**Case Summary**

Presenting problem/Diagnosis & Associated Comorbidities

Ryan’s reason for admission to Secure Psychiatric ward are problems related with his diagnoses of Schizoaffective Disorder as well as poly-substance abuse of alcohol, drugs amphetamines and Intravenous drugs, he has also had past history of Casino gambling. Schizoaffective disorder can be described as a psychosis in which pronounced manic and or depressive features are combined with schizophrenic features. This tends towards readmission without permanent consequence, but which are usually prone to recur (Edward, Munro, Robins & Welch, 2011). Diagnosing a person with schizoaffective disorder, should only be made when both the affective and schizophrenic symptoms are pronounced. Cognition and emotion are the most common features seen to become affected by schizoaffective disorder. These include symptoms such as delusions, hallucinations, paranoia, catatonic behaviour and in some cases disorganised speech and thinking (Edward, Munro, Robins & Welch, 2011).

Comprehensive Health History including

Ryan has previously experienced low neutophils secondary to his medication Clozapine. As a result ensuring his white blood cell count stays within an acceptable level is of importance, this is done by conducting monthly FBE full blood examinations. Ryan has previously been admitted to hospital and treated for pneumonia; any signs of chest conditions must be closely monitored as well as promoting Ryan to using smoking interventions such as nicotine patches which he has been prescribed. Ryan has returned elevated lithium levels from his blood test which required a reduction of his medication Lithium carbonate from 1600mgs nocte to 1000mgs nocte, continued observation of his lithium levels is required. Ryan is currently screened as positive for Hepatitis C. Recently he experienced several bouts of serve constipation, aperients where provided and encouragement was given for their use. Education to a healthy diet of fruits and vegetables, with good fluid intake and regular exercise was recommended.

Current Medications

Ryan is only occasionally non-compliant in taking his medications, and this is usually due to agitation involving particular nursing staff members. This can also result because of triggers for aggression. Currently Ryan is on a number of different medications to stabilise his condition these medications include Amisulpride 200mg BD to manage his symptoms of chronic Schizophrenia with positive and or negative symptoms, including those with predominantly negative symptoms. This medication works to bind selectively to D2 and D3 dopamine receptors with a low affinity for other receptor sites (Tiziiani, 2010). Lithium Carbonate 1000mg NOCTE used for the control of manic episodes and schizoaffective illness. Lithium ions may compete with sodium ions, thereby altering the electrophysiological characteristics of neurons (Tiziiani, 2010). Clozapine 650mg NOCTE for treatment-resistive schizophrenia, in those who are unresponsive or intolerant to other antipsychotics (Tiziiani, 2010). Sodium Valproate 600mg MANE and NOCTE, is thought to raise brain levels of the inhibitory synaptic transmitter γ-amino butyric acid (GABA), as well as blocking voltage dependent sodium channels. Action is to control symptoms of Mania where other agents are inadequate or inappropriate (Tiziiani, 2010). Esomeprazole 20 mg MANE to reduce symptoms of gastric acid secretion by inhabiting the enzyme H+ -K+ -ATPase the proton pump in the partial cells. Converted to active form by high concentration of acid (Tiziiani, 2010). Ryan suffers quite severe constipation he has been prescribed two tablets of Coloxyl and Senna to assist with soften faeces by decreasing surface tension, and Fybogel daily to **i**ncreases the volume of faeces by absorbing water, so stimulating peristalsis (Tiziiani, 2010). Ryan is also prescribed PRN medications as he requires them, Diazepam 5-10mg Max 10mg a dayfor short term management of anxiety, which has a long duration of action because of active metabolites. Nicotine Patch 21mg Daily, Movicol 1-2 sachets TDS works as a polyethylene glycol-electrolyte solution that cleanses the bowel by inducing diarrhoea, while causing little change in water and electrolyte balance (Tiziiani, 2010). As well as Latulose 20ml BDwhich is used to stimulate break down in the colon by bacteria to acetic and lactic acids, which reduce the tph, levels (Tiziiani, 2010).

Clinical management plan

Ryan is a thirty four year old male with a long history of treatment resistive schizoaffective disorder. He presents with a number of entrenched grandiose delusions of being famous, having world renowned musical talents, associations with famous people, and believing he is a billionaire. He believes he has many different identities these include his association with famous people involved in the music and art world financial business affiliations. Much of his stress comes from his inability to access what he believes are lost identification documents, which will prove his delusions are correct. Ryan feels he is superior to all other people around him in particular his co-clients and he believes this entitles him to act and behave differently due to his position. He has no insight into having a mental illness and is in denial, he occasionally expresses that he is in hospital to protect him from outsiders, and that he has been imprisoned by the government. Who know who he really is and the powers that he possesses. Ryan also believes he is of Asian descent and his parents are posing as imposters. Ryan intermittently believes that his parents have stolen his billions of dollars away from him at a very young age.

Ryan demonstrates a number of challenging behaviours. The aim of his clinical management plan is to decrease disruptive behaviour and to maintain therapeutic milieu by providing clear expectations of his behaviour, as well as staff’s consistency in responses to difficult behaviour. Ryan’s challenging behaviour’s are a majority of the time thought to be driven by his psychotic symptoms and that staff have a position of assisting Ryan to manage this distress. Ryan’s clinical management plan consists of a number of strategies to managing him holistically. These include providing reality orientation and redirection of delusional thoughts where possible, administering his medications as prescribed and discussing with Ryan any changes, which may occur with his medication as well as promoting medication compliance. Encouraging activities of daily living ADL’s, Ryan takes pride in his rock star appearance, when he is well. Occasionally he needs prompting in changing his clothes and tending to washing. Providing positive re-enforcement for continuing improvement in his living skills is important. Budgetary planning is another significant aspect to Ryan’s management as he has history of gambling problems. Staffs are to discuss with Ryan any large purchases he would like to make, and to save for the purchase from his allowance. When requiring more money Ryan needs to request extra money from the state trustee’s. Ryan is assisted with his purchases for his cooking with the Occupational therapist twice a week; this assists to improve on his skills in meal preparation and planning food purchases. Ryan is encouraged to participate in ward activities as he expresses his feelings of superiority to other co-clients and is reluctant to join in; he enjoys shopping for new clothes and planned outings with his occupational therapist. Stress management techniques are encouraged with Ryan by encouraging him to discuss in a calm manner what particular issues are concerning him. While staff may not always be able to assist with what Ryan wants advice can be given on what staff can help him with, which may be of assistance. Ryan takes pleasure in playing his guitar; this can also help to relax him, and offering PRN medications if he is in a particularly agitated mood.

Relevant diagnostic tests and procedures

Ryan has a history of illicit drug use including Intravenous drugs. Therefore in order to monitor these addictive behaviours when he has unescorted leave from the ward, random urine drug screens are conducted to potentially reduce these occurrences. Occasionally Ryan states he does not believe in using drugs anymore. Although, often returns positive drug tests when he has access to extra money. Ryan also has frequent blood tests and serum levels carried out in order to observe his white blood cell count is maintained at an acceptable level. This procedure is carried out as Clozapine medication has risk of causing Neutropenia which is a decrease in the number of white blood cells within the blood. This can potentially lead to serious side effects of possible severe infection (Eromona & David, 2007).

**Relevant Pathophysiology**

There are many different theories behind the pathophysiology reasoning of Schizophrenia. Some of the main theories are Dopamine hyperactivity, the neurochemical hypothesis believes that components of dopaminergic neurotransmitters, which are overactive, are believed to cause the positive symptoms of schizophrenia. Dopamine controls the locomotion, cognition, affect and neuroendocrine secretion (Wolfgang, 2011). Studies have shown that amphetamine abuse can induce dopamine overactivity, as amphetamines act on the D2- receptors (Wolfgang, 2011). This binding has an increase in dopamine levels within the synaptic cleft. An increase of the neurotransmitters in the synaptic cleft raises likelihood of the postsynaptic cell becoming activated which is exacerbated in people with schizophrenia (Wolfgang, 2011). Further neurochemical theories behind schizophrenia include the Glutamatergic mechanisms and N-methyl-D-aspartate (NMDA) receptors specifically. A possible finding of the role of Glutamatergic mechanisms in schizophrenia was seen that pschotomimetic agents, phencyclidine and ketamine stimulate reactions similar to schizophrenia in blocking neurotransmission of glutamate receptors (Javitt, 2007). In comparison to dopamine agents, (NMDA) antagonists stimulate negative symptoms of schizophrenia, as well as the positive symptoms (Javitt, 2007). The serotonin hypothesis of Schizophrenia is closely associated with the research of hallucinogenic drugs which are used as agonists of serotonin- 2A receptors (Geyer & Vollenweider, 2008). Research indicates that psychotic symptoms in Schizophrenia may be related to abnormalities in serotonergic systems. Studies have consolidated these theories looking at the significant connection between serotonin and both drug-induced and schizophrenic based psychotic states (Geyer & Vollenweider, 2008). More research is being carried out to gain further knowledge in understanding the relation of serotonergic systems and how they interact with other monoaminergic and glutamatergic systems to alter states of consciousness and to contribute to psychotic disorders in particularly Schizophrenia (Geyer & Vollenweider, 2008).

**Evaluation of Health Assessment and Clinical Management Plan**

The health assessment and clinical management plan for Ryan has been thoroughly written and all relevant aspect to his care have been reviewed and assessed. Interventions to nursing care which have been covered are maintaining an environment which is safe and has reduced stimuli. Administering and encouraging compliance in his medication taking has been highlighted to decrease feelings of anxiety, and disruptive behaviour. Reference has been made to the benefits of developing a therapeutic-relationship with Ryan as he responds more willingly to nurses whom he gets along with. Having frequent brief contacts with Ryan and showing an accepting, calm demeanour has been noted to work most successfully in his care management plan. Ryan’s delusions are pervasive and entrenched in all aspects of his life. It is stated not to directly challenge Ryan’s delusional thoughts, as this can lead to hostility and frustration. Although, it is not advised to enter into his delusions or validate these thoughts for him. Ryan’s comprehensive health assessment has included relevant aspects to maintaining good physical health. Medications have been regularly monitored and evaluated for side effects. Changes to the medication dosages have been made where needed. In particular toxicity levels to Lithium carbonate, as blood test results showed a reduction was required. There is documentation of past illnesses which Ryan has suffered Pneumonia and severe constipation, observing his health in relation to these past illnesses has been established. Regular vital signs of blood pressure, temperature, pulse and Sp02% are taken for base observations, and regularly checked for overall health status. This also includes monthly blood tests which are taken as Ryan is on Clozapine medication.

**Prioritisation of Care**

When caring for Ryan in prioritising his care the main aspects are maintaining an environment which creates an ambiance less likely to trigger his challenging behaviours. Managing these behaviours by educating Ryan on stress management strategies, adopting an accepting and consistent manner with Ryan is best reciprocated when approaching or verbalising with him. Managing his addictive tendencies of drug taking, this is done through conducting regular urine drug screens, when observing deterioration of his mental state. Engaging Ryan in reality-reorientation and redirecting conversation by providing reality-based explanations when he verbalises his delusional thoughts and beliefs. Encourage medication compliance to prevent relapse. Also monitor him carefully for any adverse effects of drug therapy.

**Considerations for Future Care**

Ryan is aware of pending transition of discharge planning to Residential rehab service, and has expressed his interest in moving. Ryan’s mother is happy for him to move on, as long as there are adequate support means in place for him. The main indicators of Ryan’s readiness to transition include his behaviour has been sustained at an acceptable level, managing his drug and alcohol use, performing activities of daily living ADL’s independently, showing medication compliance and understands responsible budgeting. This includes a Behaviour observation chart to be conducted by staff on a daily basis regarding both Ryan’s positive and negative behaviours. This will aid the residential rehab service and support worker when assisting Ryan. Liaise with activity staffs who work with Ryan in the transition to residential rehab service. Organising community resources to be put in place as a support mechanism for Ryan is of significant importance, in providing ongoing assistance so that he does not feel vulnerable living in the community setting. Continued support is vital to ensuring relapse does not occur, and Ryan continues to develop his living skills (Puschner, Steffen, Gabel, Freyberger, Eklein, Steinert, Muche, & Becker, 2008). Ongoing support will be provided with follow-up outpatient appointments after discharge, and education of medications for Ryan and his parents. Leading to the desired goal of self-care improvement and cognitive and social functioning (Puschner, Steffen, Gabel, Freyberger, Eklein, Steinert, Muche, & Becker, 2008).

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