UNIT NO. 5

MANAGEMENT OF RELAPSE IN SCHIZOPHRENIA

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ABSTRACT

Relapse of psychotic symptoms in Schizophrenia occurs in up to 40% of patients within a year of being hospitalised. A relapse may be secondary to any individual factor or several factors acting concomitantly. Risk factors that can precipitate a relapse in Schizophrenia are: significant residual psychopathology, poor compliance to medication, poor insight, substance misuse, interactions with other medication, poor social support, increased stress and caregivers with high expressed emotions. A thorough history and assessment should be conducted to elicit all contributory factors and appropriate interventions undertaken to address them in order to prevent the onset of a full blown relapse or to help the individual to achieve remission of symptoms. It is necessary to implement a proactive approach towards the prevention of relapses by using strategies such as psychoeducation and early identification of relapse signatures. More importantly, it should be emphasised that empowerment of the individuals in understanding and managing their illness is crucial.

Keywords: Residual psychopathology, poor compliance to medication, poor insight, substance misuse, poor social support, high expressed emotions

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INTRODUCTION

Schizophrenia is a complex mental disorder, which commonly presents with a relapsing and remitting course. Relapse of psychotic symptoms in Schizophrenia occurs in up to 40% of patients within a year of being hospitalized[1,2]. These episodes of relapse have significant implications both in terms of the cost of health care and economic burden as well as the personal implications of loss of functioning and demoralization for the individual. It has been shown that the recurrent relapses have consequences on the long term prognosis of the Schizophrenia. Recurrent relapses may lead to progressive worsening of psychotic symptoms, increasing neurobiological damage, longer duration to achieve remission, longer hospitalisations and progressive cognitive and psychosocial decline. This may lead to psychological consequences for the individual such as poor self esteem, hopelessness and thus increased suicide risk. Therefore it is important to recognise the detrimental effects of relapses and thus the long term management of Schizophrenia should encompass both the prevention and management of relapses.

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RISK FACTORS FOR RELAPSE AND MANAGEMENT

There are a multitude of risk factors that can precipitate a relapse in Schizophrenia which include significant residual psychopathology, poor compliance to medication, poor insight, substance misuse, interactions with other medication, poor social support, increased stress and caregivers with high expressed emotions[3]. Although it is important to treat the symptoms of relapse when it occurs, this approach alone may not suffice and the management of relapses in Schizophrenia has to be targeted towards managing and minimising these risk factors. It is necessary to implement a proactive approach towards the prevention of relapses by using strategies such as psychoeducation and early identification of relapse signatures. More importantly, it should be emphasised that empowerment of the individuals in understanding and managing their illness is crucial. Strategies for prevention and management of the individual factors that may precipitate a relapse will be explained further.

MANAGEMENT OF RESIDUAL PSYCHOPATHOLOGY

In individuals with residual psychopathology or inadequate response to a medication, relapses or worsening of their symptoms may occur despite compliance to the medication. This can occur due to the natural remitting and relapsing course of the illness or in relation to stressful life events. Therefore it is beneficial to optimise treatment with a view to achieving remission of any residual psychopathology, if at all possible. Although in many individuals, this remains a challenging task. The National Institute for Health and Clinical Excellence (NICE)[4] had recommended that individuals experiencing adverse effects or unsatisfactory response on typical antipsychotic medication should be switched to atypical antipsychotics. NICE has also recommended Clozapine for individuals with treatment resistant Schizophrenia, which has been defined as little or no symptomatic response to multiple (at least 2) antipsychotic trials of an adequate duration (at least 6 weeks) and at a therapeutic dose range[5].

Psychological therapies including cognitive behavioral therapy, family interventions, compliance therapy as well as social interventions such as cognitive remediation and social skills training should be used to target any residual symptoms alongside antipsychotics as this has shown to reduce relapse rates. Therefore optimising treatment of residual psychopathology encompasses a holistic approach and includes biopsychosocial interventions.

MANAGEMENT OF POOR COMPLIANCE AND POOR INSIGHT

Non compliance or partial compliance to medication remains a significant problem amongst individuals suffering from Schizophrenia. Weiden et al[6] found that 40% of relapses were secondary to poor treatment adherence. They estimated the rate of outpatient non adherence to antipsychotic treatment to be 50% within 1 year of discharge and 75% within 2 years. Robinson et al[7] reported that individuals who discontinued antipsychotic medication after their first episode of schizophrenia multiplied their risk of relapse by almost five times. The NICE guidelines recommend continuous therapy with antipsychotic medication in the long term management of individuals with Schizophrenia.

Adherence to treatment is influenced by various factors which include adverse effects, limited efficacy, complicated dosing schedules, impaired insight into illness or the importance of medication, cognitive impairment and poor therapeutic relationship with the clinician. Therefore management of poor compliance involves understanding and addressing the cause and concerns of the patient. Certain factors can be managed through a change in medication and simplifying dosing regimes. Blister packs and dosing boxes can be used for patients on several medications or for those with cognitive impairment. Caregivers can also be involved in supervising the medication. However, poor insight can be a challenging factor to overcome in improving adherence to treatment. Psychoeducation, allowing the patient time for acceptance of the illness and contact with a peer support worker or peer support group may enhance the patient's insight into his illness and thereby improve compliance.

Providing psychoeducation on Schizophrenia, the prognosis, the role of medication and the risk of relapse is essential for all patients suffering from this illness. Essentially, this information should be provided to all caregivers as studies have shown that family psychoeducation reduces relapse rates in Schizophrenia[8].

A crucial strategy in relapse prevention lies in identification of the early relapse signs. As relapses often develop gradually, being able to identify the triggers or early signs of relapse may help to prevent the relapse or at least in reducing the severity of the episode. Early recognition of an impending relapse is beneficial as treatment and support can be sought early and hospitalisation may be avoided. In addition to this, the individual would suffer from less disruption to his social and occupational functioning as well as have a quicker recovery. Early relapse signs are subtle warning signs that the patient or caregivers notice before a full relapse of the illness is imminent. They may be symptoms such as poor sleep, feeling confused or nervous, being more isolative or difficulty concentrating. Early relapse signs are unique to the individual. Clinicians should help patients along with their caregivers to identify their individual early warning signs. In Singapore, Relapse Prevention Cards are used in the Department of Early Psychosis Intervention at the Institute of Mental Health. This empowers the individual to take responsibility of his illness and through identifying the early warning signs; the individual, caregiver and clinician can work collaboratively to draw up a relapse prevention plan. This plan may include actions that the individual would take such as promptly contacting the clinician, closer monitoring of symptoms, ensuring compliance, increasing the dosage of medication or alleviating any stress. It has been shown that a full blown relapse in schizophrenia can be avoided if early intervention is provided[9].

However, in patients who continue to have poor insight despite the above interventions or in individuals who default treatment repeatedly, it may be necessary to consider long-acting intramuscular antipsychotic injections rather than oral antipsychotic medication. Long-acting intramuscular antipsychotic injections have been found to lower relapse rates by about 15% when compared to oral antipsychotic medications[10]. The benefit of these long acting antipsychotic injections is that it enables clinicians to detect non adherence which would enable them to monitor the individual for early signs of relapse and early intervention. This is helpful for individuals who have poor social support with a lack of resources for daily supervision of medication, in patients who are resistive to being supervised by caregivers and in patients who are suspected of being partially compliant.

MANAGEMENT OF STRESS

The Stress-Vulnerability model emphasises that individuals with Schizophrenia have a biologically mediated vulnerability to stressful events that can result in acute psychosis[11]. Therefore individuals who have achieved remission on medication and those with residual symptoms may experience episodes of relapse when faced with significant stressors. Herz et al[12] stated that a full blown relapse is dependant upon the complex interaction between an individual's degree of vulnerability, nature of stressful event and presence of protective factors such as coping skills, social support and therapeutic interventions.

For such individuals, it is necessary to preempt the effect of a stressful situation to prevent a relapse if possible. Management of stress is focused on identification of possible stressors, facilitating use of structured problem solving by the individual and family, decreasing activities or interactions that increase stress levels and the use of stress management techniques such as relaxation training.

MANAGEMENT OF POOR SOCIAL SUPPORT

Poor social support contributes to a relapse in Schizophrenia in several ways. An individual who lacks family or social support may be more likely to default treatment if he is not supervised, if he lacks motivation or has financial difficulties that deter him from complying with treatment. Good social support also has a protective effect in helping the patients to overcome stressful situations. Therefore it is crucial that for such individuals who lack social support, social interventions such as financial support,

placements in staff supported accommodation and participation in social activities are provided.

Patients who are relapsing often become more isolative, withdrawn and amotivated, which may lead to them defaulting their outpatient appointments. When these individuals also have poor social support, the early signs of relapse may be missed, thus leading to a full blown relapse. Therefore, clinicians may have to use assertive outreach techniques to engage these patients and encourage them to seek treatment early. Case Managers that work within various psychiatric hospital settings often employ assertive outreach techniques such as contacting patients through phone calls, letters or even conducting home visits if they are concerned that the patient may be relapsing. These case managers or care coordinators not only act as a form of assertive outreach for such patients but also as a form of social and therapeutic support for patients who are able to identify their early warning signs. In such cases the case managers provide frequent monitoring of symptoms, conduct risk assessments, assist in problem solving and management of any precipitating stressors as well as coordinating any changes in the treatment with the psychiatrist or psychologist. These assertive outreach interventions aid in possibly engaging the patient and preventing a full blown relapse.

MANAGEMENT OF SUBSTANCE MISUSE, SMOKING AND OTHER MEDICATION

Individuals may experience a relapse of Schizophrenia due to misuse of substances such as alcohol or illicit drugs. These substances can precipitate or cause an exacerbation of psychotic symptoms due to a direct intoxication effect, as a withdrawal effect, through reduced metabolism of the antipsychotic medication or through an indirect effect on the individual's sleep pattern or mood.

Patients may also become noncompliant to the medication due to a potentiation of side effects, such as increased lethargy, drowsiness or impaired concentration, which the patient may misattribute as side effects solely due to the medication. Stimulants like Amphetamines and Cocaine can cause psychotic symptoms, whilst drugs like Cannabis may precipitate or trigger further episodes of relapse. Therefore it is imperative that individuals with a history of substance use are educated on the effects of the substance on their mental health and its impact on the risk of relapse of Schizophrenia.

Smoking also has the potential to cause relapses through its effect on antipsychotic medication. People with mental illness are 2-3 times more likely than the general population to develop and maintain a nicotine addiction. Cigarette smoke contains polycyclic hydrocarbons that are known to stimulate the hepatic microsomal enzyme system that is also responsible for metabolism of many psychotropic drugs. Therefore smoking can reduce the levels of some antipsychotic medications such as Haloperidol, Clozapine and Olanzapine. Hence, if a stable patient experiences recurrent relapses, a history of concurrent or episodic smoking must be elicited. Psychoeducation on the interaction between smoking and medication as well as interventions for smoking cessation must be offered in such situations.

Apart from substances such as alcohol and illicit drugs, it is essential to elicit if the individual has been taking any other prescription medicine or traditional medicine. Interactions may occur between antipsychotic medication and other prescription or traditional medicine which may lead to a lowering of the levels of the antipsychotic medication. For example, antacids and barbiturates may reduce levels of Chlorpromazine and Haloperidol. There have also been multiple case reports of contaminated traditional medicine containing steroids or small doses of amphetamines, which can cause psychotic symptoms. Certain prescription medications such as fluoroquinolones, isoretenoin, high doses of antihistamines, antidepressants, slimming pills such as phentermine and sibutramine can cause psychotic symptoms as an adverse effect. Therefore, in an individual with recurrent relapses, it would be essential to screen for any concurrent medication or substance use that may be the precipitating or causing the relapse.

MANAGEMENT OF HIGH EXPRESSED EMOTION

Brown et al[13] showed that patients with Schizophrenia who were discharged to live with their parents or spouses appeared to relapse more often then patients who lived with other relatives or non-relatives. This led to the concept of 'expressed emotion'. This term encompasses hostility, emotional over-involvement and critical comments displayed by the caregivers of a patient. It can be measured using the semi-structured Camberwell Family Interview. There have been several studies that have duplicated these findings of the negative effects of high expressed emotions on the risk of relapse in patients with Schizophrenia. Relapse rates were observed to be much lesser in families with low expressed emotions or where caregivers expressed more positive remarks towards the patients.

Therefore based on these findings, interventions are targeted towards reducing the level of high expressed emotions in caregivers to manage to risk of relapse. Treatment of high expressed emotions involves family psychoeducation on the symptoms, treatment and prognosis of Schizophrenia, communication training, problem solving as well as developing coping strategies. Mari et al[14] showed that family interventions not only reduced the level of expressed emotions but also significantly increased compliance to medication and showed a reduction in hospitalisation when compared to a control group at 1 year follow up. This was supported by Randolph et al[15], whose study showed that behavioral family therapy was of benefit in reducing high expressed emotions as only 15% of the patients in the therapy group experienced a relapse when compared to a 55% relapse rate in the control group. This emphasises the importance of interventions to reduce high expressed emotions in order to reduce the risk of relapse in individuals with Schizophrenia.

CONCLUSION

A multitude of risk factors that can precipitate a relapse in Schizophrenia has been described above and the specific management of each individual factor has been specified. However, it is important to consider that a relapse may be secondary to any individual factor or several factors acting concomitantly. Therefore, a thorough history and assessment should be conducted to elicit all contributory factors and appropriate interventions undertaken to address them in order to prevent the onset of a full blown relapse or to help the individual to achieve remission of symptoms.

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LEARNING POINTS

- **Relapse of psychotic symptoms in Schizophrenia occurs in up to 40% of patients within a year of being hospitalised,**
- **A relapse may be secondary to any individual factor or several factors acting concomitantly. Risk factors that can precipitate a relapse in Schizophrenia are: significant residual psychopathology, poor compliance to medication, poor insight, substance misuse, interactions with other medication, poor social support, increased stress and caregivers with high expressed emotions.**
- **A thorough history and assessment should be conducted to elicit all contributory factors and appropriate interventions undertaken to address them in order to prevent the onset of a full blown relapse or to help the individual to achieve remission of symptoms.**
- **It is necessary to implement a proactive approach towards the prevention of relapses by using strategies such as psychoeducation and early identification of relapse signatures.**
- **More importantly, it should be emphasised that empowerment of the individuals in understanding and managing their illness is crucial.**