Ciplukan Leaf Extract (*Physalis Angulat l.*) as Anemia Therapy of Adolescents in the Period of Menstruation in Pamekasan

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ABSTRACT

- *Backgrounds:* Anemia or lack of blood is a condition of weakness, fatigue, lethargy due to lack of iron in the blood. A survey showedthat anemia is higher affected to women than men. If anemia affected in girls, the impact is not only short term but will affect the life cycle.
- *Objectives:* This study aims to determine the use of *Ciplukan*leaf extract on the increase of iron in the blood, is there influence on increasing levels of hemoglobin (HB) in the blood, so that it can be used as a therapy for anemia experienced by adolescents during menstruation.
- *Methods:* This study uses an experimental analytical method, a study based on the level of nature (setting) place of research to survey research and naturalistic (qualitative).
- *Results:* In essence the Experimental research is examining the effect of treatment on behavior that arises as a result of treatment. Where in this study also uses the control group besides the experimental group. From the samples that have been given *Ciplukan*leaf extract, on average there is an increase in HB levels.
- *Conclusion: Ciplukan*leaf extract can be used as a therapy for anemia in young women during menstruation.
- *Keywords:* Ciplukan Leaf Extract, Therapy, Anemia, Adolescence.

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INTRODUCTION

Ciplukan is an American plant that was distributed in tropical regions of the world. In Java it grows in the gardens, fields, roadsides, bushes, light forests, forest edges. *Ciplukan* is one of the wild plants in the form of shrubs which is a position is lower. The heightis usually only one meter and the age of this plant is approximately one year. This plant usually lives well in the lowlands. The content of the plant is a chemical compound in the form of citron and fissain. In addition, it plants also contain malic acid, alkaloids, tannins, cryptoxanthines, vitamin C and sugar.

The shapes of *Ciplukan* plants is small and have a green color that will turn yellowish when ripe, and has a mixture of sour and sweet. Basically, this fruit is often left and ignored, but now this fruit is in great demand by all people at large because it contains many benefits to the health.

Anemia is a condition when the body loses blood cells that contain hemoglobin to spread oxygen to all organs of the body. With this condition, sufferers will usually feel tired and tired, so they cannot carry out activities optimally. Anemia can occur in the short or long term, with mild to severe severity. The treatment for this condition is varieties, depending on the cause. Anemia can be treated by taking supplements regularly or special treatment procedures.

Anemia is often associated with conditions of weakness, fatigue, lethargy due lack of iron content in the blood. Not only in adults, children and even toddlers can be affected by anemia. In Indonesia the number of anemia sufferers who come from the group of school-age children (6-18 years) reaches 65 million people. In fact, when combined with anemia patients under five, teenage girls, pregnant, women of childbearing age, and the elderly, totally reaches 100 million. It means that one in two Indonesians suffer of anemia. The survey also showed that anemia is higher affected in women than men. If anemia affects a girl, the effect is not only on the child but also to the next generation. Remembering the girl will conceive and give birth.

Anemia can be caused by a condition of the body requiring iron in high amounts, such as during pregnancy, breastfeeding, the growing period of children and toddlers and puberty. Or when the body loses a lot of blood such as during menstruation and in patients with hemorrhoids and hookworms. Those who follow a poor iron diet or poor diet are also prone to anemia. Another reason is the disruption of iron absorption in the body.

Actually, anemia can be prevented easily. But, because the society think easy, and considers it to be just weak, tired, lethargic. In fact, the effects of anemia are very dangers and even cause death.

MATERIALS AND METHODS

This research uses the experimental method with the design of a true experiment. The populations of this study were young women at Junior and Senior High School of Bustanul Mubtadiin. The research of data uses primary obtained from Hemoglobin test results in young women during menstruation. Unvaried analysis in this study is independent variable that will be described, Utilization of *Ciplukan*Leaf Extract. While the dependent variable described as anemia.

The analysis of the data uses inductive analysis. The data analysis process begins by examining all the data of respondents who experience menstruation and is declared anemic. After knowing the hemoglobin levels in the blood, the researcher given treatment by giving fruit and Ciplukanleaf extract in accordance with the predetermined composition stages.

After the data collected, the researcher conducts a univariate analysis on each variable of the research results. In general, this analysis only uses the distribution results and the percentage of each variable. This research conducted on April until August. The place of this research is at Junior and Senior High School of Bustanul Mubtadiin.

RESULT

a. The Distribution Frequency Of Respondents Based On Adolescences

Table 1. The distribution frequency of respondents based on adolescents during menstruation at Pamekasan in 2019

Age (month)	Frequence	Persentage(%)
12-15	13	17.34
15-18	30	40.00
18-21 Tahun	32	42.66

b. The Distribution Frequency Of Respondents Based On Education.

Education	Frequency	Persentage (%)
SD	0	0
SLTP	13	17.34
SLTA	30	40.00
РТ	32	42.66

Table 2. The distribution frequency of respondentsbased on adolescent education duringmenstruation at Pamekasan in 2019

From the results of data collection as in Table 2. showed that the majority of respondent education is Institution which is 32 people (42.66%).

c. The Distribution Frequency of respondents based on the socioeconomic

Table 3. The distribution frequency of respondentsbased on the socioeconomic during menstruationat Pamekasan in 2019

Socioeconomic status	Frekuensi	Persentase (%)
Menengah ke Atas	32	42.66
Menengah Ke bawah	43	57.33
Atas	0	00.00

From the results of data collection in **Table 3**. showed that most of them are teenagers with middle to lower socioeconomic status (57.33%).

d. The Distribution Frequency Of Respondents Based On The Incidence Of Anemia

Table 4. The distribution frequency of respondentsbased on the incidence of anemia in adolescentsduring menstruation at Pamekasan in 2019

Anemia	Frekuensi	Persentase (%)
Anemia	75	65.21
Tidak Anemia	40	34.78

e. The Distribution Frequency Of Respondents Based On The Results Of Observation Giving *Ciplukan*leaf Extract

> Table 5. Frequency distribution of respondents based on the results of observations giving ciplukan leaf extract to adolescents during menstruation in pamekasan regency in 2019

Peningkatan Kadar HB	Frekuensi	Persentase (%)
Mengalami Peningkatan	52	80.0

Tidak		
Mengalami	13	20.0
Peningkatan	15	

CONCLUSSION AND RECOMENDATION

The Utilization of *Ciplukan*leaf extract as a treatment for anemia in adolescents during menstruation, it can be concluded that can be increase of Hemoglobinlevels in the blood and be able to overcome complaints such as dizziness, weakness and frequent drowsiness caused by anemia in adolescents during menstruation. The suggestions of this result are:

For related institutions can give more attention to the FE therapy program for adolescents during menstruation as an effort to reduce the incidence of anemia especially in young women. In this case, nutritional adequacy screening is also necessary, so that it can diagnose the cause of anemia, which can also be caused by poor diet or lifestyle. Where in this case is able to support the level of accuracy of the causes of anemia and accuracy in the handling or prevention of anemia, especially in adolescent girls.

In this study, further research is also needed to determine the benefits of *Ciplukan*leaf extract for treatment or prevention of other health problems as an addition to the basic ingredients of medicines in the world of health and the need to do a plant test as a reference that *Ciplukan*leaf has a content that is safe enough to be consumed by people who have a history of diseases such as degenerative diseases, metabolic diseases, allergies and others.

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