we found low levels of monitoring for metabolic side-effects and that monitoring was highly dependent on admission to hospital.<sup>13</sup> There is some debate as to what extent psychiatrists or primary care physicians should be responsible for this monitoring. Individuals may attend their general practitioner or other doctors for this monitoring but the extent to which they do is unclear.

The Kilkenny Mental Health Service is a semi-rural public catchment area service in the Republic of Ireland, serving a population of approximately 70,000 people. We set out to examine the knowledge and experiences of side-effects and their monitoring, in patients prescribed atypical antipsychotic medications.

## Method

A literature search did not reveal a suitable previously used questionnaire, so a two page tick-box, self-report survey was designed (*Figure 1*), which asked questions of patients prescribed atypical antipsychotic medications about side-effects and any monitoring that they might have had for them. They were also asked about general practitioner attendances and who they would prefer to carry out any necessary side-effect monitoring.

This survey was distributed, with explanatory information, to all suitable outpatient attendees over a three month period who had been prescribed any atypical antipsychotic medication for at least one year. Suitability was determined by nursing staff at the clinic that were familiar with the patients. Patients were excluded if they could not read English or if they were judged to be too unwell or too disabled. Patients returned the survey anonymously and could return it blank if they did not wish to participate.

An information sheet was provided at the clinic with details and advice regarding potential adverse effects of antipsychotic medications.

## Results

Of the 90 distributed we received 74 (82%) completed surveys. Forty-one (55%) said that they were unaware of the potential metabolic side-effects of atypical antipsychotic medications. Forty-six (62%) said that they had not been informed about the possibility of these side-effects. Fifty-six (76%) of those surveyed said they were currently experiencing side-effects (see *Table 1* for a breakdown). Twenty-three out of the 56 (41%) who said that they were experiencing side-effects said that they had not told their doctor about them. The reasons given were: doctor too busy (35%), side-

\*Larkin Feeney, MB, MRCPI, MRCPsych, Senior Registrar in General Adult Psychiatry, St Vincent's Hospital Fairview, Dublin 3, Ireland. Mary Mooney, MB, MRCPsych, MmedSc, MA, Clinical Director and Consultant in General Adult Psychiatry, Department of Psychiatry, St Luke's Hospital, Kilkenny, Co Kilkenny, Ireland.

\*Correspondence

SUBMITTED: OCTOBER 26, 2005. ACCEPTED: MAY 19, 2006.

Figure 1: Questionnaire used in this study

**1. What age are you?**  
 Less than 30                      30-45                                      45-60                                      Over 60

**2. What is your gender**  
 Male                                      Female

**3. Were you aware that these medications can cause weight gain and may increase your risk of diabetes and heart disease?**  
 Yes                                      No

**4. Has your doctor explained the possibility of these side-effects to you?**  
 Yes                                      No

**5. Would you like to receive an information sheet from us offering advice about these and other possible side-effects?**  
 Yes                                      No

**6. Are you currently experiencing any side-effects from these medications?**  
 Yes                                      No

**7. Have you told your doctor about these side-effects?**  
 Yes                                      No

**8. If you answered no why have you not told your doctor?**  
 Side-effects are new                      Doctor too busy                                      Too embarrassed                                      Not sure                                      Other

**9. If you answered yes which of the following side-effects are you experiencing?**  
 Weight gain Yes No                      Dizziness Yes No                                      Stiffness Yes No  
 Drowsiness/fatigue Yes No                      Loss of menstrual periods Yes No                                      Loss of sexual interest Yes No  
 Others (please list)

**10. When was the last time you saw your GP for a physical health problem or for a physical check up?**  
 In the last year                                      1-5 years ago                                      More than 5 years ago                                      Never

**11. Are you concerned about your physical health?**  
 Yes                                      No

**12. Did you know that when you are on these medications that you should have blood tests to check for diabetes and other conditions?**  
 Yes                                      No

**13. Have you had any blood tests in the past year?**  
 Yes                                      No

**14. Would you be agreeable to having a blood test to monitor for side-effects every year?**  
 Yes                                      No

**15. Who would you prefer to do these blood tests?**  
 Mental Health Services                                      Your GP    Don't mind

**16. If the mental health services had someone to provide general health, dietary and exercise advice at their clinics would you welcome this?**  
 Yes                                      No

effects new (22%), too embarrassed (22%) and not sure why (22%).

Forty-five patients (61%) said that they had had no monitoring blood tests in the past year. Fifty-one (69%) did not know that certain monitoring blood tests were recommended. With regard to general practitioners and monitoring, 47 (65.5%) said that they had not consulted their GP about their physical health within the past year, and 27 (36.5%) said they had not done this in over five years. Twenty-four (32%) patients said they were worried about their physical health. Sixty-nine (93%) said that they would be agreeable to having blood tests regularly for the monitoring of side-effects. When these 69 were asked about who they would like to carry out this monitoring 12 (17%) said they would prefer the mental health services, 27 (39%) said they would prefer their GP and 30 (44%) said that they did not mind. Fifty-eight (78%) said that they would welcome more input around general

health, dietary and exercise advice at the clinic, while 68 (92%) requested an information sheet about potential side-effects of atypical antipsychotics. There were no significant differences noted between genders or age groups.

### Discussion

Evidence of the potential detrimental effect of atypical antipsychotics on cardiovascular health is only emerging and no consensus yet exists on how this risk should be monitored. However, this study suggests that at the present time the reality falls considerably short of the recommended best practice for monitoring of patients prescribed these medications.<sup>12, 13</sup> This survey suggests that the majority of patients who are prescribed atypical antipsychotics are unaware of the associated metabolic risks and that doctors are not adequately communicating these concerns. Furthermore the survey supports the finding that the majority of patients are

not having the recommended monitoring tests and suggests that very few patients are attending doctors other than psychiatrists for this monitoring.

Cognitive impairment could have affected the accuracy of our findings. We did not collect diagnostic information in this study but we know from our previous study<sup>13</sup> that the majority of patients on atypical antipsychotics attending the service have schizophrenia. The nurses at the clinic used their judgement to exclude those who they felt were too impaired to complete the survey, but this is clearly an imperfect method. In our previous study of mental health records we found that just over 40% of patients on these medications had had some monitoring tests carried within the past year,<sup>13</sup> while in this study 39% of patients said that they had had some testing in the past year. The closeness of these two findings suggests that patient self-reporting was reasonably accurate in this study. The study was anonymous so we do not know if those who chose not to participate were different to those who did, but it is unlikely that they would have affected the general thrust of the results. The patient sample was also probably skewed towards more able individuals who would be more likely to know about associated risks and to pursue monitoring for them. Hence the reality may be worse than the results suggest.

### Conclusion

A recent editorial in the *British Journal of Psychiatry* states "psychiatrists should screen for metabolic disturbances if patients have no access to primary care".<sup>3</sup> Irish psychiatrists may need to be more pro-active as their patients may only see their general practitioner very irregularly, and may lack the initiative and drive necessary to avail of preventative medicine. The fact that most people in the survey who expressed a preference opted for their GP carrying out the blood testing may simply reflect a lack of association of blood tests with attending psychiatric outpatient appointments. Psychiatrists need more resources if they are to be able to provide more comprehensive monitoring. At present there are only very limited phlebotomy facilities available in most psychiatric clinics, and facilities elsewhere are often difficult to access. More education on the potential risks with atypical antipsychotics

Table 1: Side-effects reported

Side-effect	No of persons reporting (%)
Weight gain	36 (48.6%)
Dizziness	16 (21.6%)
Stiffness	4(5.4%)
Drowsiness/fatigue	33 (44.6%)
Loss of menstrual periods	7 out of 15 females under 45
Loss of sexual interest	8 (10.8%)

and the recommended monitoring for them, needs to be provided for patients, general practitioners and other health professionals if they are to play their part. Hopefully levels of monitoring and risk awareness will have increased when this study is repeated.

Declaration of Interest: None

### References

1. Stumvoll M, Goldstein BJ, van Haeften TW. Type 2 diabetes: principles of pathogenesis and therapy. *Lancet* 2005; 365: 1333-1346.
2. Eckel RH, Grundy SM, Zimmet PZ. The metabolic syndrome. *Lancet* 2005; 365: 1415-1428.
3. Thakore JH. Metabolic syndrome and schizophrenia. *Br J Psychiatry* 2005; 186: 455-456.
4. Almeras N, Despres JP, Villeneuve J et al. Development of an atherogenic metabolic risk factor profile associated with the use of atypical antipsychotics. *J Clin Psychiatry* 2004; 65: 557-564.
5. Meyer JM, Koro CE. The effects of antipsychotic therapy on serum lipids: a comprehensive review. *Schizophr Res.* 2004; 70: 1-17.
6. Nasrallah HA, Newcomer JW. Atypical antipsychotics and metabolic dysregulation: evaluating the risk/benefit equation and improving the standard of care. *J Clin Psychopharmacol* 2004; 24 (Suppl 1), S7-14.
7. Chue P, Kovacs CS. Safety and tolerability of atypical antipsychotics in patients with bipolar disorder: prevalence, monitoring and management. *Bipolar Disord* 2003; 5 (Suppl 2), 62-79.
8. Marder SR, Essock SM, Miller AL, et al. Physical health monitoring of patients with schizophrenia. *Am J Psychiatry* 2004; 161: 1334-1349.
9. Taylor D, Paton C, Kerwin R. *The Maudsley 2005/6 Prescribing Guidelines*. London: Martin Dunitz, 2005.
10. Kane JM, Leucht S, Carpenter D, Docherty JP. Expert consensus guideline series. Optimizing pharmacologic treatment of psychotic disorders. Introduction: methods, commentary, and summary. *J Clin Psychiatry* 2003; 64(12): 5-19.
11. Dinan TG and expert group. "Schizophrenia and diabetes 2003" Expert consensus meeting, Dublin, 3-4 October 2003: consensus summary. *Br J Psychiatry* 2004; 184 (47): s112-s114.
12. Taylor D, Young C, Esop R et al. Testing for diabetes in hospitalised patients prescribed antipsychotic drugs. *Br J Psychiatry* 2004; 185: 152-156.
13. Feeney L, Mooney M. Atypical antipsychotic monitoring in the Kilkenny Mental Health Services. *Ir J Psychol Med* 2005; 22: 101-102.