



ORIGINAL RESEARCH PAPER

Medical Surgical Nursing

A STUDY TO ASSESS THE KNOWLEDGE ON PREVENTION OF ANEMIA AMONG ADOLESCENT GIRLS IN SELECTED NURSING COLLEGE, KARAD

KEY WORDS:

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INTRODUCTION:

Anemia is defined as an abnormal reduction in the number of circulating red blood cells, the quantity of hemoglobin and the volume of packed red cells in a given unit of blood. causes identified include heavy blood loss as a result of menstruation, or parasite infections such as hookworms, infections like malaria, cancer, tuberculosis, and HIV. In addition, micronutrient deficiencies, including vitamins A and B12, foliate, riboflavin, and copper can increase the risk of anemia. Medical female students form a vulnerable population in this regard especially with irregular stressful schedules and erratic meal times. Therefore, this study was aimed at determining the prevalence of anemia among the apparently healthy female students studying at a health institute. Many researchers have reported that anemia is associated with fatigue, general malaise reduced work capacity and poor concentration. It adversely affects learning, cognitive function, behavior, attention and regular activities.

GLOBAL:

Anemia is a global public health problem affecting 1.62 billion people globally, which corresponds to 24.8% of the population as per World Health Organization (WHO). It is a significant burden on the social and economic development for both the de According developing and developed countries alike.

INDIA:

The most recent data for anemia in India comes from the National Family Health Survey's fifth round conducted in 2019-21. This data shows that two in three children under the age of five were anemic, as well as over half of women and a quarter of men aged 15-49 years. While some of India's poorest states including Bihar and Odisha have high rates of anemia among women and children, the prevalence is not restricted to poor states alone; Gujarat has the highest incidence of anemia in children, and West Bengal among women. MAHARASHTRA .The prevalence of anemia in women aged 15-49 in Maharashtra increased from 54.2% in 2015-16 to 68.9% in 2019-20.

DISTRICT:

The percentage of anemia in Satara district, Maharashtra, India was 49.6% according to the NFHS-5 (2019-20) survey.

NEED FOR STUDY:

Adolescent girls are chosen for the study as by improving anemia and awareness among adolescent girls, There are only few studies focusing on adolescent anemic girls. In view of the above, this study was carried out to find out the

prevalence and factors associated with anemia among adolescent girls. The period between 10 and 19 years of age has been defined as adolescence by the World Health Organization. This period has been considered as the transitional phase from childhood to adulthood. During this phase, major psychological, behavioral, and physical developments ensue, because of marked physical activity and rapid growth. Anemia is one of the most universally prevalent diseases in the world today. Anemia is caused by inadequate supply of dietary iron is the most prevalent nutritional disorder . anemia is one of India's major public health problems. The prevalence of anemia ranges from 33% to 89% among pregnant women and is more than 60% among adolescent girls.

Dietary inadequacies are likely more of threat among adolescents because of erratic eating patterns and specific psycho social factors underlying these combined with the particularly high nutritional requirements for rapid growth. Anemia in adolescent girls poses a great health hazard. Their physical, mental, emotional and social development takes the prominence during their period of time. The lowered hemoglobin status hampers and stunts this growth associated with developments.

PROBABLY STATEMENT : "A study to assess the knowledge on prevention of Anemia among Adolescent Girls in selected nursing college karad."

OBJECTIVE:

- To assess the knowledge of prevention of Anemia among Adolescent Girls .
- To find out the association between level of knowledge about prevention of Anemia at selected nursing college.

Operational definition:

Study : Refers to a systematic investigation or inquiry into a specific research question, hypothesis, or phenomenon. It involves collecting and analyzing data to answer research questions, test hypotheses, or explore relationships between variables.

Assess: Means to collect and analyzing, and interpreting data to better understand a topic.

Knowledge: Is the understanding, awareness, or familiarity of a subject that is gained through learning, experience, or education.

Prevention: Is the study of how to reduce the risk of disease or injury, or to slow the progression of a condition.

Anemia: A condition where the body doesn't produce enough healthy red blood cells or the red blood cells don't have enough hemoglobin.

Adolescent girls: A girls between the ages of 10 and 19.
Nursing college: Apost secondary institution that trains students to become nurses.

REVIEW OF LIYERATURE

1) A Descriptive Study to Assess the Knowledge, Practice and Attitude on Iron Deficiency Anemia among Adolescent Girls at Selected Private School. Prevalence of iron deficiency anemia is more common among adolescent girls. A descriptive study to assess the knowledge, practice and attitude on iron deficiency anemia among adolescent girls was conducted. The study objectives were to assess the level of knowledge, practice and attitude on iron deficiency anemia among adolescent girls, and to find out the association between the level of knowledge, practice and attitude on iron deficiency anemia among adolescent girls and with their selected demographic variables, and to find out the correlation between the knowledge & practice, knowledge & attitude and practice & attitude. 100 Adolescent girls in the age group of 13-18 years were selected as a sample for this study, based on inclusion criteria. The purposive sampling technique was used. Structured questionnaire, check list and likert scale was used as a tool to collect the data on knowledge, practice and attitude on iron deficiency anemia.

2) Effect of Structured Teaching Programme on Level of Knowledge on Iron Deficiency Anemia and Prevention of Anemia among Adolescent Girls in selected Higher Secondary School. To assess the effect of structured teaching programme on level of knowledge on iron deficiency anemia among adolescent girls and to associate the level of knowledge of iron deficiency anemia and prevention of anemia among adolescent girls with selected socio demographic and clinical data variables.

RESEARCH METHODOLOGY:

Research Approaches: Qualitative Research, Research Design: Descriptive Research Design

Setting: karad, Population: A adolescent girls diagnosed with anemia in Nursing College. Sample: a adolescent girls diagnosed with anemia in Nursing College. Sample size: 60, Sample technique: purposive sampling techniques/Random, Research variables: Independent variables: Prevention of anemia, Dependent variables: Adolescent girls, Demographics variable: age, Gender, Father's Education, Mother's education, Father, occupation, Mother occupation, Monthly income, Type of family, Dietary pattern, Residence. Eligibility criteria. a. Inclusive criteria 1) Sample who are diagnosis with anemia 2) Sample are willing to participate in the research study project. 3) Sample who can Read , Write and understand the English.

b. Exclusive criteria: 1) Sample not willing participate in this study, 2) Sample who can not Read , Write and understand the English. Tools for data collection:

Section A – Demographic variable, Section B – Question related to Anemia VIII)

procedure for data collection:

- 1) Permission will be obtained from Respected Principal
- 2) Permission will be obtained from Respected Class teacher .
- 3) Informed consent will be obtained from participants .
- 4) Then we selected the sample.

SUMMARY AND CONCLUSION:

Baseline Knowledge Levels

- Initial Assessment: Pre-intervention studies often find that a majority of nursing students (around 64%–72%) possess

only moderate or average knowledge regarding anemia and its prevention.

- Specific Gaps: Students typically struggle with technical details, such as the specific role of iron absorption inhibitors (like tea or coffee) or identifying all food sources rich in iron beyond basic green leafy vegetables.
- Prevalence Paradox: Despite their medical background, one study found that 70% of nursing students were actually anemic themselves, yet only 8% of those anemic students were taking iron supplements, indicating a gap between knowledge and personal health practice.

Effectiveness of Educational Interventions

Research across multiple nursing colleges demonstrates that structured teaching is highly effective:

- Significant Improvement: In one study at a nursing college in Indore, pre-test scores showed 64% of students had inadequate knowledge; after a Self-Instructional Module (SIM), 92% achieved an "adequate" level of knowledge.
- Methodology: Effective interventions often include a combination of structured teaching programmes, information booklets, and interactive digital media.

Key Factors Influencing Knowledge

- Academic Stage: Knowledge levels are significantly associated with the student's academic year. Seniors (4th-year students) generally show higher knowledge than juniors, likely due to increased clinical exposure.
- Demographics: Age and previous exposure to health information are strong predictors of higher knowledge scores.
- Correlation with Practice: There is a moderately positive correlation ($r = 0.5$) between a student's knowledge and their actual health practices. As knowledge improves, adherence to preventive measures like Iron and Folic Acid (IFA) supplementation also tends to increase.

Study Conclusions & Recommendations

- Institutional Role: Nursing colleges are encouraged to implement regular orientation lectures and nutritional exhibitions to reinforce prevention strategies early in the curriculum.
- Community Impact: Educated nursing students serve as vital "health ambassadors" who can effectively teach anemia prevention to the broader community during their clinical rotations.

The research titled entitled “a study to assess the knowledge on prevention of anemia among adolescent girls in selected nursing college, karad.” Was a quantitative research approach.

Objective :

- To assess the knowledge of prevention of anemia among adolescents girls
- To find out the association between level of knowledge about prevention of anemia at selected nursing college.

CONCLUSION:

The conclusion of research in this area typically emphasizes that while nursing students are future healthcare leaders, their baseline knowledge is often insufficient for professional practice, necessitating structured academic intervention.

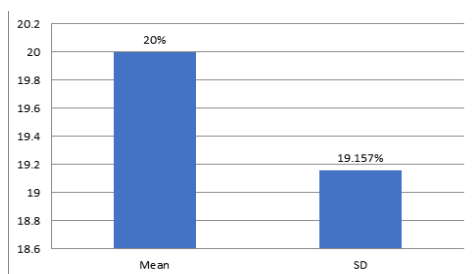
Core Conclusions

- Knowledge Deficit: Most studies conclude that a significant majority of nursing students (often over 60%) possess only moderate to inadequate knowledge regarding anemia prevention prior to specific teaching interventions

- **Intervention Efficacy:** There is a highly significant difference between pre-test and post-test scores, proving that Structured Teaching Programmes or Self-Instructional Modules (SIM) are extremely effective in upgrading knowledge [2,3].
- **Theory-Practice Gap:** A critical conclusion is that high knowledge does not always equal high compliance. Even students who understand the risks often fail to maintain personal Iron and Folic Acid (IFA) supplementation due to perceived side effects or forgetfulness [4,5].
- **Demographic Influence:** Knowledge levels are strongly linked to the academic year of study and previous exposure to health education, suggesting that early-year nursing students are at higher risk of anemia themselves [1,6].

Final Recommendations

The studies generally recommend that nursing curricula should integrate intensive nutritional education in the first year and that colleges should conduct regular anemia screening camps for their own students. This ensures that nursing graduates are not only knowledgeable but also healthy role models for the community.



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