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Life Style of Female Student Nurses With Iron Deficiency Anemia

Thesis

*Submitted for Partial Fulfillment of Master Degree
in Community Health Nursing*

By

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2022**

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List of Abbreviations

<i>Abbr.</i>	<i>Full-term</i>
AIDS	Acquired Immuno Deficiency Syndrome
BMI	Body Mass Index
DMT1	Divalent Metal Transporter 1
EEG	Electro Encephalo Gram
Fe	Iron (Ferrum, Ferrite)
Hb or Hgb	Hemoglobin
HCT	Hematocrit
HIV	Human Immunodeficiency Virus
IBD	Inflammatory Bowel Disease
ID	Iron Deficient
IDA	Iron Deficiency Anemia
IV	Intra Venous
MCH	Mean Corpuscular Hemoglobin
MCV	Mean Corpuscular Volume
RBC	Red Blood Cells
STFR	Serum Transferrin Receptors
U.S	United States
WHO	World Health Organization
ZnPP	Serum Zinc ProtoPorphyrin

Life Style of Female Student Nurses with Iron Deficiency Anemia

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Abstract

Background: Anemia due to iron deficiency is considered a common global risk between female students nurses that have a serious effect on their academic performance. **Aim:** To assess the lifestyle of female student nurses with iron deficiency anemia. **Design:** A descriptive research design was utilized. **Setting:** Three Institutes Affiliated to the General Authority of Hospitals at El-Mataria educational Institute Nursing and El Galaa Educational Institutes and Al Sahel Educational Institute Nursing in Cairo. **Sample:** A purposive sample of 160 female student nurses. **Tool:** One tool was used for data collection, interviewing questionnaire consisted of 5 parts. **part1:** Demographic characteristics of female student nurses, **part 2:** Female students' knowledge about iron deficiency anemia, **part 3:** Lifestyle of the female students with iron deficiency anemia, **part 4:** The health practice of the female students regarding the nutritional habits and **part 5:** Common health problems' assessment. **Results:** It was found that more than half of the studied sample were less than 18 years. Also, more than half of them had moderate level of anemia. Moreover, there was a statistical insignificant relation between health knowledge and severity of iron deficiency anemia. On the other hand, there was a statistical insignificant correlation between the academic educational level and the severity of iron deficiency anemia. **Conclusion:** More than half of the female student nurses had poor knowledge; the majority of them had inadequate practice, low consumption of food items containing higher percentage of iron. Moreover, there was a statistical insignificant correlation between health practice regarding the nutritional and drinking habits, iron consumption and knowledge. **Recommendations:** Health education is necessary for female adolescent in these areas as to the importance of iron-rich foods and utilization of any available sources of iron. Physical surveillance for female students nurses must be available and continuous for early detection and treatment of health problems related to iron deficiency anemia.

Keywords: Lifestyle, Female Student Nurses, Iron Deficiency Anemia.

Introduction

Iron deficiency Anemia IDA is one of the most important global health problems, and more than two billion people worldwide are estimated to have anemia in adolescence, those are particularly at risk of suffering from deficient nutritional status because of the increased needs; accelerated development, hormonal changes malnutrition, and starting of the menstrual period for girls (*López-García et al., 2018*).

Iron deficiency can cause anemia resulting from nutritional deficiency of vitamins A and B12 and folic acid. Iron deficiency anemia is a global health problem. It involves population of all age groups and both genders, but adolescent girls are more vulnerable (*World Health Organization (WHO), 2018*).

Iron deficiency anemia has the major effect on the intellectual performance, immunity, leukocyte function, physical work capacity, growth velocity, epithelial change, fertility, malignancy, neurological function and intelligence. It is defined as reduction in hemoglobin concentration, hematocrit, or number of the red blood cells per cubic millimeter (*Lanzkowsky, 2016*).

Iron is very important for maintaining many body functions, including keeping healthy cells, skin, hair, and nails. Iron in the food eat is absorbed into the body by the cells that

line the gastrointestinal tract; the body only absorbs a small fraction of the iron ingest (*Almohanna et al., 2019*).

Iron deficiency anemia among female students usually results from nutritional iron and vitamin B12 deficiency. The intestinal parasitic infestation, chronic diseases and anemia cause paleness, weakness and fatigue. Iron and folic acid supplements are solutions that also help to promote health before adolescents become parents. Intestinal helminthes such as the hook worm prevent the absorption of the micronutrients causing iron deficiency anemia (*Baranowskial, 2017*).

Female student are prone to develop iron deficiency. The total food intake or energy intake by adolescent girls compared to boys is combined with menstrual losses causing adolescent girls to be at greater risk of iron deficiency and iron deficiency anemia. Moreover, the incidence of anemia tends to be increased with age and corresponds to the highest acceleration of growth during adolescence. Iron deficiency anemia reduces cognitive functions and adversely affects learning and scholastic performance in school particularly for girls reaching adolescence (*Mousa et al., 2016*).

The lifestyle of the female student that will be the parents of the future will influence not only themselves but also the resources of the country. The health status of societies is measured by the rate of healthy individuals. Therefore, it is important that youth follow the type of behaviors that improve their health or know the risk factors in adopting behaviors of a negative lifestyle that may damage themselves and others (*Sumen & Oncel, 2017*).

A healthy lifestyle is a way of living that lowers the risk of being a disturbed adolescent or dying early. Healthy lifestyle is a way of living that helps adolescents to enjoy more aspects of their life. Health is not just about avoiding a disease or illness. It is about physical, mental and social well-being too (*WHO, 2015*).

World Health Organization defines anemia among population as a mild, moderate, or severe public health problem if its prevalence is 5-20%, 20-40%, or >40%, respectively. Most of the WHO countries have a moderate-to-severe public health problem with anemia, i.e., over 20% of adolescent and young children are negatively affected. In developing countries, diets with poor iron bioavailability are the primary cause of IDA (*Helpguide, 2020*).