MEDICATION COST AND ANTIPSYCHOTIC CHOICE

Peter M. Haddad

Peter M. Haddad is a Consultant in Community Psychiatry at Greater Manchester West Mental Health NHS Foundation Trust, Salford, United Kingdom and an Honorary Senior Lecturer at the University of Manchester, United Kingdom

The paper by Chaudhry and colleagues[1] provides an important insight into prescribing practice and clinicians' attitudes to antipsychotics in Pakistan. The data are from a cross-sectional survey of psychiatrists and psychiatric nurses in several cities in Pakistan. Respondents were asked which antipsychotic they prescribed most frequently to treat patients suffering from psychosis and also which antipsychotic they would want to receive themselves if, hypothetically, they were to suffer a psychotic illness.

Approximately one third of the nurse respondents did not know or answer the question on which antipsychotic they dispensed most frequently with another 18% naming a psychiatric medication from another class including an anticholinergic, anxiolytic or antidepressant[1]. This is not a criticism of the nurses themselves but rather a reflection that until recently there has been a lack of dedicated psychiatric nurse training in Pakistan. This has important clinical consequences. If nurses lack basic knowledge about psychiatric medication it will impact on their ability to provide patients with information as well as to monitor patients for response and adverse effects. The recent inclusion of dedicated psychiatric training into general nurse training programmes in Pakistan is an important development and it will be interesting to see the effect on psychiatric care. Internet-based education programmes may also prove an important way to develop clinical expertise in developing countries and form a bridge to academic centres in more developed countries.

The psychiatrists were approximately equally split between those who most frequently prescribe an atypical, usually risperidone, and those who most frequently prescribe a conventional drug, usually haloperidol, in clinical practice[1]. This contrasts to the UK where atypical drugs dominate prescribing for psychosis and many younger psychiatrists have little or no experience of prescribing conventional drugs[2]. These national prescribing differences are interesting given that, other than clozapine, atypical and conventional drugs show little or no difference in efficacy in schizophrenia[3, 4]. In contrast antipsychotics differ markedly in their side effect profiles to the extent that the division into atypical and conventional groups is somewhat meaninglesss[5]. It would be interesting to know more about antipsychotic prescribing in Pakistan, for example what dose range of haloperidol is favoured and what makes some clinicians favour haloperidol and other risperidone given the difference between the two drugs in risk of extrapyramidal side effects[6].

In Chaudhry's sample a high proportion of respondents stated that risperidone was the most frequently used antipsychotic in their clinical practice (43%) and also the drug they would select for their own treatment (55%)[1]. This is consistent with a meta-analysis that shows that risperidone provides a good balance of efficacy and tolerability[6]. It is notable that although 52% of psychiatrists usually prescribe a conventional antipsychotic in clinical practice, if ill themselves only 20% would choose a conventional drug, virtually all the remainder choosing an atypical drug. The difference between the two scenarios is largely due to psychiatrists being more likely to choose olanzapine, quetiapine, aripiprazole, ziprasidone or clozapine for their own treatment than for their patients and conversely being less likely to select haloperidol for themselves. A previous study in Pakistan reported similar results with psychiatrists reporting approximately equal experience of using typical (48%) and atypical (49%) antipsychotics but 81% indicating that they would choose an atypical if ill themselves[7]. Medication cost is a likely explanation for these results. It is unclear when Chaudhry's data was gathered but it is likely to have been when risperidone was the only generic and therefore cheap atypical antipsychotic available accounting for the very limited prescribing of expensive branded atypical drugs.

Similar studies in other countries have provided varying results. A German study published in 2003 reported that 95% of psychiatrists would choose an atypical as first line antipsychotic if they or a relative had

Peter M. Haddad, Consultant Psychiatrist, Greater Manchester West Mental Health NHS Foundation Trust, Cromwell House, Cromwell Road, Eccles, Salford, Manchester, M30 0GT, UK and Honorary Senior Lecturer, University of Manchester, UK
E-mail: peter.haddad@gmw.nhs.uk

schizophrenia whereas 70% of prescriptions for patients with schizophrenia in Germany in 2000 were for conventional antipsychotics[8]. In contrast a UK study conducted in 2005/6 found little difference between psychiatric professionals in terms of their prescribing experience and their preference for an antipsychotic if ill themselves with atypicals being overwhelmingly favoured in both situations[2]. In the two Pakistani studies[1,7] <10% of respondents cited medication cost as the most important factor in determining antipsychotic choice if ill themselves. Not a single respondent in the UK study[2] identified cost as the main determinant when hypothetically choosing an antipsychotic to treat themselves. In all three studies[1,2,7] efficacy and tolerability/safety were seen as the two most important factors influencing drug selection for self-treatment.

These studies indicate that antipsychotic choice varies by time and place and is influenced by a range of factors. Not surprisingly drug cost appears a more important factor in low income than high income countries. It is interesting that cost appears to have more influence on antipsychotic selection in clinical practice than when it comes to selecting an antipsychotic to treat oneself. Two atypical antipsychotics, olanzapine and quetiapine, have recently become generic or will do so shortly. The resulting price fall may alter prescribing patterns. New drugs are continually being developed and so clinicians are always going to be faced with choosing between older cheaper drugs and newer more expensive drugs.

Resources in all health care systems are finite and so health professionals must make rational choices regarding financial spending, including prescribing, and tax payers would expect this in publically funded systems. This is especially so in the current economic climate with health care budgets in many countries coming under increasing pressure. This raises the question of how to assess the cost effectiveness of psychiatric drugs. A cheaper drug may not necessarily be more cost-effective. For example an antipsychotic with a higher acquisition cost, but a better tolerability profile, may prove cheaper in the long-term if it leads to (i) better adherence thereby reducing relapse rates and (ii) lower rates of physical morbidity due to its better tolerability profile. Antipsychotic non-adherence is common in schizophrenia and a major cause of relapse and rehospitalisation[9]. Weight gain and metabolic abnormalities caused by antipsychotics may lead to substantial long terms health costs particularly through an increased risk of cardiovascular disease[10] while hyperprolactinaemia may increase the risk of osteoporosis and fractures[11]. The impact of prescribing different antipsychotics on these outcomes in clinical practice is unclear as multiple confounders are at play. There include frequent switching of antipsychotics, the impact of psycho-education and physical health screening with appropriate interventions and the effect of other risk factors including smoking, poor diet, lack of exercise and drug and alcohol misuse. Clozapine appears to be cost effective in treatment resistant schizophrenia compared to other antipsychotics[12] but other than this the current evidence base is insufficient to compare the long-term cost effectiveness of antipsychotics. As a result financial decisions about antipsychotics are likely to continue to be based on drug cost rather than true cost effectiveness with budgets for medication, inpatient care, general medical care, social care etc being considered in isolation.

There is a pressing need for long-term health economic studies to address the cost effectiveness of antipsychotics. In the meantime drug cost is an important factor that all clinicians need to consider when making prescribing choices. In reducing antipsychotic drug costs it is important that inappropriate and ineffective polypharmacy is avoided and that generic prescribing is employed. Clearly, if all things are equal the cheapest drug should be prescribed. However drug cost needs to be considered alongside other factors including an individual's prior experience of medication, their preference regarding future prescribing and the different side effect profiles of different drugs. Patients show marked individual variation in their response and tolerability to antipsychotics and as such clinicians and patients need access to a range of drugs. Making prescribing decision on an individual patient basis in partnership with the patient remains an essential part of good psychiatric practice.

Declaration of interest:

In the last 3 years PMH has received lecture and/or consultancy fees, as well as conference expenses, from the manufacturers of several antipsychotics including AstraZenecca, Bristol Myers Squibb, Eli Lilly, Lundbeck and Janssen.

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