

RECOGNIZE ANEMIA AND BALANCE DISORDERS INDEPENDENTLY FOR INDONESIAN MIGRANT WORKERS AT INDONESIAN EMBASSY IN KUALA LUMPUR - MALAYSIA

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ABSTRACT Anemia is still a problem in Indonesia, especially among the elderly. Anemia is a condition in which the number of red blood cells or the concentration of hemoglobin in them is lower than normal. Hemoglobin is needed to carry oxygen and if it has too few or abnormal red blood cells, or not enough hemoglobin, there will be a decrease in the blood's capacity to carry oxygen to the body's tissues. The most common nutritional cause of anemia is iron deficiency, although folate deficiency, vitamin B12. One of the symptoms of anemia is body balance disorders. The analysis of the situation faced by Indonesian migrant workers placed in Malaysia (Kuala Lumpur) is that knowledge about health both regarding anemia and body balance disorders is not yet a major need for Indonesian migrant workers placed in Malaysia. However, to recognize themselves as healthy is still a need to maintain health and continue to work. With this situation analysis, the pengabdian wants to provide counseling and training on recognizing anemia and body balance disorders independently. The implementation method was carried out online on May 26, 2024 with. Results: International III community service has been carried out, online. Conclusion Balance disorders in anemia are susceptible to people with vitamin B12 deficiency anemia. Vitamin B12 deficiency triggers damage to the nervous system which affects the body's balance. That is the reason people with vitamin B12 deficiency anemia fall easily due to loss of body balance.

KEYWORDS: *Anemia, Balance Disorders, Independently*

1. INTRODUCTION

Anemia is still a problem in Indonesia, especially in the elderly. According to WHO news (https://www.who.int/health-topics/anaemia#tab=tab_1) Anemia is a condition in which the number of red blood cells or the concentration of hemoglobin in them is lower than normal. Hemoglobin is needed to carry oxygen and if it has too few or abnormal red blood cells, or not enough hemoglobin, there will be a decrease in the blood's capacity to carry oxygen to the body's tissues. This causes symptoms such as fatigue, weakness, dizziness and shortness of breath,ect. The optimal hemoglobin concentration required to meet physiological needs varies with age, gender, altitude of residence, smoking habits and pregnancy status.

Anemia can be caused by several factors: nutritional deficiencies through inadequate diet or inadequate absorption of nutrients, infections (e.g. malaria, parasitic infections, tuberculosis, HIV), inflammation, chronic diseases, gynecological and obstetric conditions, and inherited red blood cell disorders. The most common nutritional cause of anemia is iron deficiency, although folate, vitamin B12 and A deficiencies are also important causes.

WHO uses Hb levels to determine the severity/degree of anemia. The division of the degree of anemia consists of mild, moderate, and severe anemia. This grouping considers age, gender, pregnancy status, genetic factors, environment, and race (Chaparro & Suchdev, 2019). In addition, Chaparro & Suchdev (2019) also stated that anemia is a condition in which hemoglobin (Hb) concentration and/or red blood cell (RBC) count is lower than normal and insufficient to meet the physiological needs of individuals. The division of this anemia can be seen in the table below:

Table 1. Hb Concentration for Anemia Diagnosis

Population	Anemia			Normal
	Severe	Moderate	Mild	
Age				
Age 6-59 months	< 7	7,00-9.9	10,00-10,9	≥ 11
Age 5-11 years	< 8	8,00-10,9	11,00-11,4	≥ 11,5
Age 12-14 years	<8	8,00-10,9	11,0-11,9	≥ 12
non-pregnant women >15 years old	<8	8,00-10,9	11,0-11,9	≥ 12
Pregnant women	<7	7,00-9.9	10,0-10,9	≥ 11
Men over 15 years old	<8	8,00-10,9	11-12,9	≥ 13

Sumber: Chaparro dan Suchdev (2019)

How to check independently?

- 1) Clean hands by washing hands with 6 Steps
- 2) Stand in front of the mirror
- 3) Open the lower eyelid
- 4) Stretch the eyelid
- 5) Observe the color of the inner eyelid layer (lower part)
- 6) Interpret the color
- 7) Wash hands
- 8) The examination can be done by pressing the fingertips, normally after pressing the area will turn red.



Figure 1 Normal conjunctiva (uploaded from the internet); full redness of the anterior edge and its discordance with the posterior aspect of the conjunctiva

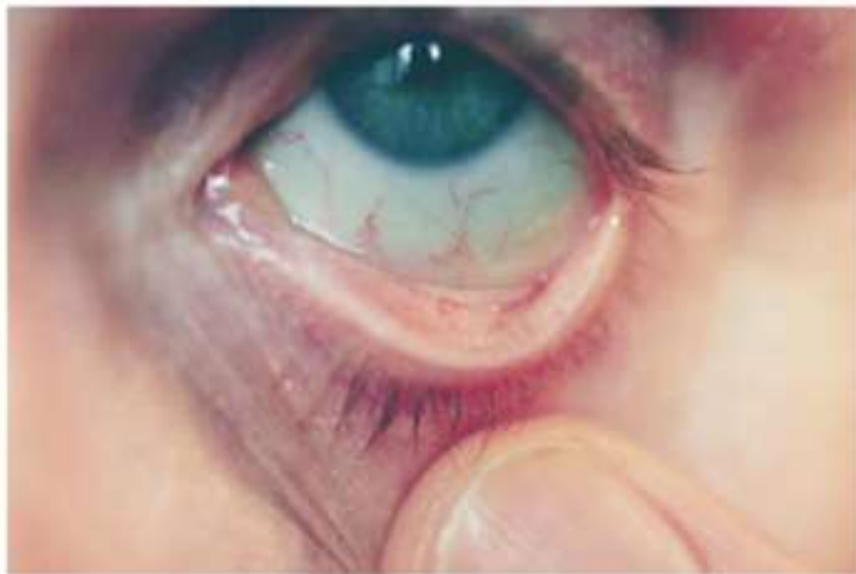


Figure 2. Pale conjunctiva (uploaded from the internet); the color of the pale anterior rim and posterior part of the conjunctiva is the same

Note that the color of the pale anterior rim and posterior part of the conjunctiva is the same states that a balance disorder is any condition that makes the body feel unsteady and unable to maintain posture, especially when standing or walking. It may cause dizziness or lightheadedness. There are many causes, most of which can be identified and successfully treated with proper testing. Broadly speaking, balance can be defined as the ability to control the body's center of mass or center of gravity against a fulcrum or plane and can be assumed to be a group of reflexes that trigger the balance center found in visual, vestibular and somatosensory (Risangdiptya and Ambarwati, 2016).

How to recognize balance disorders independently?

Stand on one leg and do it alternately. And measured the length of each leg.

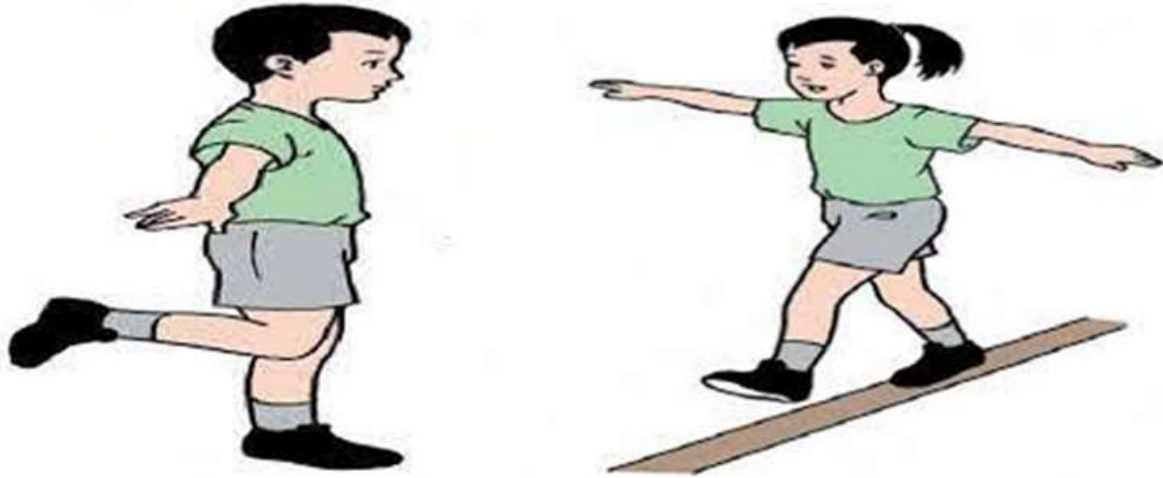


Figure 3. Balance standing stork test (taken from the internet)

To test both static and dynamic balance, there is one test, the Standing Stork Test (SST). The Standing Stork Test or commonly called a one leg stand is a measuring tool to test the athlete's static balance ability while standing on one leg. (Risangdiptya and Ambarwati, 2016). The Standing Stork Test is generally used as a gold standard compared to tests at the age of 15-30 years someone is able to stand on one leg with the highest average of 26-39 seconds (Risangdiptya and Ambarwati, 2016) and does not falter.

The analysis of the situation faced by Indonesian migrant workers placed in Kuala Lumpur, Malaysia is that knowledge about health both regarding anemia and body balance disorders is not yet a primary need for Indonesian migrant workers placed in Kuala Lumpur, Malaysia. However, it is still a necessity to maintain health.

With this situation analysis, the pengabdian wants to provide counseling and training on recognizing anemia and body balance disorders independently.

2. METHOD

A. Preparation

Preparations were made by submitting the title of community service for Indonesian migrant workers at the Indonesian Embassy in Kuala Lumpur Malaysia with a health theme. Community Service for Indonesian Migrant Workers in the placement of the Indonesian Embassy in Kuala Lumpur Malaysia is carried out online. The approach taken by approaching Sharing NGOs. Preparations made are Preparation of materials provided on May 26, 2024

B. Implementation

The activity was conducted on May 26, 2024 and was conducted online. Advances in communication and information technology make it easier for people to interact. The phenomenon of online social media on the internet such as google, yahoo, facebook, twitter, and others (Suratini, Muljono, and Wibowo, 2021).

C. Evaluation

This stage is carried out to see during counseling activities whether there are obstacles, as well as the presence of online participants.

3. RESULT AND DISCUSSION

3.1 Result

The material to recognize anemia and balance disorders independently is provided online. According to Usman, Mujahidin & Fath (2021) the way to learn online and is known as online learning (e-learning or electronic learning). This online learning solution is very easy to accept. Besides using these communication technology tools, such as cellphones which are the main facilities in online activities, at the same time the teaching staff are more or less familiar with using these cellphones. Therefore, the implementation of e-learning is very quickly accepted in various educational institutions (Usman, Mujahidin & Fath, 2021).

The material on anemia and balance disorders is provided online independently. The material provided is in the form of a powerpoint. The service participants listened and scrutinized the material exposure. The material exposure is as follows



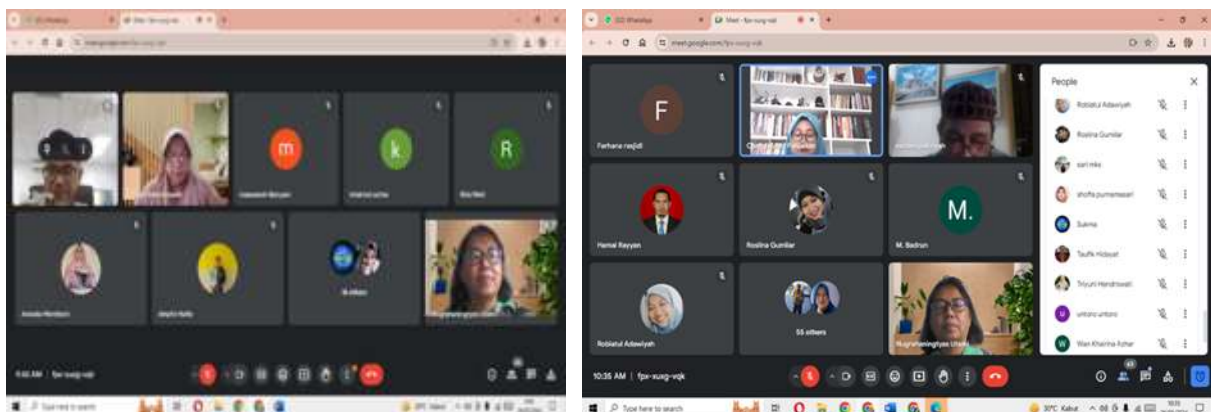
Figure 4. Online counseling materials for Migrant Workers Placed in Malaysia in Kuala Lumpur (May 26, 2024).

Before conducting community service activities for Migrant Workers in the placement of Kuala Lumpur Malaysia, information on the schedule and speakers who will conduct online community service for Indonesian migrant workers in the placement of Kuala Lumpur Malaysia has been carried out. The Flyer is as shown below



Figur 5. Online flyer for session 1 of International Community Service III Indonesia-Malaysia on May 26, 2024.

While the implementation of International Community Service III is carried out online, it can be seen in the picture below



Figur 6. Implementation of International Community Service III online on May 26, 2024 for Indonesian Migrant workers placed in Malaysia (Kuala Lumpur)

3.2 Discussion

The importance of recognizing anemia independently is because independent experience is the first step before asking for help from health workers. The symptoms of anemia are The symptoms of anemia vary greatly, depending on the cause. Patients with anemia can experience symptoms such as: weakness and fatigue, headaches and dizziness, frequent drowsiness, for example drowsiness after eating, skin looks pale or yellowish, irregular heartbeat, shortness of breath, chest pain or cold in the hands and feet and a disturbance of balance. (<https://www.halodoc.com/artikel/waspada-ini-5-gejala-anemia-defisiensi-vitamin-b12-dan-folat> uploaded May 2024) Balance disorders in anemia are susceptible to people with vitamin B12 deficiency anemia. Vitamin B12 deficiency triggers damage to the nervous system, which affects the body's balance. That's why people with vitamin B12 deficiency anemia fall easily due to loss of balance ((<https://www.halodoc.com/artikel/waspada-ini-5-gejala-anemia-defisiensi-vitamin-b12-dan-folat> uploaded May 2024)

4. CONCLUSION

After conducting Community Service for Indonesian Migrant Workers placed in Kuala Lumpur Malaysia online, it can be concluded that

1. Indonesian migrant workers placed in Kuala Lumpur, Malaysia can check anemia independently
2. Indonesian Migrant workers placed in Kuala Lumpur Malaysia can independently check body balance

Therefore, the recommendations for the future are

1. Need to train themselves to know whether they are anemic or not before going to the health service.
3. The need to train oneself to keep the body balanced and healthy

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CONFLICT OF INTERESTS

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