Knowledge on Prevention and Management of Anaemia among Adolescent Girls

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Abstract

Anaemia is a condition in which the number of red blood cells and consequently their oxygen-carrying capacity is insufficient to meet all the body's physiologic needs which are vary with a person's age, gender, altitude, smoking and different stages of pregnancy. Iron deficiency is thought to be the most common cause of anaemia globally, but some other nutritional deficiencies (including folate, vitamin B12 and vitamin A), acute and chronic inflammation, parasitic infections, and inherited or acquired disorders can cause anaemia. *Methodology:* Quantitative non-experimental Descriptive research design was used. The targeted population is adolescent girls age group (12–19 years). 60 subjects were collected using convenient sampling technique. The tool used to collect data is structured questionnaire prepared by the researcher. *Result:* Out of 60 subjects, majority of them 53.3% has average knowledge on prevention and management of anaemia, 36.7% of them had good knowledge and 10% of them had poor knowledge. There was statistically significant association between the level of knowledge with selected demographic variables as age at $p > 0.05$ level. *Conclusion:* Therefore the findings of the study revealed that knowledge regarding prevention of anaemia among adolescent girls were at average level. It revealed that the role of community health nurse plays vital role in promoting the level of knowledge on prevention and management of anemia among adolescent girls to rule out anemia.

Keywords: Anaemia; Pregnancy; Adolescent.

Introduction

Iron deficiency is thought to be the most common cause of anaemia globally, but some other nutritional deficiencies (including folate, vitamin B12 and vitamin A), acute and chronic inflammation, parasitic infections, and inherited or acquired disorderscan cause anaemia.[1] Blood is comprised of two parts: A liquid called the plasma and a cellular part. The cellular part contains several different cell types. One of the most important and the most numerous cell types are red blood cells.[3] The other cell types are the white blood cells and platelets. Only red blood cells are discussed in this article. The purpose of the red blood cell is to deliver oxygen from the lungs to other parts of the body. Red blood cells are

produced through a series of complex and specific steps.[2] They are made in the bone marrow (inner part of the femur and pelvic bones that make most of the cells in the blood), and when all the proper steps in their maturation are complete, they are released into the blood stream.[1]

Statement of The Problem

A study to assess the level of knowledge on prevention and management of anaemia among adolescent (12–19 years) girls in selected area Puducherry.

Objectives

- To assess the level of knowledge on prevention and management of anaemia among adolescent girls.
- To associate the level of knowledge on

anaemia among adolescent girls with selected demographic variable.

Materials and Methods

Quantitative non-experimental Descriptive research design was used. The targeted population is adolescent girls age group (12–19). Sixty subjects were collected using convenient sampling technique. The tool used to collect data is structured questionnaire prepared by the researcher.

Results

Table 1,2 showed the association between the level of knowledge with selected demographic variables. There was statistically significant association between the level of knowledge with selected demographic variables as age at $p > 0.05$ level.

Table 1: Frequency and percentage distribution of the level of knowledge regarding anaemia among adolescent girls

$N = 60$

Level of knowledge	Frequency (n)	Percentage (%)
Good knowledge	22	36.7
Average knowledge	32	53.3
Poor knowledge	6	10.0

Table 2: Association of level of knowledge regarding anaemia among adolescent girls with selected demographic variables

$N = 60$

Demographic variables	Good knowledge		Average knowledge		Poor knowledge		Chi-square value
	N	%	N	%	N	%	
Age							13.029
10–12 years	1	1.66	2	3.33	5	8.33	df =6
13–15 years	1	1.66	10	16.66	10	16.66	$p = 0.043*$
16–18 years	1	1.66	16	26.66	5	8.33	S
19 years	3	5	4	6.66	2	3.33	
Education							7.706
5th–6th	0	0	1	1.66	2	3.33	df = 6
7th–8th	1	1.66	4	6.66	6	10	$p = 0.260$
9th–10th	0	0	9	15	7	11.66	NS
11th–12th	5	8.33	18	30	7	11.66	
Income							2.326
Below 10000	2	3.33	9	15	9	15	df = 6
11000–15000	2	3.33	17	28.33	10	16.66	$p = 0.887$ NS
16000–20000	1	1.66	3	5	2	3.33	
Above 21000	1	1.66	3	5	1	1.66	
Family type							4.641
Nuclear family	4	6.66	25	41.66	11	18.33	df = 2
Joint family	2	3.33	7	11.66	11	18.33	$p = 0.098$ NS

(Contd.)

Demographic variables	Good knowledge		Average knowledge		Poor knowledge		Chi-square value
	N	%	N	%	N	%	
Number of family members							
2–3 members	0	0	6	10	6	10	10.063 df = 6 p = 0.122 NS
4–5 members	4	6.66	23	38.33	12	20	
5–6 members	2	3.33	2	3.33	1	1.66	
More than 6 members	0	0	1	1.66	3	5	
Diet							0.733 df=2 p = 0.693 NS
Vegetarian	1	1.66	11	18.33	7	6.66	
Non-vegetarian	5	8.33	21	35	15	25	
Age of menarche							1.861 df = 4 p = 0.761 NS
9–11 years	0	0	2	3.33	3	5	
12–14 years	4	6.66	24	40	17	28.33	
15–17 years	1	1.66	5	8.33	2	3.33	
Menstrual pattern							5.455 df = 4 p = 0.244 NS
Not attained menarche	1	1.66	2	3.33	0	0	
Regular	5	8.33	20	33.33	17	28.33	
Irregular	0	0	10	16.66	5	8.33	
Deworming status							0.171 df = 2 p = 0.918 NS
Yes	4	6.66	19	31.66	14	23.33	
No	2	3.33	13	21.66	8	13.33	
Intake of iron tablets							2.718 df = 2 p = 0.257 NS
Yes	4	6.66	23	38.33	11	18.33	

Discussion

Out of 60 subjects, majority of them 53.3% has average knowledge on prevention and management of anaemia, 36.7% of them had good knowledge and 10% of them had poor knowledge. There was statistically significant association between the level of knowledge with selected demographic variables as age at $p > 0.05$ level.

Conclusion

Therefore the findings of the study revealed that knowledge regarding prevention of anaemia among adolescent girls were at average level. It revealed that the role of community health nurse plays vital role in promoting the level of knowledge on prevention and management of anemia among adolescent girls to rule out anemia.

References

1. Lewis SM, Heitkemper MM, et al. Text Book of Medical Surgical Nursing. 5th ed. New York: Mosby publisher 2005.

2. Park K. Preventive and Social Medicine. 19th ed. Jabalpur: M/S Banarsidas Bhanot Publisher. 2008.

3. Black MJ, Hawks HJ. Medical Surgical Nursing Clinical management for positive outcome. 7th ed. Missouri: Elsevier publication. 2007.