

A Study to Assess the Effectiveness of Planned Teaching on Anemia among Pregnant Women Visiting Selected Government Hospitals of Mumbai

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Abstract

The reproductive period of woman begins at menarche and ends in menopause. It usually extends from 13-45 years. While biological variations may occur in different geographical areas, pregnancy is rare below 12 years and beyond 50 years. Anemia is the commonest hematological disorder that may occur in pregnancy. According to the standard laid down by WHO, anemia in pregnancy is present when the hemoglobin concentration in the peripheral blood is 11gm/100 ml or less. When anemia comes on slowly, the symptoms are often vague and may include feeling tired, weakness, shortness of breath or a poor ability to exercise. Prophylaxis include avoiding frequent child birth, supplementary iron therapy, diet which is high in iron and vitamin c, adequate treatment on the basis of cause.

Keywords: Effectiveness, Anemia, Pregnant women

1. Objective

- 1.1. To assess the knowledge on anemia among pregnant women before and after planned teaching.
- 1.2. To associate the effect of planned teaching on anemia among pregnant Women with selected demographic variables.

2. Introduction

Pregnancy is the time during which one or more offspring develops inside a woman and she need to be taken care of herself and the life inside

her. Anemia is one of the most commonly encountered medical disorder during pregnancy. Globally, anemia affects 1.62 billion people (95% CI: 1.50–1.74 billion), which corresponds to 24.8% of the population. 56 million pregnant women 41%. During pregnancy plasma volume expands resulting in hemoglobin dilution. For this reason, hemoglobin level below 10 gm/dl at any time during pregnancy is consider anemia. (WHO-1993, CDC-1990). Anemia is responsible for 20% of maternal deaths in the world countries. Anemia is a decrease in the total amount of red blood cell (RBCs) or hemoglobin in the blood, or a lowered ability of the blood to carry oxygen. When anemia comes on slowly, the symptoms are often vague and may include feeling tired, weakness, shortness of breath or a poor ability to exercise. Anemia that comes on quickly often has greater symptoms, which may include confusion, feeling like one is going to pass out, loss of consciousness, or increased thirst. Anemia must be significant before a person becomes noticeably pale.

One study conducted in Rural India showed the prevalence of anemia was 98% among the pregnant females, Out of these 41.76% had mild anemia, 37.05% had moderate anemia and 15.88% had severe anemia and 3.29% very severe anemia (Mangala M et al). Another retrospective case-control study was conducted on 1221 women who delivered between 37 and 42 weeks. The prevalence of anemia in women attending center for delivery was 41.6%, duration of iron supplementation <3 months (OR=2.62, 95% CI=1.51–4.17) and 3–6 months (OR=1.68, 95% CI=1.13–2.91), and occurrence of preeclampsia (OR=1.55, 95% CI=1.03–2.1, p=0.041) were independently associated with anemia.

More of the time causes of anemia are blood loss, dietary deficiency, impaired absorption also an iron requirements increase during pregnancy, to accommodate fetal and placental needs, expansion of the maternal RBC mass, and blood loss during delivery. Treatment for the anemia includes oral iron supplement, I.V and in severe cases blood transfusion. There is need to educate women regarding the proper diet pattern and the care during pregnancy for the prevention and management of the anemia which also helps to prevent maternal mortality. Hence the investigator proposed to take this study to assess the effectiveness of planned teaching on anemia to identify their knowledge and disseminate the knowledge among pregnant woman.

2. Material and methodology:

The present study was conducted in Multispecialty Government hospital from 13 September to 27 September 2017.

The present study was conducted to assess the effectiveness of planned Teaching on anemia among pregnant women. Research approach was quantitative approach and Investigator used pre experimental research design to conduct the study (one group pretest and posttest). Nonprobability, purposive sampling technique adopted to select 40 pregnant women from Antenatal OPD. The knowledge was measured by using structured knowledge questionnaire regarding knowledge related anemia in pregnancy knowledge related to signs & symptoms of anemia. Investigations, complications of anemia in pregnancy, prevention of anemia, treatment of anemia. Pretest was conducted where each participant was given 20 minutes to complete the questionnaire; they were advised not to write their name on the questionnaire and told that, their responses would remain confidential. Right answer was scored 1 and wrong answer was score 0. After one week of the pretest and implementation of the planned teaching program the post test was conducted. Six samples were unable to come for the OPD so their data was collected on next OPD day of a week.

Description of research tool

Section I: A) Socio-demographic data of respondent,

It consist of the following items, age, education, religion, occupation, family income, type of family, diet.

B) Obstetric data

Age of menarche, ANC Registration in which week, whether diagnosed high risk pregnancy, if yes cause of high risk, weight at 1st visit, Hb at first visit

Section II: The structure knowledge questionnaire consists of 20 items used to measure the respondents' level of knowledge, regarding knowledge related to signs & symptoms of anemia. Investigations, complications of anemia in pregnancy, prevention of anemia, treatment of anemia.

Analysis of the data:

Descriptive (frequency and percentage) and inferential statistic (t test) were used .

3. Results and discussion:

The study result showed that out of 40 samples, 23 (57.5%) in age group of 25-35 yrs. 22 (55%) have completed their secondary education. Majority 35 (87.5%) were Hindu by religion. Out of 40 pregnant women 18 (45%) were working women. 22 (55%) samples family income was Rs.5000-10000. There were 25(62.5%) were from joint family. 17 (42.5%) consume mixed diet pattern.

Obstetric data

Menarche started at 13years -15 years among 22(55%) samples. Majority i.e.17(21%) have registered between 17 to 24 weeks. 13(32.5%) diagnosed with high risk pregnancy where 7(17.5%) had medical and 6 (15%) had surgical problems. During their first visit 25(62.5%) samples were in 35 to 45 kg weight category and hemoglobin was in range of 7gm% to 10gm% among 26 (65%) of the samples

There is highly significance (t-value=27.89, df=39, p=0.00) impact of knowledge on anemia among pregnant women before (8.13) 32% and (17.38) 68% after planned teaching.

Association of selected demographic variables with knowledge was done by using ANOVA

The planned teaching was effective as there is improvement is posttest score but there is no statistical association between knowledge and demographic variables.

Table 1. Distribution of samples according to knowledge related to anemia in pregnancy among pregnant women.

N=40

Sr. No.	Knowledge related to anemia among pregnant women	Pre test		Post test	
		F	%	F	%
I	Knowledge related to signs & symptoms of anemia				
1	Anemia means	14	35.0	35	77.5
2	The early signs	13	32.5	40	100.0
3	Cause of Swelling on Legs	24	60.0	31	77.5
4	Color of tongue	22	55.0	39	97.5
II	Knowledge related to investigations				
5	Test necessary to Detect Anemia	20	50.0	37	92.5
6	Urine Examination to detect	20	50.0	29	72.5
7	Hemoglobin Level should be checked during Pregnancy	16	40.0	33	82.5
III	Knowledge related to complications of anemia in pregnancy				
8	The Complication of anemia during Pregnancy	25	62.5	40	100
9	The real threat of severe anemia	9	22.5	28	70.0
10	Effect of Anemia in Pregnancy on Fetus	24	60.0	36	90.1
11	Effect of Anemia on mother after delivery	17	42.5	33	82.5
IV	Knowledge related to prevention of anemia				
12	Rich & cheap sources of Iron	15	37.5	39	97.5
13	Supplementary Iron Therapy should be started from	14	35.0	36	90
14	Minimum visits are required in ANC period	24	60.0	31	77.5
15	Deworming is necessary in Anemia	11	27.5	37	92.5
16	Vitamins are needed for Iron Absorption	8	20	34	85.0
17	Iron & Folic Acid tables should be taken after Delivery	6	15.0	32	80.0
V	Knowledge related to treatment of anemia				
18	Hinders / Delays Iron Absorption	13	32.5	36	90.0
19	The expected side effect of Iron supplement	13	32.5	34	85.0
20	Iron and calcium tablets should be taken with the consultation of doctor before pregnancy	17	42.5	39	97.5

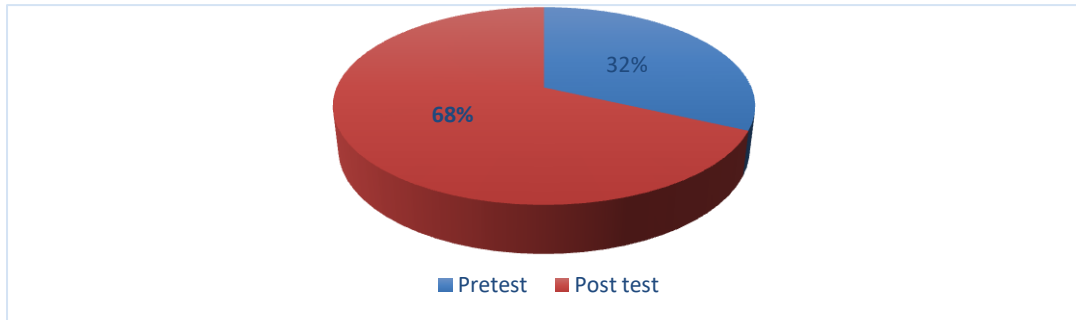


Figure 1. Effectiveness of planned teaching on anemia among pregnant woman pretest and post test

4. Conclusion

The present study shows that, there was lack of information about the causes and the diet pattern among the women and this planned teaching was effective on anemia among pregnant women. The post test score was more as compared to pretest. The health care workers also to be trained to educate adolescent and women in reproductive age for the prevention of anemia and the importance of the balanced diet. Safe Motherhood Booklet can be also prepared and distributed to the pregnant women for educating them on dietary diversification and promotion of consumption of iron and folic acid tablets. Prevention is always better than cure and this helps to reduce the number of anemias during pregnancy.

References:

- [1] De Benoist B, Worldwide prevalence of anemia, 1993-2005. WHO Global Database on Anemia Geneva, World Health Organization, 2008.
- [2] Dutta. D.C, Text book of obstetrics, 6th ed. New Central Book Agency: pg.no.262-267, (2004)
- [3] Frie, L.A. Anemia in Pregnancy. MSD manual, 2017, <http://www.msmanuals.com>
- [4] Mangla M, Singla D, Prevalence of anemia among pregnant women in rural India: a longitudinal observational study, Int J Reprod Contracept Obstet Gynecol. 5(10):3500-3505. (2016). doi: <http://dx.doi.org/10.18203/2320-1770.ijrcog20163431>
- [5] Park K, Park's text book of Preventive and Social Medicine, 23rded.M/s Banarsidas Bhanot, 2015.
- [6] Schrier, S.L., Auerbach M. Treatment of iron deficiency anemia in adults, 2017, <https://www.uptodate.com>
- [7] Taner, .E., Ekin,A., Solmaz,U., Gezer,C. Çetin, B., Keleşoğlu,M.,... Ozeren M. Prevalence and risk factors of anemia among pregnant women attending a high-volume tertiary care center for delivery, J Turk Ger Gynecol Assoc. 16(4): 231–236,2015. doi: 10.5152/jtgga.2015.15071
- [8] WHO. Preventing the tragedy of Maternal Death. A report on international safe motherhood conference, Nairobi, world Bank/WHO/UNEP, Feb. 1987