

Thalassemia with Malnutrition

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CASE REPORT

A 2 years old patient presented with a complaint of weight that had not increased in the past few months. The patient was identified by the *Puskesmas* Team in an integrated UKM activity on March 30, 2017, with a condition of complaining of fever and being taken to the local midwife, but there had been no improvement. Next, after the examination, the patient was advised to be referred to Sukadana Regional Hospital, East Lampung Regency, Lampung, where physical and laboratory examinations were conducted with results showing hemoglobin (Hb) 6.9 and a pediatrician established a diagnosis of thalassemia.

The patient's mother said that the patient was treated at Sukadana Hospital for 16 days and received blood transfusions as much as 120 ml, where after the transfusions, the Hb rose to 8.2.

Next, on August 22, 2017, the patient was treated again at Sukadana General Hospital for 1 day to get a blood transfusion of 120 ml, and the patient's Hb rose from 7.9 to 13.5. In addition to the handling at the hospital, the patient received treatment from the health center in the form of education and counseling by the Responsible Person of Nutrition Program and was given mineral mix 100 and supplementary feeding/*Pemberian Makanan Tambahan* (*PMT*) in the form of biscuits so that the patient's body weight improved from 6.9 kg to 7.1 kg. During this time the patient was active in the integrated service post/*Pos Pelayanan Terpadu* (*Posyandu*), where he received BCG immunization at the age of 1.5 months, DPT at the age of 6.8 and 9 months, and measles shot at the age of 9 months.

The mother of the patient was married twice, and was previously divorced from her first husband because her exhusband often got drunk and hit her.

The patient's mother married a second time in 2015 and had 1 child that is the patient. The patient's mother at the first

marriage was blessed with a daughter who is now 12 years old. The patient's father is currently working as a garbage collector in Abdoel Moeloek Hospital with a salary of 1.5 million per month, and rarely goes home, usually once every 2-3 months to visit his children and wife. Currently, the patient lives with his mother and stepsister, where around the neighborhood there are relatives of the patient's mother, namely the aunt and sister of the patient's mother. The patient's mother is a senior high school graduate and father is a junior high school graduate.

Biological Diagnosis and Psychosocial Diagnosis

The biological diagnosis of this patient is malnutrition where the body weight is below minus 3 standard deviations and there is a complication, namely thalassemia. Thalassemia alone can cause the nutritional condition of a toddler to fall into a condition of malnutrition and besides that poor nutrition can cause similar conditions ranging from severe stunting to thalassemia^{1,2}.

Psychosocial diagnosis involves the concern of the mother about the condition of her child, where the child is getting thinner and the growth compared with children in his age is classified as late. In addition, the economic condition which is mediocre became a barrier to bring their children to the hospital for routine treatment because every visit requires costs/transport. The husband who works in the city also causes the wife to take care of her two children by herself. Besides that, the patient's father is only a junior high school graduate with a relatively small monthly income that makes this family have many limitations due to their poor economic condition.

FORMULATION OF THE PROBLEM

The problem of this case is very complex, where the factors that affect the patient's condition both biological and psychosocial are very many.

1. Poor nutrition is a manifestation of thalassemia, as

well as poor nutrition that is not handled properly can worsen the condition of thalassemia¹.

- 2. The patient is the result of the second marriage with a poor husband who works in the city and rarely goes home. The patient's mother takes care of the first child from the previous marriage and the patient.
- 3. Support from village officials for the condition of the patient's family is not very visible.
- 4. The patient's father only earns 1.5 million per month, where the income has not been deducted for the living cost in the city (workplace) and the rest is sent to the patient's mother to meet family needs.
- 5. The perseverance of worshiping by the patient's mother sometimes diminishes so that she gets a feeling that she is closer to her end of life and surrenders to Allah SWT.

DISCUSSIONS

This section will discuss the follow-up that can be done by a primary care doctor/Dokter Layanan Primer (DLP) in helping to solve the problems above with the family focus and community-oriented approach³. In the family focus approach related to malnutrition, a DLP is able to educate the patient's family to provide balanced nutrition by teaching them to make food formulas which are suitable for the patient's condition. Then, the DLP can monitor the patient's Posyandu schedule and make a referral to a pediatrician. Next, a husband who works far from the house with a low income might think about moving to work near the house by providing a description or possible options in accordance with her husband's ability/expertise and can also provide input on the need for a religious approach, because maintaining a religious approach can provide encouragement for the family to face and find solutions to their child's problems. The next approach is communityoriented, namely by approaching the village head so that he can pay more attention to his citizens by creating a group for empowering the surrounding community such as forming a village nutrition barn where the community can be empowered by collecting a few rupiahs, for example, Rp1000 can be used if there are neighbors that require supplementing nutrition. In addition, it is also possible for the village head to enter into the work program for community empowerment efforts through training Posyandu cadres on early detection of developmental disorders.

In an effort to dialogue with the patient's mother, a DLP can be guided by 8 questions from Arthur Kleinman⁴ namely:

1. What do you think about the cause of her child falling into malnutrition and thalassemia?

The patient's mother said that the socioeconomic conditions were lacking where the salary sent by her husband was insufficient to meet daily needs and cost of treatment.

2. When do you think malnutrition and thalassemia first appeared?

The patient's mother said that at the age of 7 months, her child had fever and physical body complaints more often compared to other babies of the same age.

3. What do you think about problems in the body of a

patient of malnutrition and thalassemia?

The patient's mother said that she worried about her child's growth which was not appropriate with children of the same age, and that it would have an impact on her child's future.

- 4. According to mothers, are malnutrition and thalassemia quickly cured or takes a long time? The patient's mother said that she was optimistic that malnutrition and thalassemia could be cured but she did
- not understand when it would heal.5. What kind of treatment do you expect? The patient's mother said that she hoped for treatment that would cure her child completely, both from the problem of malnutrition and thalassemia with ease of cost and access to health services.
- 6. What results did you expect from the treatment? The patient's mother said that she hoped to be fully cured where her child can grow the same as other children.
- 7. What are the main complaints of malnutrition and thalassemia?

The patient's mother said that the main complaints were her child looked small with weight and motor abilities under the age of her baby.

8. What are you worried about as the consequence of malnutrition and thalassemia? The patient's mother said that she worried about the problem of malnutrition and thalassemia could not be treated until he recovered and the ught shout the future.

treated until he recovered and thought about the future of her child.

By referring to the 8 questions above, the DLP can find out some helpful information from the patient's mother so as to facilitate discussion and education for the patients through the mother.

REFERENCES

- Arijanty L, Nasar SS. Nutrition problem of thalassemia. Sari Pediatri. 2016 Dec 6;5(1):21-6.
- Kusumawati E, Proverawati A, Purnamasari DU, Rahardjo S. Level of nutrient intake and nutritional status of thalassemia sufferers in Banyumas District. Kesmas Indonesia. 2017 Feb 2;7(02):155-66.
- Abramson JH, Kark SL. Community oriented primary care: Meaning and scope. Community Oriented Primary Care: New Directions for Health Services Delivery. 1983:21-59.
- Kleinman A. Suffering, healing and the human condition. Encyclopedia of Human Biology. 1988.