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A study to assess prevalence of anemia among the adolescent's girls in selected slum area

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Abstract

Introduction: Estimate the prevalence of anemia among adolescent girls and to study the socio demographic factors associated with anemia. Adolescence as the age period between 10 to 19 years of age for both the sexes (married and unmarried). There about 1.2 billion adolescents in world, which is equal to 1/5th of the world's population and their numbers are increasing. Out of these, 5 million adolescents are living in developing countries. India's population has reached the 1.5 billion mark, out of which 21% are adolescents.

Research approach: Survey research approach was used. Research design used was Non-experimental descriptive survey research design. Conceptual frame work on in 1975 of Dr. Pender published 'A Conceptual Model for Preventive Health Behaviors' the setting for this study was the conducted in selected slums areas Balaji Nagar, Phule Nagar. 120 adolescent's girls who were with anemic in selected slums areas. Non-Probability Purposive Sampling Technique was used. Who met the designated set of criteria during period data collection. Tool developed which includes.

Section-I: Demographic variables.

Section II: Consisted of a Structured Interview Schedule which included 10 items on knowledge regarding iron deficiency anemia.

Section III: Consisted Observation Checklist of 10 items to assess symptoms anemia among adolescent girls.

Section IV: Consisted of WHO scale to assess the hemoglobin levels.

Results: Since p-value corresponding age was small (less than 0.05), age adolescent girls was found to have significant association with prevalence of anemia among adolescent girls. Majority adolescent girls from age 12 to 15 years had mild moderate anemia. 69.2% adolescent girls had mild moderate anemia age group of 12 to 15 years. 2.5% 69.2% adolescent girls had mild moderate anemia age group 12 to 15 year. 23.3% adolescent girls had mild moderate anemia in age group 16 to 19 year. 5.0% adolescent girls had mild moderate anemia in age group 16 to 19 year. Since p-value corresponding to age was small (less than 0.05), age of adolescent girls was found to have significant association with prevalence of anemia among adolescent girls. Majority of adolescent girls from age 12 to 15 years had mild to moderate anemia.

Keywords: Assess, prevalence, anemia, adolescents

Introduction: The developmental stage of adolescence is described as identify is role confusion Ericson speaks essence crisis adolescence including dramatic changes drives. Adolescence has broader meaning it including mental emotional and social maturity physical.

Research design: Non-experimental descriptive survey research design used.

Research setting: Study conducted in selected slums areas like Balaji Nagar, Phule Nagar.

Population: Population' consists 120 adolescents girls who were anemic in selected slums areas.

Sample: Adolescent girls residing selected slum areas.

Sample size: Study sample size was 120 adolescent girls

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Sample technique: Non-Probability Purposive Sampling Technique was used

Criteria for selection of sample

Inclusion criteria

1. Those Adolescents girls who were willing to participate in this study.
2. Adolescents girls who were suffering from selected problem of anemia and those who were at home.
3. Adolescents girls who could read and write both Marathi and English.

Exclusion criteria

1. Adolescents girls who were not willing to participate.
2. Adolescents girls who were unable to read and write Marathi and English.
3. Adolescents girls with problem of mental illness.

Description of the tool

In this study the tool consisted:

Section I: Demographic variable.

Section II: Structured Interview Schedule which included knowledge regarding iron deficiency anemia.

Section III: Observation Checklist of assess symptoms anemia among adolescent girls.

Section IV: Data related symptoms anemia among adolescent girls.

Section V: Related to association prevalence of anemia of adolescent girls with selected demographic variables.

Reliability: Reliability was assessed using test-retest method. Pearson's correlation coefficient was found to be 0.82.

Ethical consideration

The researcher followed ethical and legal issues related nursing research. Formal administrative approval was sought from Nagarsevak of Phulenagar Nagarsevak Balaji Nagar, head PSM department Dr. D.Y. Patil Medical College, Consent was taken from the parents of the adolescent girls. This study was done only study purpose, researcher maintained confidentiality research.

Plan for data collection: At the beginning, session was introduced by investigator. They were explained about the purpose study and assured about the confidentiality information between investigator and the respondent only. Their willingness for sought for data was collected as per demographic.

Pilot study: A pilot study was conducted 16th September to 17th September 20th selected slums Phule Nagar, Bhosari, Pune-18 and Balaji Nagar, to assess Feasibility of study the plan for data analysis. Prior Administrative permission was obtained from the Nagarsevak of Phulenagar, Balaji Nagar, Bhosari-Pune.

Data analysis and interpretation

This chapter deals with the analysis and interpretation of the data collected from 120 adolescent girls. The collected data is entered in to the master sheet. Descriptive Statistics" was applied to describe selected demographic variables study participants and determine the effect of Self-Instructional Module on knowledge regarding lifestyle modification.

Result

Section I: Frequency and percentage distribution of selective demographic variables

71.7% of the adolescent girls were aged between 12 to 15 years and another 28.3% of them were aged between 16 to 19 years. 51.7% them were educated in public school, 30.8% them in private schools and 17.5% of them in government schools. 59.2% them had monthly family income upto Rs. 5000, 36.7% them had family income Rs.5001-10000, 3.3% them had monthly family income Rs.10000-15000 and 0.8% of them had monthly family income above Rs.15000. 29.2% them had lived in joint family, 51.7% them live in nuclear family and 19.2% of them had extended family. 24.2% of them had menarche before 10 years age, 30% of them had menarche at 10-12 years, 43.3% them had menarche at 12 to 14 years and 2.5% them had menarche after 14 years age. 18.3% of them were vegetarians, 49.2% of them had non-vegetarian diet and 32.5% of them had mixed diet.

Section II: Analysis of data related to the prevalence of anemia among adolescents girls

Majority of 92.5% of the adolescent girls had mild to moderate anemia (Score 8-11).

Section III: Analysis of data related to the knowledge of adolescent girls regarding anemia

45.8% of 90.8% of the adolescent girls had average knowledge (Score 6-11) and 9.2% of them had poor knowledge (Score 0-5) regarding anemia.

Section IV: Analysis of data related to the symptoms of anemia among adolescent girls

45.8% of the adolescent girls had moderate symptoms of anemia (score 4-6), 44.2% of them had severe symptoms (Score 7-10) and 10% of them had mild symptoms (Score 0-3) of anemia.

Section V: Analysis of data related to association of prevalence of anemia of adolescent girls with the selected demographic variables

Association of prevalence of anemia of adolescent girls with selected demographic variables was assessed using Fisher's Exact Test. The summary of Fisher's Exact Test is tabulated below:

Conclusion

The overall experience of conducting this study was a satisfying one, as there was good co-operation from adolescent girls at the selected slum area. The study was a new learning experience for the Investigator. The result of the present study shows that the demographic variables were found to have significant association with prevalence of anemia among adolescent girls.

Discussion

The conceptual frame work used for this study was 'based Health Promotion Theory. Exploratory Design was adopted for the present study. Study consisted of 120 samples of adolescent girls. Purposive Sampling Technique was used to select the samples.

Limitations

1. The study was conducted on only one group of 120 adolescent girls at selected slums Area.

2. The study did not use a control group and there was a threat to internal validity as the Investigator had no control over the events that took place between the test and re-test.
3. Extraneous variables such as exposure to mass media were beyond researcher's control.
4. Study conducted on the adolescents girls did not included other population of samples.

Recommendations

1. A similar study can be replicated on a larger sample with different demographic characteristics.
2. A similar study can be replicated with broader content area on chronic illness.
3. A similar study can be done in different setting.
4. Same study can be conducted by using different set of Questionnaires.

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