Compliance to antipsychotic medication: a challenge for client, family and health care providers
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Abstract
Compliance with anti-psychotic medications plays a significant role in managing clients with schizophrenia. It not only helps in controlling the symptoms, but also decreases the risk of relapses and ultimately improves quality of life (QoL) for the clients. However, compliance with anti-psychotic medication remains a challenge for the client, family and healthcare providers. Identification of these associated factors is vital to make appropriate plan to enhance medication compliance. In this paper, various factors are highlighted that are associated with medication compliance in clients with schizophrenia.

Keywords: Schizophrenia, Anti-psychotic medications, Non-compliance, Relapse, Insight.

Introduction
Compliance with medication remains a challenge in psychiatry globally. Mostly, chronic mentally ill clients such as schizophrenics are managed acutely in hospital settings, but their home management and treatment compliance remain doubtful. Schizophrenia is a persistent disease of disconnected mind\(^1\) that results in progressive clinical, cognitive, social and vocational deterioration.\(^1\) It is apparently the most expensive psychiatric illness that causes a huge economic burden on client, family and nation.\(^2\) Therefore, long-term management of schizophrenia with anti-psychotic medication is considered a cost-effective approach for developing countries.\(^3\)

Though the anti-psychotic drugs are considered foremost for the treatment of schizophrenia,\(^1\) compliance with medications remains a concern.\(^3\) A study reported that 74% of the patients with chronic schizophrenia stopped taking their medication within 18 months.\(^4\) A study conducted in Pakistan also reported that 41.8% of the patients with psychotic illness were identified to be non-compliant.\(^5\) The major consequences reported to be associated with the non-compliance includes worsening of symptoms, increased risk of relapse, personal suffering, re-hospitalisation and suicidal attempt, and increased cost and disrupted process of recovery. The risk of relapse increases almost five-fold due to non-compliance to medications in schizophrenia.\(^3,6\) Hence, one of the major contributions of the recovering client relies on compliance with medication. This review aims at recognising the crucial factors that are associated with poor compliance that can assist in making appropriate plan for managing clients with schizophrenia.

Methods and Results
A literature search was conducted related to publications between January 2000 and December 2012 from PubMed using key terms ‘antipsychotic medications’, ‘non-compliance’, ‘non-adherence’, ‘relapse’ and ‘insight’ in combination with ‘Schizophrenia’. The search was further supplemented by a textbook in Psychiatric Nursing\(^1\) along with personal experience of the researchers. In addition, the reference list of the searched articles was also used in identifying related articles that may have been missed during the search. A total of 100 articles were identified related to the topic. Finally 9 articles and the text book were considered for inclusion, based on its relevance to the topic and limitation of the references to be cited by the selected journal.

Risk factors for non-compliance
Literature reveals various factors associated with medication non-compliance in schizophrenia. These factors can be addressed at individual, family/community, healthcare professional and treatment levels (Table).

Individual factors
Various individual demographic variables, including age, gender and socio-economic and educational status can influence adherence to medications in clients with schizophrenia.\(^6\) Younger clients are more likely to be non-compliant than the elderly;\(^4\) however, possible decline in cognition and memory in the elderly may alter their persistence of treatment in the longer run.\(^7\) On the other hand, women are found to be more compliant than men.\(^7\) Cost associated with the medications and regular follow-up exerts additional burden on the clients.\(^8\) Likewise, in Pakistan, a study reported that 16.32% of the patients had stopped taking medication mainly because they could not afford to bear the cost.\(^5\) In addition, low educational...
status contributes to poor understanding of the trend of the disease that consequently results in poor development of insight and medication compliance.6

Other unhealthy practices in clients with schizophrenia, such as substance abuse, including alcohol, nicotine, cocaine and cannabis, can also add to the non-compliant behaviour and are considered significant factors for relapse.1,6 Literature reveals that clients with substance abuse disorder are at higher risk for non-adherence.1

Some of the individual factors that are associated with schizophrenia, such as positive and negative symptoms, also influence medication compliance. Clients who experience persecutory and grandiose delusions (positive symptoms) are either reluctant to take medication or are less interested in their treatment. It is usually observed in everyday nursing practice that persecutory delusions often restrict clients from taking medication when offered by a caregiver with the fear of being poisoned. On the other hand, clients with negative symptoms often experience lack of motivation which leads to poor compliance.1 Therefore, individual’s perception and attitude is significant barrier to medication compliance, which is often associated with symptoms and poor knowledge about the pattern of schizophrenia.

Acceptance of the disease or presence of insight also plays a crucial role towards medication adherence and treatment compliance. Literature reveals that between 50% and 80% of the patients with schizophrenia either lack partial or total insight of their mental disorder.9 In contrast, patients with the absence of insight at times do continue their medication as their cognitive impairment and poor memory requires them to rely solely on their clinician’s judgment3 or that of the caregivers.

**Family/caregiver factors**

Contribution of family, friends and community can play a major role in maintaining medication compliance in schizophrenia. The risk of non-compliance goes up three times in clients who are not supported by their family for treatment adherence.10 However, families are less frequently involved in the planning of treatment10 by healthcare professionals. Literature depicts that assistance and supervision provided by family can enhance medication compliance,7 which can improve clinical outcome and decrease the rate of relapse.10 Poor understanding of the client’s disease process further worsens the persistent support that the client is looking for. This poor knowledge and associated social and cultural myths often make a family prone to looking for alternating treatment options such as quacks and traditional faith-healers to deal with mental illnesses.5 In developing countries like Pakistan, preference of treatment is usually given to traditional healers compared to psychiatrists as it is less expensive and coincides with their values and beliefs.5 This practice is more common in the rural areas compared to the urban areas. It often results in worsening the symptoms and gives psychological trauma to clients when strict measures of faith-healing are performed that often result in further deterioration of the client’s symptoms.

**Healthcare professional factors**

Poor physician-patient relationship is significantly associated with the non-compliance in schizophrenia, including poor discharge planning and lack of followup care. Physicians are often found to be providing inadequate consultation time to their clients. Proper time helps in assessing the clients’ compliance and concerns. Complex prescription of medication at times becomes challenging for the client and family to comprehend and follow as required.5 With limited assessment, at times it is challenging for the healthcare team to differentiate between poor responses versus poor compliance to the medication.5 In addition, insufficient information provided about the need for long-term treatment hinders continuity of medication because the improvement of the symptoms are equated with termination of the illness.5 About 28% of the clients reported to be careless once their symptoms improved with psychiatric medications as they were not informed that the maintenance dose of medications is required for relapse prevention.8 Similarly, a study conducted in Karachi, revealed that the inability of
the physician to explain the timings and dose of medication resulted in non-compliance of medication in 92% of psychiatric patients. In addition, this communication gap between the physician and client also fails to consider the client’s lifestyle, availability of physical and financial resources of the client that are required for maintaining compliance.

**Treatment factors**

One of the factors associated with medication non-adherence in schizophrenia are the side-effects of medications experienced by the client. The common misconceptions of physician is that the information about side-effects can lead to non-compliance often restrict the physicians from sharing the possible side-effects with the clients. This usually results in poor compliance. Moreover, at times clients and family expect these drugs to work as a miracle pill as they are unaware that the anti-psychotic medication usually has a delayed onset of therapeutic effect. As a result, they often become non-compliant considering it to be ineffective when their misperception remains unaddressed by the healthcare providers. In addition, medication is prescribed without considering the cost and availability of the drugs which is an added challenge in terms of compliance.

**Conclusion**

Compliance with anti-psychotic drugs is an enormous challenge in clients with schizophrenia. To ensure compliance, it is crucial to identify factors associated with non-compliance, and to address these factors to develop a comprehensive treatment plan. To enhance understanding of the contributing factors in specific socio-cultural contexts, further researches need to be conducted in Pakistan.

**References**