Management of Schizophrenia in Pregnancy: A Case Report

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Abstract
Schizophrenia is a severe mental disorder, characterized by deep thinking disturbances, affecting language, perception, and sense of self. This often includes psychotic experiences, such as hearing sounds or delusions. The most common age of onset for schizophrenia in women is from ages 25-35 (reproductive age). We report a case of a 27-year-old woman with pregnancy and schizophrenia paranoid. Reproductive age women with schizophrenia need comprehensive management during their reproductive years, including contraception, prenatal care, antenatal care, postnatal care, as well as safe and effective parenting.
Keywords*: Schizophrenia, mental disorders, pregnancy*

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Tatalaksana Skizofrenia Pada Kehamilan: Laporan Kasus

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Abstrak
Skizofrenia merupakan kelainan mental berat yang ditandai dengan gangguan proses berfikir dalam, mempengaruhi bahasa, persepsi dan rasa terhadap diri. Pengalaman psikosis biasanya berupa seolah-olah mendengar suara-suara atau delusi. Onset usia tersering terkena skizofrenia adalah 25-35 tahun (usia reproduksi). Kami melaporkan sebuah laporan kasus seorang wanita hamil berusia 27 tahun dan mengidap skizofrenia paranoid. Wanita usia reproduktif dengan skizofrenia membutuhkan penanganan komprehensif selama usia reproduksi, termasuk kontrasepsi, asuhan pra-natal, antenatal, dan post-natal, serta menjadi orang tua yang aman dan efektif.
Kata kunci*: skizofrenia, gangguan mental, kehamilan*

Introduction

Mental health is one of the most significant health problem in the world, including in Indonesia. According to WHO, there are 23 million people affected by schizophrenia.[1] In Indonesia, there are various biological, psychological and social factors with the diversity of the population; hence the incidence of mental disorders continues to increase which has an impact on increasing the country's burden and decreasing human productivity. The 2018 Basic Health Research (Riskesdas) data shows an increase in the proportion of mental disorders compared to 2013 Riskesdas, from 1.7 per mil in 2013 to 7 per mil in 2018.[2] The prevalence of schizophrenia in pregnancy among countries across the world ranged from 2.7/1000 to 8.3/1000.[3]

Schizophrenia is a type of mental illness characterized by distortions in thinking, perception, emotions, language, self-esteem and behavior. Clinical manifestation of schizophrenia including hallucinations, delusion, abnormal behavior such as wandering aimlessly, mumbling or laughing at oneself with weird looks, self-neglect or neglected appearance, incoherent or irrelevant speech, and emotional disorders marked by apathy or incoherency.[4]

Single etiologic factor for schizophrenia has not been established, but studies hypothesized that interactions between genes, various environmental factors and psychosocial factors can cause schizophrenia.[5] The most common age of onset for schizophrenia in women is from 25-35.[4] Traditionally, women with schizophrenia had low fertility rates, with little attention paid to their reproductive health. A study showed that women with schizophrenia had an increased risk for pregnancy and delivery complications, compared with women with no mental disorder. A large register-based Danish study and other studies conducted in some countires in Europe reported that women with schizophrenia had an increased risks for stillbirth, infant death, preterm delivery, low birth weight, and small-for-gestational-age.[6-9]

Case Illustration

Patient is Mrs. 27 years old, diagnosed with paranoid schizophrenia since the age of 19 and she was treated at the local psychiatric hospital. She underwent antenatal care at the primary health care, then referred to our hospital (Cipto Mangunkusumo hospital) at 8 weeks of gestation. This is her first pregnancy, her LMP was September 20th, 2018 with EDD: June 27th, 2019. First ultrasound at our hospital was done at 8 weeks gestational age then she routinely came to our hospital, at 19, 29 and 34 weeks gestational age. During antenatal care she was treated with haloperidol 2 x 5 mg tablet.

During pregnancy, she has had 2 episodes of psychosis events, initially on November 18th, 2018, at the 8th week of pregnancy and taken to the hospital due to nervousness and anger at her husband. She said that her husband was mean to him and wanted a divorce. There were

hallucination and delusion, such as she mentioned she was not a child of her parents but a rich kid who often appeared on TV and told that she was kidnapped during childhood and since then she also had hearing loss. According to her family, when she was angry, she threatened to drink insecticide. After 16 days of treatment, her condition was improved, then she was discharged.

The second treatment was on February 6th, 2019, she was at the 19th week of pregnancy and taken to our hospital by her family because of her abortion attempt since the last 1 month. She admitted consuming herbal medication, pineapple, soda, and beat her stomach with the aim of abortion. She feels that she was too young and cannot take care of the child, she was also afraid of pain in the labor. She had experienced hallucinations manifested by hearing whispers commenting on his pregnancy. She decreased the dosage of her own medication because of the fear that the drugs can affect her pregnancy. During treatment, patient's condition improved. She said he would take care of her pregnancy and not make abortion attempts like she had done before. After 12 days of treatment, she was discharged.

Patients were planned to had an elective cesarean delivery but 3 days before surgery the patient's water had broke. Then she underwent cesarean section due to premature rupture of membrane, oligohydramnios, low pelvic score, and born a baby girl, birth weight 2825 g, body length 47 cm with Apgar score 9/10. She used intrauterine contraceptive device after surgery.

The patient was the eighth child out of ten siblings, there was no other family member with schizophrenia, she was born spontaneously, at a term pregnancy, helped by the midwife, immediately cried, there was no history of seizures. At 7 years old her parents noticed she had a hearing loss, she became embarrassed by her abnormality, then stopped going to formal school during grade 1 elementary school. Her parents admitted her to a special needs school, and she continued to the level of junior high school. At the level of senior high school, the patient continued her beauty course. Relationships with peers are good, had no problems with the school environment, good motor and cognitive development. There was no history of sexual abuse. There was a family history of mental disorder (grandmother from maternal side). She got married in 2018, with spouse introduced by the family. Five months after marriage she got pregnant. Her husband was a 29-year-old private worker (alfamart employee). Right now patient in good condition without acute psychotic symptomps. Patient had already controlled to psychiatric policlinic and the treatment regimen was changed to trihexyphenidyl 1 mg, lorazepam 0,5 mg, and risperidone 2 mg.

At the age of 19, she had a love interest, but she did not get approval from her parents. Since then she become depressed, often cried and talked to herself. She was taken to the psychiatric hospital for treatment, given Olanzapine 1 x 5 mg tablet therapy, and her condition improved with the treatment.

We conducted a home visit on the 12th day of childbirth. She appeared calm and cooperative during the interview, and able to communicate well but was limited due to patient's hearing difficulties. She claimed to love her child and want to take care of the child. She did not breastfeeding because it was not allowed by the pediatrician. Other family members had never seen patient trying to hurt her child. The family seemed very supportive. Child care was aided by the family, especially by the patient's biological mother.

The family had understand the patient's illness, and how to avoid recurrence. The whole family were able to provide support to the patient and were very helpful in adapting patient to her new role as a mother. There were no further psychotic episodes after delivery.

Discussion

Women with schizophrenia have an increased risk of sexual harassment and unwanted pregnancies, so we put an emphasize on preventive health services focused on the use of contraception in reproductive age women with the aim to prevent pregnancies that are not desired. The most common age of onset for schizophrenia in women is from 25-35 (reproductive age).[4] Around 50-60% of these women became pregnant; and 50% of these pregnancies were unplanned or unwanted.[5, 10]

Hereditary factors in children born from two parents with schizophrenia increases the risk of having children with schizophrenia significantly. Approximately 46–68% of these children may develop schizophrenia.[11] If only one parent was affected, the risk for schizophrenia in offsprings are 15%.[12] Therefore, contraception plays a pivotal role in reducing the number of schizophrenia.

Women with schizophrenia still have autonomy to determine whether she will continue or terminate the pregnancy.[13] For women who choose to get pregnant or want to continue their pregnancy should involve

comprehensive interventions including personal, social and psychopharmacological support.[5] Antipsychotic medications are first-line medication treatment for schizophrenia. Antipsychotic medications have significant side effects, assessment and management of these adverse effects are an important part of treatment. Antipsychotic medications are commonly grouped into two categories, with first-generation and second-generation. The dose of most antipsychotic drugs should be titrated from an initial dose to the therapeutic range as quickly as tolerated. The timeframe for titration differs for each drug and also depends on the individual patient's tolerance of the drug's sedation and hypotension tendency.[14]

It is important for patients with partners and families to hold discussions with psychiatrists and obstetricians about what will happen to themselves and their babies. Schizophrenia in pregnancy has a number of risks, such as delay in knowing pregnancy, inadequate antenatal care, heavy smoking, poor diet, and delay in recognizing and understanding labor, therefore cessation of drugs in schizophrenic women who are pregnant will increase the risk to the fetus and mother.[5] Due to a high recurrence rate when treatment is stopped, it is recommended to continue treatment during pregnancy.[15]

Although a meta-analysis by Altshuler et al. found rates of congenital abnormalities 2 - 2.4% in infants exposed to antipsychotic use, there were no specific patterns of abnormalities (such as abnormalities in limbs on thalidomide use) and detectable levels below the normal level of 3% in the general population. Study conducted by Einarson and & Boskovic of multiple studies and found no increase in teratogenicity in women taking thioridizine, fluphenazine, perphenazine, chlorpromazine, promethazine, trifluoperazine, haloperidol, flupenthixol, dibenzoxazepines.[5, 11] The risk of psychotic events in women with schizophrenia during the first three months postpartum is around 24%,[16] there was no psychotic events recorded in our patients.

There are some risks if schizophrenia in pregnancy is not well treated, which include: neglecting and rejecting the baby, bad parent-child relationship, suicide, infant homicide, delay in development and growth of the baby.[5] During the postpartum period, home visits from healthcare professionals should be provided.

Breastfeeding is allowed in mothers who are taking antipsychosis. All antipsychotic drugs can be excreted in breast milk but at a low level, less than 10% of the maternal dose, and does not seem to cause bad side effects on the baby. We should monitor the possible side effects on infants (extrapyramidal reactions), using the smallest effective dose, avoiding polypharmacy and mothers taking clozapine should not breastfeed.[5]

Women with schizophrenia may need a lot of support during the postpartum period. Supervision must be carried out to monitor the symptoms of psychosis or lack of attention to the baby which might put the baby in high risk conditions. Severe maternal mental illness, combined with poor social support and comorbidity, can significantly affect her parenting capacity. However, the poor quality of care by psychotic mothers is not always the case, as some of them may be very good parents.[15]

Parenting classes may be needed to help the women recognize their baby's needs.[17] There should be a training for the mothers to recognize the early signs of disease, adherence to medication, show affection for the babies and reduce distorted perceptions of schizophrenia. The involvement of family members and the community in providing support is very important.[18]

The managing team was faced with questions on how and when physicians should intervene in cases of pregnancy and co-morbid mental illness. Furthermore, both statutory and case laws vary state by country, and therefore clinicians must be aware of the rules and regulations of their individual jurisdictions. As in Indonesia, the constitutional law had stated that every human have the right to life, not be tortured, freedom of thought and conscience, religion, thus person with schizophrenia also have such rights.[19]

Conclusion

Women with schizophrenia may become pregnant, and motherhood is common in such women, but many things should be considered. People with schizophrenia have equal rights in view of reproductive function, thus the education regarding family planning including long term contraception is essential in patients with schizophrenia. Management of women in reproductive age with schizophrenia must be holistic including pre-pregnancy, antenatal care, post-natal care, breastfeeding and during nurturing the offspring.

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