Depression Due to Loss of a Parent in a Child with HIV: Case Report

Qurrota Aini
Study Program of Psychiatry, Faculty of Medicine, Udayana University, Denpasar, Indonesia
Corresponding author email: dr.corrydokubani@gmail.com

I Gusti Ayu Indah Ardani
Head of Child and Adolescent Psychiatry Department, Faculty of Medicine, Udayana University, Denpasar, Indonesia

I Gusti Ayu Trisna Windiani
Head of Pediatric Growth and Development Department, Department of Pediatric, Udayana University, Denpasar, Indonesia

I Gusti Agung Ngurah Sugitha Adnyana
Staff of Pediatric Growth and Development, Department of Pediatric, Udayana University, Denpasar, Indonesia

Abstract---HIV-infected and HIV-affected children experience grief from the death of their family, many caregiver transitions, and the potentially traumatic experience of living under stigma. Boy patient, 9 years old, Hindu, Balinese, single, not working, was consulted from the pediatric department and admitted in the Cempaka room of Prof. Dr. I.G.N.G. Ngoerah on April 6, 2023. From auto-anamnesis, he has a depressive mood, loss of interest and excitement, weight loss, fatigue or loss of energy, insomnia, psychomotor agitation, or retardation. The patient was diagnosed with Human Immunodeficiency Virus (HIV) in 2014 when he was a year and six months old. The patient lost his father in February 2023. The patient experienced depression caused by psychosocial stressors because of the loss of his father and was diagnosed with HIV. HIV-infected children are prone to depression. One of the psychosocial stressors experienced by children with HIV is the prolonged mourning process due to the loss of a family member. Comprehensive treatment is needed in the form of psychopharmacology and psychotherapy. Family support is the most important thing in relieving symptoms of depression and increasing medication adherence.

Keywords---comprehensive therapy, depression, family support, HIV, medication adherence, relieving depressive symptoms.

Introduction

HIV infection is a group of diseases that attack immune cells that starts from infection, with or without acute symptoms, asymptomatic stages, to severe stages. In 2018, 38 million people worldwide were infected with HIV, including 3.2 million children under the age of 15 (Ahidan et al., 2023). HIV-infected and HIV-affected children experience grief from the death of their family, many caregiver transitions, and potentially traumatic experiences, and living under stigma. Stigma can influence the disclosure of a child's HIV status, hard to have family communication, and potentially influence other health outcomes. Disclosure barriers reported by parents include the desire to protect children and families from psychological impacts and social stigma (Bingaman et al., 2022). The relationship between HIV and mental health is often described as two-way, meaning that the effects of living with HIV/AIDS or having an affected family member can increase the risk of illnesses such as anxiety and depression.
Grief is a normal process of suffering in the loss, which is influenced by culture and always requires adaptation to new situations (Martínez-Caballero et al., 2023). Losing a loved one is probably one of the most difficult and confusing in a person's life. Experiencing the death of a family member may cause sadness and grief; however, it can also cause depressive symptoms (Nguyen & Scott, 2013). Among children who have lost main family members, postmortem adjustment can be a complex process that is associated with physical and psychological health problems, including aggressive behavior, sleeping and eating problems, regression, somatization, and headaches (Martínez-Caballero et al., 2023). Death of a family member during childhood is associated with short and long-term symptoms of depression, post-traumatic stress disorder (PTSD), and prolonged mourning disorder (Breen et al., 2023).

Depression is a clinical health problem that has developed significantly (Park & Zarate Jr, 2019). Depression generally causes 1 in 5 people. It is an important cause of morbidity and mortality worldwide, and its impact on global health is increasing and will become the second leading cause of morbidity of any disease in 2020. The prevalence of depressive disorders is increasing in adolescents to mid-adolescent adulthood. However, it is an overlooked fact that depression is common before adolescence, affecting 1-2% of school-aged children and that being affected by this younger age significantly increases the risk of psychiatric disorders in adult life (Forti-Buratti et al., 2016). Depression is associated with impaired family, peer, and romantic relationships, lower education and socioeconomic status, and an increased risk of premature death by suicide (Weersing et al., 2017).

**Case Reports**

Boy patient, 9 years 11 months old, unemployed, was admitted to Cempaka room at Prof. Dr. I.G.N.G. Ngoerah Denpasar Bali accompanied by his grandmother. The interview was conducted on April 6, 2023. The patient was interviewed lying in bed, having an IV in his right hand, having an NGT tube in his right nose, and wearing a red shirt and black pants. The patient is thin, quite neat in appearance, has a gloomy facial expression, and the fingernails and toenails look quite well-groomed. During the interview, the patient looked down more, was less willing to make eye contact, and answered the examiner's questions with low intonation, low volume, and good articulation. During the interview, the patient was mostly silent.

The patient was consulted to the psychiatric department for depression. The patient can state his name, his current age, where he is, when he was examined, and who is currently attending correctly. When asked why the patient was hospitalized, the patient said it was because of stiffness and pain in the legs. The patient said that the legs also felt weak, making it difficult to walk.

The patient feels sad because of this illness so the patient cannot take the exam at school. The patient wants to take the exam together with his friends. In addition, the patient feels sad because his mother has to take care of him at the hospital. The feeling of sadness has been felt since 3 weeks ago when the patient had to be hospitalized again. The patient also feels bored because he has been in the hospital for a long time and wants to go home immediately. The patient said that he had been hospitalized several times. When asked how long he had been sick and whether the patient knew about his illness, the patient answered that he had a stomach infection and that it had been a long time because he was tired of taking medication all the time. The patient wants to get better so he can stop taking the medication. The patient does not know about his disease (Fawzi et al., 2012; Herman et al., 2022; Moreira et al., 2021).

The patient complained of disturbed sleep where the patient can only sleep briefly because he woke up to defecate. For the time being, patients are only allowed to drink milk through the NGT. Since being in the hospital, the patient usually takes a bath with the help of his mother.

**Heteroanamnensis (patient’s mother)**

The patient was admitted to Prof. Dr. I.G.N.G. Ngoerah Hospital on April 17 2023 due to diarrhea, vomiting, and weakness. The patient was referred from Klungkung Hospital and was treated there for 5 days. When admitted at Prof. Dr. I.G.N.G. Ngoerah Hospital, the patient complained that his feet and hands were stiff and painful, which made him give up and say "I can't stand it anymore and I want to go with my father". The initial incident was 1 month ago, when the patient was at school suddenly his legs felt weak and made him fall. The patient's teacher took him home. The patient has been taken to a doctor and given medication, but until now the condition of his leg has not changed. Since the incident, the patient has not attended school until now (since February 2023). The patient is currently in grade four of elementary school and never failed a grade.

The patient looks sad since being admitted to the hospital. The patient's mother said he felt sad because his illness prevented him from taking exams at school with his friends. The patient was also sad because he felt sorry for the
mother who had to wait for him while he was being treated at the hospital. The patient felt that he was always bothering his mother because he was often sick and was hospitalized. The patient looks gloomy and unenthusiastic during his hospitalization. The patient also experienced disturbed sleep since the illness appeared, often woke up at night because of diarrhea and cramped legs, so he asked his mother to massage his feet. The patient also seemed unwilling to eat, during treatment, he was only given milk through the NGT.

The patient's mother feels that the patient's behavior has changed since his father died. Where the patient looks gloomy, often daydreaming and not excited. The patient also seemed to lose pleasure when his school friends visited him and refused friends invitations to play together. The patient is people who are always happy to be invited to play with their friends when the patient is healthy and at home. The patient is often seen sitting alone in his father's room and feels sad when he remembers his experience with his father when he was often picked up from school and given pocket money.

The patient was first diagnosed with HIV in 2014 (when he was one year and two months old) and started taking anti-retroviral drugs (ARV) in 2015 because at that time the patient had a lung infection and had to take tuberculosis medication first. The patient's weight is said to have decreased by 3.5 kilograms (kg) since 1 month ago. Patients often ask why he has to take medicine continuously and when will he finish taking the medicine. Patients feel bored taking medication every day. The patient never asked about his illness. The patient's mother was not ready to tell and was worried that it would make her child sad. The patient contracted HIV from both parents. The patient and his family (father, mother, and older sibling) were found to have HIV in the same year as the patient. The patient was diagnosed with HIV at the age of 1.5 years old with complaints of itching of the skin which got worse and worse until pus oozed and at that time the patient did not gain weight. Then the patient was examined by the doctor by the mother and blood tests were carried out. From the results of the examination it was found that the patient was infected with HIV. The patient's father passed away 3 months ago (November 2022). The patient's father works as a truck driver and his mother works as a market laborer.

From the physical examination, vital signs were found within normal limits, general status was found in the eyes: anemic conjunctiva +/, icteric –, ENT: fungal plaque on the tongue and pharynx, thorax: symmetrical, no retraction, cor: S1S2 normal, regular, no murmur, pulmonary: vesicular, no rules and no wheezing, abdomen: no distension, no tenderness, normal peristaltic, liver: not palpable, spleen: not palpable. Internal and neurological status within normal limits. In the psychiatric status, the appearance was un-normal, the facial expression was gloomy, looked down more, was less willing to have eye contact with the examiner's eyes, and answered the questions asked by the examiner with a low intonation, low voice volume, and good articulation. During the interview, the patient was mostly silent.

Verbal and visual contact is lacking. The patient has a depressive/depressive/appropriate mood. In the thought process, non-logical non-realistic thought forms are obtained, the flow of thought is poor in speech, the content of thought is poor in ideas. In perception, there are no hallucinations, illusions, depersonalization, or derealization. On an instinctual drive, there is late-type insomnia, hypobulia is present, and raptus is absent. On psychomotor obtained calm during the interview. In psychometry, the child depression inventory (CDI) on March 24, 2023, obtained a score of 21 (depression), and CDI on April 6, 2023, obtained a score of 16 (depression). In the laboratory examination on March 31, 2023, white blood cells (WBC) were 4.54 × 10^3/µL, red blood cells (RBC) 3.03 × 10^6/µL, hemoglobin (HGB) 8.70 g/dL, hematocrit (HCT) 26.40%, creatinine 0.69 mg/dL, BUN 7.3 mg/dL, potassium 2.65 mmol/L, calcium (Ca) 7.8 mg/dL. In the stool culture examination on March 29, 2023, positive mucus, 0-1 leukocytes, negative erythrocytes, negative amoeba, negative worm eggs, and negative FOBT. At the vitamin D25-OH examination on April 3, 2023, a total of 29.10 ng/ml was obtained.

In the history of the disease and previous treatment, he was first diagnosed with HIV in 2014 (at the age of one year and two months) and started taking ARV drugs in 2015. In the family history of the disease, it was found that the patient's father died because of HIV, one of his older siblings was HIV positive, and none were currently on psychiatric medication. In the history of the mother's pregnancy, it was found that the mother was pregnant for 9 months, during her pregnancy she did not experience psychological pressure and never suffered from a serious illness. In the birth history, there was a normal delivery process at the clinic, assisted by a midwife, when he was born he immediately cried loudly and his limbs were complete, his birth weight was 2500 grams and his body length was 48 cm, history of infection, seizures and shortness of breath at birth was denied, congenital defects denied since birth. In the nutritional history, started taking breast milk aged 10 days, formula milk aged 0 months (on demand), milk porridge aged 8 months, steamed rice aged 10 months, and adult food aged 12 months until now. In the history of development, gross motor skills began to hold the head up at 2 months, turn the head over at 7 months, sit at 5 months, crawl at 8 months, stand at 10 months, walk at 14 months, up and down stairs at 18 months. Fine motor-adaptive obtained around the age of 3-4 years learning to wear clothes. In terms of language, it was found that at the
age of 4 months, he began to babble, at the age of 15 months he began to be able to speak one syllable. In personal social, start playing with other children aged 2-3 years old. History of immunization obtained complete basic immunization. In emotional development, it was found that from childhood until now he is a quiet, diligent, and responsible child. The patient is said to have started to turn gloomy and not want to interact since his father died. In psychosexual development, the development of secondary genitalia is found according to age. In social and environmental history, he was the youngest of three siblings, his father died 3 months ago, currently lives with his mother and two older siblings. In school history, it was found that he was currently in fourth grade in elementary school, his school performance was quite good, never dropped out of class (Chiriboga et al., 2005; Wang et al., 2012; Pilowsky et al., 2003; Ssewamala et al., 2012).

In the history of fulfilling the basic needs of children’s care, he received breast milk for the first 10 days and continued with giving formula milk to solid food. Currently living with the extended family of his late father with eleven other families, in a house with two bedrooms, and one bathroom with adequate ventilation. The patient is still registered as an elementary student at SDN 2 Selat, Klungkung. He was raised from birth by both parents with great affection and tended to be spoiled by their late father, his father never scolded patients, and his mother was a bit harsh with patients. The history of growth and development within normal limits. Patients can be trained and educated.

The patient was diagnosed with a major depressive episode without psychotic symptoms and received psychopharmaceutical therapy with aripiprazole 1.5 milligrams every 24 hours intraoral at night, supportive psychotherapy, and family psychoeducation. The patient also received second-line anti-retroviral therapy (ARV) from the pediatrics department. The patient received psychiatric treatment for 15 days and there was an improvement in his general physical condition and mental condition where his sleep was not awakened, his mood was not sad, improved of appetite. The patient returned for control on April 14 2023 and found that the mood was still sad, the legs still felt weak, sleep and appetite were not disturbed and the patient was still thinking about his father. The patient is given supportive psychotherapy in the form of ventilation and reassurance by letting the patient tell what is on his mind and helping calm the patient by comforting him. After the supportive psychotherapy was carried out, the patient said he was calm and his feelings of sadness were reduced (Wogrin et al., 2019; Higueras et al., 2022; Oladunni et al., 2021).

Discussion

In this case, a major depressive episode without psychotic symptoms was diagnosed using the diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) by anamnesis and examination of physical and mental status. On examination found a depressive mood, loss of interest or excitement, weight loss, fatigue or loss of energy, insomnia, agitation, or psychomotor retardation. This has been experienced by patients since his father died (in February 2023) (American Psychiatric Association, 2013).

The patient was diagnosed with HIV in 2014 when he was a year and six months old and infected by his parents. Pediatric HIV infection is an ongoing epidemic, and around 260,000 new pediatric infections were estimated worldwide in 2012, most acquired through mother-to-child transmission, and most of them in Saharan Africa where there are many challenges to implementing clinical recommendations (Hurst et al., 2015). In 2016 globally, 160,000 children were infected with HIV, resulting in 18 children acquiring HIV infection every hour (Irira et al., 2020). The patient received second-line ARV therapy for HIV. In under-resourced countries, second-line ARV regimens are used because of limitations and lack of experience in children with HIV. The systematic review used 13 cohort studies and 7 single trials to determine the outcome of second and third-line ARV therapy. Systematic reviews show that all guidelines for second and third-line ARV therapy are effective and well tolerated, but because of the lack of comparative data, it is difficult to conclude for second and third-line ARV therapy in children.

The patient has a psychosocial stressor where the patient experiences mourning as a result of his father’s death. HIV-infected children may suffer the consequences of parental illness, poor relationships with parents, and even the loss of parents (Zhou et al., 2019). As with the process of physical recovery after an injury, there is evidence to suggest that the mourning process consists of a series of tasks that a person must perform before going through full adjustment to loss such as: accepting reality and fully experiencing the emotional distress of loss; adjusting to the environment and feeling without a loved one; finding meaning in the death of a loved one; and engaging with other adults who can provide comfort, safety, and ongoing care (Woollett et al., 2017). Despite the potentially serious consequences of childhood bereavement, including risks of depression, maladaptive grief, and other emotional and
behavioral problems, little evidence is available on mourning services for children in South Africa (Thurman et al., 2017).

The patient received atypical antipsychotic psychopharmaceutical therapy, aripiprazole. Aripiprazole may be a relatively safe option, although patients on antiretroviral therapy regimens such as cobicistat may require special attention, as rates of aripiprazole may increase in drug interactions (Mao et al., 2019). Mothers are given psychoeducation about how to care for, monitor adherence to taking medication, and provide social support for children. The relationship between social support and depression can be done by: Individuals with depressive symptoms can become withdrawn and socially isolated, thus receiving less social support, whereas social support can be an independent predictor of depressive symptoms. Studies have shown that social support can help relieve depressive symptoms or alleviate depression with behaviors such as avoidant coping, which can result in better medication adherence (Medeiros et al., 2020; Mao et al., 2019).

Conclusion

HIV-infected children are prone to depression. One of the psychosocial stressors experienced by children with HIV is the prolonged mourning process due to the loss of a family member. Comprehensive treatment is needed in the form of psychopharmacology and psychotherapy. Family support is the most important thing in alleviating symptoms of depression and increasing adherence to taking medication.

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Conflict of interest

There is no conflict of interest in the study.

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