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B20 Infection

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CASE REPORT

Mrs K was a 34-year-old mother, coughing for more than two months. Her cough was sometimes accompanied by white sputum. Sometimes, she had a fever. When being examined, the body temperature was normal. There was no shortness of breath, flu, nor pain when swallowing. The patient said there was no history of allergies or asthma. The patient also felt fatigue. Her appetite was good. She sometimes had vaginal discharge. The discharge was white, not yellowish or greenish, not itchy, and odorless. There was no complaint regarding urinating nor defecating. The patient denied any dental and mouth complaints. She also denied any chest complaints and swollen legs. During these two months, the patient had not sought help from any health care facilities. She only took curative beverage (called as *Larutan Penyegar* by the locals), bought in the pharmacy. The routine blood test showed Hb 10,7 gr/dl, and the routine urine test showed increased erythrocytes, leukocytes, and epithelium.

The patient had been hospitalized twice in the primary health care (*Puskesmas*) with a fever, diarrhea, and UTI (Urinary Tract Infection). The patient also had a history of recurrent vaginal discharge. From the examination, we found a *Neisseria Gonorrhoea* infection. The patient's husband was also infected by *Neisseria Gonorrhoea*. When we performed PITC (Provider Initiated Testing and Counseling) to the patient using HIV antibody rapid test, the result was reactive. The patient was treated for the *Neisseria Gonorrhoea* infection and referred to Edelweis ward in Dr. Sardjito Hospital for further examination and then she got ARV (antiretroviral) therapy. Since the result was reactive, the patient routinely took ARVs to Dr. Sardjito Hospital. Later, she got the ARVs from Sleman Regional Public Hospital because of more accessible in terms of transportation.

The patient denied a family history of hypertension, diabetes mellitus, cancer, and asthma. Her husband had passed away in 2017 in Dr. Sardjito Hospital due to AIDS. Before passing away he was hospitalized in Dr. Sardjito Hospital for one month. Both of her children had PITC examination with Rapid Test of HIV Antibodies in the primary health care, and the results were not reactive at all. Every day, the patient sold food made by her neighbor. She sold the foods using motorcycles to offices or schools from morning around eight o'clock to noon around one o'clock. In the morning, before selling, She took her children to school. Then, at three o'clock in the afternoon, she picked up her children at school.

The patient had two children, boys aged 13 and 7 years. The patient complained of her economic difficulties to pay her children's tuition fees, her monthly house-rental fee, the health insurance (BPJS) contribution, and their daily expenses for her children's meal and snacks. The patient never attended social gathering (known as *arisan* by the locals) in her village because she worried not being able to pay dues due to her financial condition. The patient was a Muslim, wearing a veil and did five-times prayer but rarely join Al Quran recitation because she lamented that her daily activities already made her tired. The patient's highest education level was junior high school, so her skills were limited and it was hard for her to get a better job.

Patient and her husband come from neighboring village. When she was going to be married, her family did not approve because her husband was considered to be not a good person religiously and behaviorally. The patient still insisted on getting married because she felt it was right. When the patient had economic difficulties, her family did not help much because the patient did not obey the advice of her family before getting married. On the other hand, when her husband was still alive, he often drank alcohol, did gambling, and was a womanizer. Her husband even sold all the inheritance from her parents to meet his personal needs.

The patient had been keeping her illness and her husband's from her children, relatives, and neighbors. The patient sometimes worried that her children, siblings, and neighbors would know her illness. The patient felt bored with her daily activities which were trading, picking up her children, and raising two children by herself with various limitations. The patient often felt tired and dizzy with all problems that happened to her. The patient occasionally wanted to have a vacation but did not have money and enough time while she already felt tired of her routine activities.

The patient and her children lived in a rented room, 4x2 meters square in size. There were a bathroom and toilet inside it. The monthly rental fee was three hundred thousand rupiahs. The water was from a company that provided water. The ventilation and the lighting were adequate. Every day, the patient and her children ate rice that was cooked using a rice cooker in the room, and the side dishes were the remaining food that was not sold by her or cooked eggs bought from a stall. The patient did not have a stove, so she never cooked.

The location of the patient's rented house was in a village. It had cement walls, ceramic floor, and plasterboard roof. The house consisted of 1 main house which was occupied by a small family. There were eight rooms around the main house, but only one room was occupied by the patient and her children. Her room was directly connected to the outside when the door was opened.

The patient was supposed to immediately go to Sleman Regional Public Hospital to get ARV so that her condition was not decreasing. Unfortunately, the patient did not immediately ask for referrals to Sleman Regional Public Hospital caused by her unpaid health insurance (BPJS) contribution. She worried that being treated in Sleman Regional Public Hospital would cost her a lot. The patient and her children were not the recipient of government subsidized health insurance (BPJS - PBI), so they could not get free healthcare. Instead, she had to pay the health insurance (BPJS) by herself.

Biological Diagnosis and Psychosocial Diagnosis

The biological diagnoses were HIV / B20 infection with observed chronic cough suspecting TB, differential diagnostic was MDR TB; urinary tract infection; and anemia. Cough is a common complaint in patient with HIV infection¹. To find out HIV infection in a patient with chronic infectious diseases, we need to explore the patient's complaints, the history of the patient's and her partner's illness, sexual behavior, and her job. In this patient, we found the existence of risk factors for HIV infection in her partner and his sexual behavior that had multiple partners. Theoretically, there are four stages of HIV infection. In the first stage, it is usually asymptomatic, or it sometimes presents as persistent generalized lymphadenopathy. In the second stage, the symptoms are weight loss less than 10%, minor mucocutaneous abnormality, herpes zoster, angular cheilitis, recurrent oral ulceration, papular pruritic eruption (PPE), seborrheic dermatitis, and fungal nail infection. In the third stadium, the symptoms are weight loss more than

10% with unknown causes, chronic diarrhea more than 1 month with unknown cause, prolonged fever more than 1 month, persistent oral candidiasis, oral hairy leukoplakia, pulmonary tuberculosis, severe bacterial infections (pneumonia, empyema, meningitis, etc), acute necrotizing, anemia with unexplainable cause, thrombocytopenia, and neutropenia. In the fourth stage, the symptoms are wasting HIV syndrome, PCP (Pneumocystis pneumonia), recurrent bacterial pneumonia, brain toxoplasmosis, CMV infection, esophageal, tracheal, bronchial or lung candidiasis, invasive cervical carcinoma, nephropathy or cardiomyopathy associated with HIV, mycobacteriosis, chronic herpes simplex, extra pulmonary TB, recurrent sepsis, lymphoma, Kaposi's sarcoma, HIV encephalopathy, extrapulmonary cryptosporidiosis, progressive multifocal leukoencephalopathy (PML), chronic cryptosporidiosis, chronic isosporiasis, and disseminated mycosis². This patient was in the second stage with the symptom of weight loss less than 10%. However, the above symptoms may differ from one patient to another, depending on the condition of the body, comorbidities, and the immunity of each patient. This patient had been given ARV in Sleman Regional Public Hospital, and this was also determined by the patient's CD4 laboratory result.

HIV infection in this patient was most likely to be obtained from her husband, as most women get HIV infection from their partners¹. To be able to diagnose MDR TB, the patient's sputum was sent to Dr. Sardjito Hospital for Gene Expert examination. Urinary tract infection in the patient was probably an opportunistic infection of B20 that she had². Less nutritious intake and the condition of the patient with predisposing factors of HIV infection caused the patient to have anemia³ also caused her Body Mass Index become underweight, which was 16.43 (Weight = 36 kg, Height = 148 cm).

The psychosocial diagnoses were worrying and anxious about the future of her children. The patient worried to die before her children could live independently. The patient felt terrified if her illness got worse and could not afford to pay for her children's needs. The patient felt that she could do the daily activities despite being fatigued. She stayed strong because she was the backbone of her family. Patient expected to be healthy until her children are successful, given a long life to help her children achieve their goals. The patient's relationship with the neighbors was good, so some neighbors made food and asked the patient to sale their food. When she married her husband, the patient was not approved by her family. The patient was aware that the present condition was due to her former attitude of not being obedient to her family so that they did not want to help her and she accepted the current circumstances.

PROBLEMS

The problem, in this case, was very complicated. We should pay attention to several aspects in the approach for HIV patients: privacy (respect patient's privacy), confidentiality (we must keep patient's health information confidential), fidelity, and veracity (upholding truth and honesty). The confidentiality in this case was patient's status as an HIV patient. Also, we must understand that

the complaints experienced by HIV patients would be different from one and another.

In addition to her physical problems, there was also her psychosocial problem. Assistancess from an HIV counselor for the patient while maintaining her confidentiality were needed to manage the patient's health problems, such as 1) How to ensure that the patient visited health care facility regularly to get ARVs and to be treated for the diseases caused by HIV infection. 2) How to overcome the nutritional problems in the patient due to her low economic status. 3) How to educate the patient in stress management. 4) How to increase patient motivation and compliance in HIV management for a better quality of life. 5) How to advocate the community leaders to help poor people who need long-term medical treatment to have health insurance covered by the government.

DISCUSSIONS

1. Patient-Centered Care

- a. Promotional interventions were explaining to the patient about HIV infection, chronic cough, anemia and UTI. The explanation consisted of etiologies, transmission, treatment, and prevention. Health education on transmission of HIV and chronic cough is important to prevent transmission to others.
- b. Preventive interventions are:
 - 1) Educating the patient to take ARV routinely in Sleman Regional Public Hospital, facilitating her in obtaining government supported health insurance scheme, while waiting for the government support insurance, the patient was assisted by social fund from the primary health care facilities.
 - 2) Educating the patient to keep healthy by having a balanced diet and high nutrition, enough rest, drink enough water, manage stress well, and immediately go to the health center if there is any complaint.
 - 3) Educating the importance of clean and healthy life behavior and the ethics of coughing.
- c. Curative Interventions are:
 - 1) History taking about the patient recent illness, past illness, family history, and biopsychosocial of the patient.
 - 2) Conducting a physical examination, supporting examination if necessary, to make a diagnosis, and to do an internal referral to HIV counselor, nutritionist, psychologist, the HIV program officers, community health personnel, and external referral to get ARV in Sleman Regional Public Hospital, also sputum delivery to Dr. Sardjito Hospital for gene expert examination⁴.
 - 3) Prescribing medicine consisted of 3x1 C syrup of succus liquiritiae, 2x1 tablet of Cotrimoxazole forte for five days, 3x1 tablet of Paracetamol if necessary, and 1x1 tablet of Hemaform³. Explaining the side effects and drug interactions to the patient.

2. Coordinative care

Management of patient with HIV infection will be optimal when there is an effective collaboration among health care providers. In primary health care facility, this HIV patient was taken care by:

- 1) A doctor who was responsible for patient's management, coincidentally she was also as a HIV counselor. The roles of HIV counselors to this patient were:
 - To accompany and monitor patients' treatment, ensure all symptoms were managed properly. The counselor should understand the natural history of an HIV infection that may progress to AIDS.
 - To take a holistic approach to the patient by paying attention to patient's history and recent circumstances.
 - To facilitate behavior change through counseling, improving patient's behavior to lower the risk of transmission of HIV infection.
 - To build the patient's confidence in making wise and realistic decision.
 - To guide the patients to be able to accept the consequences of their choices by emphasizing on an open and sensitive communication.
 - To always be able to provide up-to-date information especially about HIV.
- 2) A psychologist who deals with patient's psychological problems, manages her feeling of anxiety and worries, increase patient's confident so she is optimistic to keep the spirit on getting the treatment, getting a high quality of life, being productive, and being useful to others.
- 3) Community health personnel who deals with the environment sanitation to prevent infection.
- 4) A nutritionist who deals with the nutritional problems of the patient, such as anemia, underweight, and the importance of balanced and complete nutrition. The food does not have to be expensive due to the low economic status of the patient, more importantly is the quality of the diet. A nutritious diet could increase patient's immune system who was susceptible to infection.
- 5) The HIV program officer is a nurse who is in charge of doing home care, recording, and reporting the case.

In this case, the healthcare providers always coordinated and collaborated on any problem faced while taking care the patient. Then, they discussed on how to solve it. All members of the team had to keep the patient's confidentiality, support patient's treatment, prevent transmission, and be able to improve the quality and productivity of patients.

d. Rehabilitative interventions:

- 1) To provide psychological support to the patient; the patient was asked to keep the spirit, be patient and reliance on God, and suggested to obey the doctors and other healthcare providers' advices.
- 2) To monitor the side effects and medicine interactions.
- 3) To collaborate with the NGOs that concern to HIV patient (Fiesta & Victory) so that the patient get sufficient assistance during the treatment and prevent drop out².
- 4) To advise the patient to join HIV / AIDS prevention group to reinforce her confident in the treatment of

her illness³.

2. Family-Focused (Family Wellness Plan)

Screening by sex and age in family members of patient⁵:

No.	Name	Health Status	Screening	Counseling	Immunization
1.	Patient, 34 years old	- B20 - A - chronic cough - Anemia - UTI	1. Cardiovascular test 2. Physical examination / two years 3. Dental examination every year 4. Hearing test 5. Eye examination / two years 6. Infectious diseases screening 7. IVA / Pap smear 8. Breast examination	1. Balanced nutrition, highly nutritious and regular diet 2. Enough rest 3. Prevention of transmitted disease	1. Tetanus / DPT every year 2. Influenza every year
2.	First Child, 13 years old	Good	1. Growth and development monitoring 2. Mental health, emotional, and behavioral tests 3. DM test 4. Dental examination 5. Hearing test 6. Infectious disease test 7. Physical health test 8. Reproduction examination 9. PITC examination twice with six months interval	1. Prevention of transmission 2. Eating nutritious food for the growth	1. HPV immunization three times starting at ten years old 2. Flu immunization each year 3. Varicella immunization two doses 4. Hepatitis A immunization 5. Typhoid immunization 6. DPT immunization
3.	The second child, seven years old	Good	1. Growth and development monitoring 2. Mental health, emotional, and behavioral tests 3. DM test 4. Dental examination 5. Hearing test 6. Infectious disease test 7. Physical health test 8. Reproduction examination 9. PITC examination twice with six months interval	1. Prevention of transmission 2. Eating nutritious food for the growth	1. HPV immunization three times starting at ten years old 2. Flu immunization each year 3. Varicella immunization two doses 4. Hepatitis A immunization 5. Typhoid immunization 6. DPT immunization

3. Community-Oriented

- Socialization of HIV/AIDS, tuberculosis, and urinary tract infections in the community including the symptoms, transmission, treatment, and prevention.
- Coordination with the village officers so that the poor ones, such as the patient, are given the ease to be proposed to the social service department to have subsidized health insurance (BPJS) by the government to access health services for free.

REFERENCE

- Padyana M, Bhat RV, Dinesha AN. HIV in females: A clinico-epidemiological study. *Journal of Family Medicine and Primary Care*. 2013 Apr;2(2):149.
- Public Health Office of Yogyakarta. HIV testing counseling training materials at Hotel Prima Sleman. Yogyakarta: Provincial Public Health Office of Yogyakarta (DIY). 2016.
- Ministry of Health Republic of Indonesia. Regulation of the Minister of Health of the Republic of Indonesia Number 5 years 2014 on the Clinical Practice Guide for Physicians in Primary Health Care Facilities. Jakarta: Ministry of Health Republic of Indonesia. 2014.
- Ministry of Health Republic of Indonesia. Regulation of the Minister of Health of the Republic of Indonesia Number 67 Year 2016 on Guidelines for Tuberculosis Control. Jakarta: Ministry of Health Republic of Indonesia. 2016.
- Department of Family and Community Medicine Faculty of Medicine Universitas Gadjah Mada. Guidance for early promotion and detection for patient according to age and sex category, Post-Graduate Program in Medical Clinic Main Interest in Family Medical Science. Yogyakarta: Faculty of Medical UGM. 2015.